CITY OF LOS ANGELES
DEPARTMENT OF CITY PLANNING
CITY HALL 200 NORTH SPRING STREET LOS ANGELES CA 90012

Categorical Exemption

Colfax & Ventura Project

Case Number: ENV-2021-9478-CE
Class 32, Infill Exemption

Project Location: 11611-11695 West Ventura Boulevard and 4000-4028 North Colfax Avenue, Los Angeles, CA 91604

Community Plan Area: Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass

Council District: 4 - Nithya Raman

Project Description: The Project includes demolition and removal of all existing uses from the Project Site and development of the site with an eldercare facility for persons 62 years of age or older in two buildings. The Project includes development of a 135,454-square-foot building on the western half of the Project Site (Main Building) to accommodate 140 licensed assisted-living (AL) care dwelling units and a 68,826-square-foot building on the eastern half of the site to accommodate 59 senior independent living dwelling units (IL Building). The Project also includes development of an approximately 1,941-square-foot publicly-accessible, privately-owned and maintained, local-serving "Pocket Park" at the northwest corner of the Project Site, bounded by Colfax Avenue to the west and the Los Angeles River to the north. The Project would provide 21,471 square feet of open space. The Project would provide 146 vehicle parking spaces. Of these spaces, 142 would be located within the subterranean parking level, and 4 would be surface parking spaces located outside the main entrance to the Main Building. Additionally, the Project would include 62 bicycle parking spaces. Of the 63 on-site trees, 54 of the non-protected trees would be removed. Additionally, one non-protected, right-of-way (ROW) tree would be removed. No protected trees would be removed. All other on-site, ROW, and off-site trees would be preserved. All removed trees would be replaced in accordance with the City's tree replacement requirements. The Project would require the export of approximately 32,970 cubic yards of soil. To allow for development of the Project, the Project Applicant is seeking the following discretionary approvals from the City: 1) VESTING TENTATIVE TRACT MAP (VTTM) NO. 83460, pursuant to LAMC Section 17.15, for the merger of the Project Site into one ground lot, including the mergers of the adjoining public right-of-way areas on Colfax Avenue to the west and northwest of the Project Site, and a portion of an adjoining 16-foot "paper" alley that runs north/south along the north side and middle of the Project Site. As part of VTTM No. 83460, the Applicant requests the following from the Advisory Agency: a) Haul route approval for the export of approximately 32,970 cubic yards of soil; 2) An ELDERCARE FACILITY UNIFIED PERMIT, pursuant to LAMC Section 14.3.1, to permit an Eldercare Facility to be located within the C2-1VL-RIO Zone when the Eldercare Facility does not meet the use, area, height, and setback provisions of the underlying zoning regulations (per the Ventura/Cahuenga Boulevard Corridor Specific Plan and LAMC), specifically as follows: a) From the provisions of the Ventura/Cahuenga Boulevard Corridor Specific Plan: i) Permit a Floor Area Ratio (FAR) of approximately 2.07:1, in lieu of the otherwise permitted FAR of 1:1 per Specific Plan Section 6.B.3; ii) Provide a publicly-accessible, privately-maintained pocket park onsite in lieu of meeting the requirement in Specific Plan Section 7.A.1.d, which states "Owners of all lots which have a coterminous lot line with the Los Angeles County Flood Control District (the Los Angeles River), shall make provisions for public access from the bike path to the building on the lot or to the front lot line when the bike path and any public open space along the river is built"; iii) Permit maximum height as follows, in lieu of the 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i.: 1. Approximately 57 feet-6 inches to the top of the parapet plus an additional 8 feet to the top of the highest structure (stair/elevator overrun), for a maximum overall height of approximately 65 feet-6 inches for the Main Building, in lieu of 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i; and 2. Approximately 48 feet-5½ inches to the top of the parapet plus an additional 3 feet-11 inches to the top of the highest structure (mechanical screen), for a maximum overall height of

approximately 52 feet-4½ inches for the IL Building, in lieu of the 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i; iv) Permit no stepbacks from the roof perimeters for the Main Building and for the IL Building, in lieu of the stepbacks required per Specific Plan Section 7.E.1.f; b) From the provisions of the LAMC: i) Permit a maximum height of approximately 57 feet-6 inches to the top of the parapet and approximately 65 feet-6 inches to the top of the highest structure (stair/elevator overrun) for the Main Building, and a maximum height of approximately 48 feet-5½ inches to the top of the parapet and approximately 52 feet-4½ inches to the top of the highest rooftop structure (mechanical screen) for the IL Building, in lieu of the 33-foot transitional height limit within 50-99 feet of the adjacent property located in the OS Zone and in lieu of the 61-foot transitional height limit within 100-199 feet of the adjacent property located in the OS Zone per LAMC Section 12.21.1 A.10; ii) Permit encroachments into the 15-foot and 17-foot Building Lines established along Colfax Avenue, by RES-1244 and Ordinance No. 86,306, respectively, to allow for 0-foot Building Lines, as per LAMC Section 12.32 R.4; iii) Permit relief from the “Fence Height” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(c), to allow one retaining wall with a maximum height of approximately 11.9 feet, plus a minimum 3.5-foot-tall guard rail, within the 10-foot rear landscape buffer, in lieu of the 6-foot height permitted; iv) Permit relief from the “River Access” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(f), which states “all river adjacent projects that partially or wholly abut the river shall have Americans with Disabilities Act compliant access gates from their property to the river. The gates shall also be accessible for bicycle entry. Access may be controlled and limited to residents, employees and/or visitors of the project”; v) Permit relief from the “Riverfront Door” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(g), which states “All projects located either adjacent to the river corridor or frontage road shall include a riverfront door visible to, and accessible from, the river corridor or frontage road”; 3) A CONDITIONAL USE PERMIT (CUB), pursuant to LAMC Section 12.24 W.1, to permit the sale and service of a full line of alcoholic beverages for on-site consumption by residents of the Eldercare Facility and their visitors/guests in the C2 Zone, as an incidental use in and accessory to the operation of the Main Building; 4) SPECIFIC PLAN PROJECT PERMIT COMPLIANCE REVIEW, pursuant to LAMC Section 11.5.7 C and Section 9 of the Ventura/Cahuenga Boulevard Corridor Specific Plan, for the demolition of all existing structures with a total of approximately 22,488 square feet of Floor Area and for the development of an Eldercare Facility with a total of approximately 204,280 square feet of Floor Area; 5) SITE PLAN REVIEW, pursuant to LAMC Section 16.05 and 14.3.1.B, for an Eldercare Facility development, which will create 50 or more dwelling units or guest rooms; and 6) A DIRECTOR’S DECISION, pursuant to LAMC Section 12.21 G.3, to permit approximately 21,471 square feet of total usable open space, including common open space provided on the building roof decks comprising covered areas (not open to the sky) and areas with horizontal dimensions less than 15 feet that total approximately 1,562 square feet and would otherwise not be counted as common open space per LAMC Sections 12.21 G.2(a)(1)(i) and (iii), in lieu of 21,325 square feet of open space required (Note: Approximately 19,909 square feet of total open space is technically provided in satisfaction of LAMC Section 12.21 G, in lieu of a minimum of 21,325 square feet open space required, representing a 6.64 percent reduction in required open space); and 7) ADMINISTRATIVE CLEARANCE, pursuant to LAMC Sections 13.17 G.2 and 12.32 S.4, for a review of compliance with the “RIO” River Improvement Overlay District.

PREPARED FOR:
The City of Los Angeles
Department of City Planning

PREPARED BY:
CAJA Environmental Services
9410 Topanga Canyon
Boulevard, Suite 101
Chatsworth, CA 91311

PROJECT APPLICANT
MG at Studio City, LLC
111 North Post Street, Suite 200
Spokane, WA 99201

June 2024

CATEGORICAL EXEMPTION

COLFAX & VENTURA PROJECT

JUNE 2024

PROJECT DESCRIPTION

Existing Conditions

The 2.41-acre (104,885-square-foot) Project Site is located at 11611-11695 West Ventura Boulevard and 4010-4028 North Colfax Avenue in the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan area of the City of Los Angeles (City). The Assessor Parcel Numbers (APNs) for the Project Site are 2368-007-001, -002, -028, -029, and -030. The Project Site is bounded by the Los Angeles River on the north, Ventura Boulevard on the south, Colfax Avenue on the west, and surface parking on the east. The Project Site is located on the Ventura Boulevard corridor, which is developed with a dense mix of commercial and residential uses. The greater Project Site area to the north and south of the Project Site and the Ventura Boulevard corridor is largely developed with residential uses. Regional access to the Project Site is provided by U.S. Route 101 located approximately 1.0 mile to the north and 1.0 mile to the east.

The Project Site is zoned C2-1VL-RIO (Commercial Zone, Height District 1VL, River Implementation Overlay District), with a corresponding General Plan land use designation of General Commercial. Additionally, the Project Site is also located within the boundaries of the following:

- ZI-2498 Local Emergency Temporary Regulations – Time Limits and Parking Relief – LAMC 16.02.1
- ZI-1729 Specific Plan: Ventura/Cahuenga Boulevard Corridor

The Project Site is currently developed with four commercial buildings and includes approximately 2,560 square feet of office, 6,720 square feet of retail, 960 square feet of restaurant, 10,160 square feet of auto sales, and 2,085 square feet of auto repair. As shown in Table 1, there are 63 trees on the Project Site, 7 trees located in the public right of way adjacent to the site, and 36 trees located in the Los Angeles County Flood Control area adjacent to the site on the north.

Table 1
Tree Inventory

Common Name	Botanical Name	Total Onsite	Total Offsite	Total ROW	TOTAL
Aleppo pine	*Pinus halepensis*	5	-	-	5
Canary Island pine	*Pinus canariensis*	-	-	1	1
Chinese elm	*Ulmus parvifolia*	1	-	-	1
Citrus	*Citrus sp.*	1	-	-	1
Cost live oak	*Quercus agrifolia*	8[1]	32[2]	-	40
Common myrtle	*Myrtus communis*	1	-	-	1
Indian laurel fig	*Ficus macrocarpa*	1	1	-	2
Mexican fan palm	*Washingtonia robusta*	11	-	-	11
Mulberry	*Morus alba*	-	1	-	1
Peach	*Prunus persica*	1	-	-	1
Pecan	*Carya illinoinensis*	2	-	-	2
Shamel ash	*Fraxinus uhdei*	2	1	-	3
Southern California black walnut	*Juglans californica*	2[1]	1	-	3
Texas privet	*Ligustrum texanum*	28	-	-	28
Torrey pine	*Pinus torreyana*	-	-	5	5
Weeping fig	*Ficus benjamina*	-	-	1	1
	Total	**63**	**36**	**7**	**106**

[1] *The City defines "protected trees" as any tree with a four-inch (or greater) cumulative trunk diameter, as measured at 4.5 feet above the base of the tree, including valley oak (Quercus lobate) and coast live oak (Quercus agrifolia), or any other tree of the oak genus indigenous to Southern California but excluding the scrub oak (Quercus berberidifolia); Southern California black walnut (Juglans californica); western sycamore (Platanus racemosa); and California bay (Umellularia californica). The City defines "protected shrubs" as any Southern California indigenous shrub with a four-inch (or greater) cumulative trunk diameter as measured 4.5 feet from the base of the shrub, including Mexican elderberry (Sambucus mexicana) and toyon (Heteromeles arbutifolia). It should be noted that a Mexican elderberry can also be considered a small tree and is presented as a tree in this Project Description.*

[2] *Protected trees as set forth in the Ordinance are any tree in the oak genus which is (a) 25 inches or more in circumference (eight inches in diameter) as measured four and one-half feet above mean natural grade; in the case of an oak with more than one trunk, whose combined circumference of anytwo trunks is at least 38 inches (12 inches in diameter) as measured four and one half feet above mean natural grade, on any lot or parcel of land within the unincorporated area of Los Angeles County, or (b) any tree that has been provided as a replacement tree, pursuant to Section 22.56.2180, on any lot or parcel of land within the unincorporated area of Los Angeles County.*

Source: Carlberg Association, 2024. Refer to Appendix A.

Project Characteristics

The Project includes demolition and removal of all existing uses from the Project Site and development of the site with an eldercare facility for persons 62 years of age or older in two buildings. The Project includes development of a 135,454-square-foot building on the western half of the Project Site (Main Building) to accommodate 140 licensed assisted-living (AL) care dwelling units and a 68,826-square-foot building on the eastern half of the site to accommodate 59 senior independent living dwelling units (IL Building). The Project also includes development of an approximately 1,941-square-foot publicly-accessible, privately-owned and maintained, local-serving "Pocket Park" at the northwest corner of the Project Site, bounded by Colfax Avenue to the west and the Los Angeles River to the north.

Main Building

The 135,454-square-foot Main Building would be five stories with varying building heights as the building height would step down from five stories to four stories on the eastern portion of the building to break up the roof line and create a transition to the three-story IL Building on the eastern portion of the site (discussed below). As measured from "Adjacent Grade" as defined in Los Angeles Municipal Code (LAMC) Section 12.03, the Main Building would reach a maximum height of approximately 57 feet and 6 inches to the top of the parapet (representing the majority of the building), with portions of the building reaching a height of approximately 65 feet and 6 inches to the top of the highest structure (stair/elevator overrun).

The Main Building would set atop one level of subterranean parking, which would extend across the entire site to below the IL Building and would include 142 vehicle parking spaces with 16 electric-vehicle (EV) parking spaces and 24 EV-ready parking spaces. The first floor of the Main Building would include common areas, including a bistro, a private dining room, kitchen, living area, theater, salon, wellness center, as well as administrative areas and offices; trash and loading dock areas; and 13 assisted-living dwelling units. Additionally, four surface, vehicle parking spaces would be provided adjacent to the Main Building. The second and third floors would include a total of 66 assisted-living dwelling units (33 units per floor). The fifth floor would include 28 assisted-living dwelling units, a sky lounge, and a roof deck, which would include landscaping, trees, benches, tables and chairs, a soft seating area, lounge chairs with umbrellas, a fire pit, and a vegetable garden. The roof level would include mechanical equipment and areas reserved for future photovoltaic solar panels.

The assisted-living dwelling units would include 22 studios, 92 one-bedroom units, and 26 two-bedroom units.

IL Building

As stated previously, the 68,826-square-foot IL Building would be located on the eastern half of the Project Site, separated from the Main Building with a driveway located off of Ventura Boulevard. The IL Building would include up to three stories and would also vary in height, as the building steps down from three stories to two stories on the western portion of the building. As measured from adjacent grade, the IL Building would reach a maximum building height of approximately 48 feet and 5½ inches to the top of the parapet that represents the majority of the

IL Building height, with portions reaching a maximum height of approximately 52 feet and 4½ inches to the top of the highest structure (mechanical screen). The 59 unlicensed IL dwelling units would comprise 34 one-bedroom units, 22 two-bedroom units, and 3 three-bedroom units.

The first floor (ground level) would house common areas, including a lobby area, fitness center, craft room, office, conference room, and mail room, and would also include residential dwelling units on the majority of the floor. The second and third floors would be reserved for residential dwelling units exclusively. Accessible from the third floor is a roof deck on top of the second floor, adjacent to an indoor sky lounge and an indoor private dining room. The roof of the third floor would include mechanical equipment with screening and an area for future photovoltaic solar panels.

Residents of the IL Building would have "a la carte" access to the facilities and amenities located in the Main Building, including the dining facilities and the bar/bistro, activity room, theater, wellness center, salon, and all indoor and outdoor common open space areas.

Pocket Park

As stated previously, the Project also includes development of an approximately 1,941-square-foot publicly-accessible, privately-owned and maintained, local-serving Pocket Park at the northwest corner of the Project Site, bounded by Colfax Avenue to the west and the Los Angeles River to the north. The Pocket Park would serve as a public benefit to the local community, and is adjacent to the existing stair and American Disabilities Act (ADA) river access on Colfax Avenue, and has been designed to enhance and revitalize the Los Angeles River. The Pocket Park would have anticipated operating hours of sunrise to sunset and would possibly be secured with a gate outside of operating hours. The pocket park would include landscaping, newly planted trees, and seating (benches). It should be noted that as part of the Project scope, the Applicant also proposes to extend and maintain landscaping within the City public right-of-way area located between the proposed on-site pocket park and the existing access to the river, which is outside of the Project Site boundaries (proposed property lines), as an additional community benefit, with the goal of obtaining a revocable permit from the Bureau of Engineering, Department of Public Works.

Open Space

As shown in Table 2, the Project would be required to provide a minimum of 21,325 square feet of open space in accordance with the Los Angeles Municipal Code (LAMC). As shown in Table 3, the Project would provide 21,471 square feet of open space.

Table 2
Open Space Requirements Summary

Unit Type	Number of Units	LAMC Requirement	Total
<3 habitable rooms	148	100 sf/unit	14,800 sf
3 habitable rooms	48	125 sf/unit	6,000 sf
>3 habitable rooms	25	175 sf/unit	525
		LAMC Open Space Requirement	**21,325 sf**

LAMC = Los Angeles Municipal Code *sf = square feet*

Source: Urbal Architecture, February 12, 2024.

Table 3
Project Open Space

Open Space	Size
Dog Run & River Open Space	1,118 sf
Pocket Park	1,941 sf
Roof Deck	4,840 sf
Balconies – Private	7,050 sf
Interior Common Amenity	5,331sf
Total	**21,471 sf**

sf = square feet

Source: Urbal Architecture, February 12, 2024.

Setbacks

Setbacks would be provided for the Project as required by the Ventura/Cahuenga Boulevard Corridor Specific Plan (Specific Plan). In compliance with Specific Plan Section 7.A, all buildings would be constructed with direct access from the sidewalk along Ventura Boulevard, without crossing the parking lot or driveway, which are oriented toward the north of the Project Site. Per Section 7.A.3.a.3 of the Specific Plan, for lots that are wider than 200 feet (as is the Project Site along the Ventura Boulevard frontage), the front yard requirement is a minimum of 18 inches for the first floor or up to 15 feet in height, with a maximum front yard of 20 feet for 50 percent or more of the length of the front lot line and with the balance of the lot line permitted a maximum front yard of 60 feet or equal to the average of all existing structures on the block in which the lot is located, whichever is less. However, floors above 15 feet in height may be built to the front lot line. Both the Main Building and the IL Building would comply with the 18-inch-minimum front yard at the ground floors, while floors 2 and up would extend closer to the front property line. Additionally, the Main Building would provide an 18-inch landscaped westerly side yard/setback along Colfax Avenue, as required by the Specific Plan under Section 7.A.3.b. The easterly side yard of the Project (to the east of the IL Building) is not subject to a minimum or maximum setback as per Specific Plan Section 7.A.3.b. However, a minimum 9-foot setback would be provided. Lastly, in compliance with Section 7.A.1.d of the Specific Plan, a 10-foot landscaped rear yard would be provided along the north property line adjacent to the edge of the Los Angeles River.

Parking

As shown in Table 4, the Project would be required to provide a minimum of 99 vehicle parking spaces and would provide 146 vehicle parking spaces. Of these spaces, 142 would be located within the subterranean parking level, and 4 would be surface parking spaces located outside the main entrance to the Main Building.

Table 4
Vehicle Parking Summary

Unit Type	Amount	LAMC Parking Ratio	Total Spaces
AL Units	140 du	0.5 spaces/unit	70
IL Units	59 du	0.5 spaces/unit	29
		LAMC Vehicle Parking Requirement	*99*
		Total Vehicle Parking Provided	**146**

LAMC = Los Angeles Municipal Code

Source: Urbal Architecture, February 12, 2024.

As shown in Table 5, the Project would be required to provide a minimum of 61 bicycle parking spaces, which the Project would meet with 62 bicycle parking spaces. The short-term bicycle parking spaces would be located on the ground floor near the Main Building entrances, while the long-term spaces would be provided in the subterranean parking level.

Table 5
Bicycle Parking Summary for the Main Building

Parking Type	LAMC Ratio	Square Footage	Total Spaces
Long Term	1 space/5,000 sf	204,280	41
Short Term	1 space/10,000 sf	204,280	20
		Total Bicycle Parking Required	***61***
		Total Bicycle Parking Provided	**Long Term: 41** **Short Term: 21** **62**

LAMC = Los Angeles Municipal Code sf = square feet

Source: Urbal Architecture, February 12, 2024.

Access

Vehicular access to the Project Site would be provided at two ingress/egress driveways. One driveway would be located on Colfax Avenue, north of the Main Building, and would provide access to the vehicular entrance to the subterranean parking garage of the Main Building at the northwestern corner of the Main Building, as well as access to the drop-off/pick-up area outside of the lobby of the Main Building, located on the north side of the building. One driveway would be located on Ventura Boulevard – one located between the Main Building and the IL Building.

The main pedestrian entrance to the Main Building would be located on the north side of the building, at the drop-off/pick-up area. Additional pedestrian access points would be provided along

the Ventura Boulevard frontage, including an access to the dining area and bistro that leads to the reception area and lobby, an entrance at the living room and an entrance at the activity room. Pedestrian access would also be provided at the east end of the Main Building at the stairs leading to the corridors of the Main Building and the common areas on the ground floor.

The main pedestrian entrance to the IL Building would be located at the west side of the building that leads to the lobby/common amenity area. An additional pedestrian access point would be located on the south side of the building, along Ventura Boulevard that would also directly access the lobby area.

Tree Removal/Replacement

Of the 63 on-site trees, 54 of the non-protected trees would be removed. Additionally, one non-protected ROW tree would be removed. No protected trees would be removed. All other on-site, ROW, and off-site trees would be preserved. All removed trees would be replaced in accordance with the City's tree replacement requirements.

Construction

The estimated construction schedule is shown in Table 6. The Project would require the export of approximately 32,970 cubic yards of soil to be disposed of at a regional dump location within approximately 30 miles of the Project Site. The estimated haul route would include trucks exiting the south side of the Project Site onto westbound Ventura Boulevard to northbound Laurel Canyon Boulevard to the 101 Freeway.

Table 6
Estimated Construction Schedule

Phase	Duration	Notes
Demolition	Months 1-2	Removal of 3,300 tons of debris hauled 25 miles to landfill in 14-cubic-yard capacity trucks. Includes removal of retaining wall along northeastern property line.
Site Preparation	Month 2	Grubbing and removal of 55 trees, plants, landscaping, weeds.
Grading	Months 2-3	Approximately 32,970 cubic yards of soil hauled 25 miles to landfill in 14-cubic yard capacity trucks. Includes fine grading for storm drain relocation, as well as sidewalk, curb, and gutter along Ventura Bl and Colfax Ave.
Trenching	Months 4-10	Trenching for utilities, including gas, water, electricity, and telecommunications.
Building Construction	Months 4-27	Footings and foundation work (e.g., pouring concrete pads, drilling for piers), framing, welding; installing mechanical, electrical, and plumbing. Floor assembly, cabinetry and carpentry, elevator installations, low voltage systems, trash management. Includes construction of relocated storm drain.
Paving	Months 14-27	Flatwork, including paving of driveways and walkways. Includes flatwork for storm drain relocation and sidewalk, curb, and gutter along Ventura Bl and Colfax Ave.
Architectural Coatings	Months 12-27	Application of interior and exterior coatings and sealants.

Discretionary Approvals

To allow for development of the Project, the Project Applicant is seeking the following discretionary approvals from the City:

1. **VESTING TENTATIVE TRACT MAP (VTTM) NO. 83460**, pursuant to LAMC Section 17.15, for the merger of the Project Site into one ground lot, including the mergers of the adjoining public right-of-way areas on Colfax Avenue to the west and northwest of the Project Site, and a portion of an adjoining 16-foot "paper" alley that runs north/south along the north side and middle of the Project Site.

   As part of VTTM No. 83460, the Applicant requests the following from the Advisory Agency:

   a. Haul route approval for the export of approximately 32,970 cubic yards of soil.

2. An **ELDERCARE FACILITY UNIFIED PERMIT**, pursuant to LAMC Section 14.3.1, to permit an Eldercare Facility to be located within the C2-1VL-RIO Zone when the Eldercare Facility does not meet the use, area, height, and setback provisions of the underlying zoning regulations (per the Ventura/Cahuenga Boulevard Corridor Specific Plan and LAMC), specifically as follows:

   a. From the provisions of the Ventura/Cahuenga Boulevard Corridor Specific Plan:

      i. Permit a Floor Area Ratio (FAR) of approximately 2.07:1, in lieu of the otherwise permitted FAR of 1:1 per Specific Plan Section 6.B.3.

      ii. Provide a publicly-accessible, privately-maintained pocket park onsite in lieu of meeting the requirement in Specific Plan Section 7.A.1.d, which states "Owners of all lots which have a coterminous lot line with the Los Angeles County Flood Control District (the Los Angeles River), shall make provisions for public access from the bike path to the building on the lot or to the front lot line when the bike path and any public open space along the river is built."

      iii. Permit maximum height as follows, in lieu of the 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i.:

         1. Approximately 57 feet-6 inches to the top of the parapet plus an additional 8 feet to the top of the highest structure (stair/elevator overrun), for a maximum overall height of approximately 65 feet-6 inches for the Main Building, in lieu of 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i.

         2. Approximately 48 feet-5½ inches to the top of the parapet plus an additional 3 feet-11 inches to the top of the highest structure (mechanical screen), for a maximum overall height of approximately 52 feet-4½ inches for the IL Building, in lieu of the

45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i.

iv. Permit no stepbacks from the roof perimeters for the Main Building and for the IL Building, in lieu of the stepbacks required per Specific Plan Section 7.E.1.f.

b. From the provisions of the LAMC:

i. Permit a maximum height of approximately 57 feet-6 inches to the top of the parapet and approximately 65 feet-6 inches to the top of the highest structure (stair/elevator overrun) for the Main Building, and a maximum height of approximately 48 feet-5½ inches to the top of the parapet and approximately 52 feet-4½ inches to the top of the highest rooftop structure (mechanical screen) for the IL Building, in lieu of the 33-foot transitional height limit within 50-99 feet of the adjacent property located in the OS Zone and in lieu of the 61-foot transitional height limit within 100-199 feet of the adjacent property located in the OS Zone per LAMC Section 12.21.1 A.10.

ii. Permit encroachments into the 15-foot and 17-foot Building Lines established along Colfax Avenue, by RES-1244 and Ordinance No. 86,306, respectively, to allow for 0-foot Building Lines, as per LAMC Section 12.32 R.4.

iii. Permit relief from the “Fence Height” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(c), to allow one retaining wall with a maximum height of approximately 11.9 feet, plus a minimum 3.5-foot-tall guard rail, within the 10-foot rear landscape buffer, in lieu of the 6-foot height permitted.

iv. Permit relief from the “River Access” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(f), which states “all river adjacent projects that partially or wholly abut the river shall have Americans with Disabilities Act compliant access gates from their property to the river. The gates shall also be accessible for bicycle entry. Access may be controlled and limited to residents, employees and/or visitors of the project.”

v. Permit relief from the “Riverfront Door” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(g), which states “All projects located either adjacent to the river corridor or frontage road shall include a riverfront door visible to, and accessible from, the river corridor or frontage road.”

3. A **CONDITIONAL USE PERMIT (CUB)**, pursuant to LAMC Section 12.24 W.1, to permit the sale and service of a full line of alcoholic beverages for on-site consumption by

residents of the Eldercare Facility and their visitors/guests in the C2 Zone, as an incidental use in and accessory to the operation of the Main Building.

4. **SPECIFIC PLAN PROJECT PERMIT COMPLIANCE REVIEW**, pursuant to LAMC Section 11.5.7 C and Section 9 of the Ventura/Cahuenga Boulevard Corridor Specific Plan, for the demolition of all existing structures with a total of approximately 22,488 square feet of Floor Area and for the development of an Eldercare Facility with a total of approximately 204,280 square feet of Floor Area.

5. **SITE PLAN REVIEW**, pursuant to LAMC Section 16.05 and 14.3.1.B, for an Eldercare Facility development, which will create 50 or more dwelling units or guest rooms.

6. A **DIRECTOR'S DECISION**, pursuant to LAMC Section 12.21 G.3, to permit approximately 21,471 square feet of total usable open space, including common open space provided on the building roof decks comprising covered areas (not open to the sky) and areas with horizontal dimensions less than 15 feet that total approximately 1,562 square feet and would otherwise not be counted as common open space per LAMC Sections 12.21 G.2(a)(1)(i) and (iii), in lieu of 21,325 square feet of open space required (Note: Approximately 19,909 square feet of total open space is technically provided in satisfaction of LAMC Section 12.21 G, in lieu of a minimum of 21,325 square feet open space required, representing a 6.64 percent reduction in required open space).

7. **ADMINISTRATIVE CLEARANCE**, pursuant to LAMC Sections 13.17 G.2 and 12.32 S.4, for a review of compliance with the "RIO" River Improvement Overlay District.

Pursuant to various sections of the LAMC and other City requirements, the Applicant will request approvals and permits from the Building and Safety Department (and other municipal agencies) for Project construction actions including, but not limited to: demolition, excavation and export, shoring, grading, foundation, and building and tenant improvements.

CATEGORICAL EXEMPTION

Title 14 of the California Code of Regulations, Chapter 3 (Guidelines for Implementation of the California Environmental Quality Act [CEQA]), Article 19 (Categorical Exemptions), Section 15300 (Categorical Exemptions) includes a list of classes of projects that have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA.

For the reasons discussed in this document, the Project is categorically exempt from the requirement for the preparation of environmental documents under Class 32 in Section 15332, Article 19, Chapter 3, Title 14 of the California Code of Regulations. Class 32 is intended to promote infill development within urbanized areas. The class consists of environmentally benign in-fill projects that are consistent with local general plan and zoning requirements. Class 32 is not intended to be applied to projects that would result in any significant traffic, noise, air quality, or water quality effects. Application of this exemption, as all categorical exemptions, is limited by certain exceptions identified in section 15300.2.

15332. In-Fill Development Projects.

Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.

***Note:** Authority cited: Section 21083, Public Resources Code. Reference: Section 21084, Public Resources Code.*

15300.2. Exceptions

(a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located -- a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore,

these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

(b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

(c) Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

(d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

(e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

(f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

Discussion of Section 15332(a)

The Project would be consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

As discussed below, the Project would be consistent with the applicable General Plan land use designation for the Project Site and applicable General Plan policies, as well as with the applicable zoning designation for the site and applicable regulations.

General Plan

The Los Angeles General Plan sets forth goals, objectives and programs that guide both Citywide and community-specific land use policies. The General Plan comprises a range of state-mandated elements, including, but not limited to: Land Use, Transportation, Noise, Safety, Housing, and Conservation. The City's Land Use Element is divided into 35 Community Plans that establish parameters for land use decisions within those sub-areas of the City. The Project Site is located within the boundaries of the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan (Community Plan) and the Ventura/Cahuenga Boulevard Corridor Specific

Plan (Specific Plan). As discussed below, the Project would be consistent with the purpose, intent, and provisions, of the City's General Plan and its elements, including the Framework Element, Housing Element, and Mobility Element, as well as with the Land Use Element (i.e., the Community Plan) and the Specific Plan.

Framework Element

The Framework Element provides guidance regarding policy issues for the entire City, as well as sets forth a Citywide comprehensive long-range growth strategy and defines Citywide policies regarding such issues as land use, housing, urban form, neighborhood design, open space, economic development, transportation, infrastructure, and public services. While the Framework Element does not specifically address eldercare facilities, LAMC Section 14.3.1.A provides that an eldercare facility that does not meet all LAMC use, area, and height provisions may be permitted upon review by the Zoning Administrator. LAMC Section 14.3.1, establishing the Eldercare Facility Unified Permit, was adopted in recognition that eldercare facilities are public benefit projects. As distinguished from generic deviations such as variances and zoning administrator adjustments that could potentially apply to any type of project, the Eldercare Facility Unified Permit is narrowly tailored to a specific use and intended to facilitate the more efficient approval of much needed services and housing for the growing senior population of the City of Los Angeles. The Framework Element contains the following objective and policy that are relevant to the Project:

> ***Objective 3.4****: Encourage new multi-family residential, retail commercial, and office development in the City's neighborhood districts, community, regional, and downtown centers as well as along primary transit corridors/boulevards, while at the same time conserving existing neighborhoods and related districts.*
>
> > ***Policy 3.4.1****: Conserve existing stable residential neighborhoods and lower-intensity commercial districts and encourage the majority of new commercial and mixed-use (integrated commercial and residential) development to be located (a) in a network of neighborhood districts, community, regional, and downtown centers, (b) in proximity to rail and bus transit stations and corridors, and (c) along the City's major boulevards, referred to as districts, centers, and mixed-use boulevards, in accordance with the Framework Long-Range Land Use Diagram.*

In addition, the Framework Element contains the following relevant goal and objectives as they relate to housing:

> ***Goal 3C****: Multi-family neighborhoods that enhance the quality of life for the City's existing and future residents.*
>
> > ***Objective 3.7****: Provide for the stability and enhancement of multi-family residential neighborhoods and allow for growth in areas where there is sufficient public infrastructure and services and the residents' quality of life can be maintained or improved.*

***Objective 4.2**: Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher-density developments and surrounding lower-density residential neighborhoods.*

The Project is consistent with the goal, objectives, and policy set forth above. The Project would provide 199 dwelling units and associated amenities and services that would enhance the quality of life for one of the City's most vulnerable and underserved populations, persons 62 years of age and older. Additionally, the Project would enhance the surrounding neighborhood and properties with a modern, well-designed development, which would also allow for the improvement of the quality of life for Project residents.

The Project locates eldercare residential uses in a commercial zone along a major transportation corridor with strong connections to regional transportation modes. The Project would replace outdated one- and two-story commercial uses (i.e., restaurant, office, and automobile sales and service) without any displacement of existing residents. The Project would transform an under-utilized property with a modern, architecturally significant development providing much-needed senior housing for an area that needs this housing while respecting and enhancing the surrounding neighborhood.

The new eldercare facility would benefit and enhance the surrounding neighborhood by providing an opportunity for the community's aging population to stay within their area when it is time for them to leave their current homes. Additionally, the Project has been designed with due regard to the surrounding uses and is characterized by modern, high-quality architecture and design given the adjacency of low-scale residential areas across the Los Angeles River to the north, with large breaks in the proposed massing and expansive open spaces areas. Most of the development's parking would be located within a subterranean parking level creating little to no impact typical of a development with surface parking lots or above-grade parking structures.

Further, not only are there sufficient resources near the Project Site to support the development, but the nature of eldercare is such that the development creates a self-sustaining community whereby Project resident's health, wellness, social, recreational, and daily needs are all met within the Project. Specifically, the Project would promote social and physical activities with spaces programmed in both buildings and on the Project Site. In the Main Building, common and activity areas include common dining room which will include a large dining area with a bistro, a private dining room, wellness center, living area, theater, and a salon, as well as administrative areas, offices and a staff room, and a roof deck and an adjacent indoor sky lounge. The IL Building would also be programmed with common areas, including a fitness center, craft room, and a roof deck adjacent to an indoor sky lounge and an indoor private dining room. Residents of the IL Building will also have "a la carte" access to the facilities and amenities located in the Main Building, including the dining facilities and the bar/bistro), activity room, theater, wellness center, salon, and all indoor and outdoor Common Open Space areas.

Housing Element

The Housing Element of the General Plan identifies the City's housing conditions and needs, establishes the goals, objectives, and policies that are the foundation of the City's housing strategy and provides an array of programs to meet Citywide Housing Priorities, including addressing the housing shortage, advancing racial equity and access to opportunity, preventing displacement, and promoting sustainability and resilience. The current 2021-2029 Housing Element was adopted by the Los Angeles City Council on November 24, 2021, and then reapproved with targeted adjustments based upon comments by the State by City Council on June 4, 2022, and will be in effect through 2029. It includes the following relevant housing goals, objectives, and policies that the proposed Project meets:

> ***Goal 1:*** *A City where housing production results in an ample supply of housing to create more equitable and affordable options that meet existing and projected needs.*
>
> > ***Objective 1.1:*** *Forecast and plan for existing and projected housing needs over time with the intention of furthering Citywide Housing Priorities.*
> >
> > ***Objective 1.2:*** *Facilitate the production of housing, especially projects that include Affordable Housing and/or meet Citywide Housing Priorities.*
>
> ***Goal 2:*** *A City that preserves and enhances the quality of housing and provides greater housing stability for households of all income levels.*
>
> > ***Objective 2.1:*** *Strengthen renter protections, prevent displacement and increase the stock of affordable housing.*
>
> ***Goal 3:*** *A City in which housing creates healthy, livable, sustainable, and resilient communities that improve the lives of all Angelenos.*
>
> > ***Objective 3.1:*** *Use design to create a sense of place, promote health, foster community belonging, and promote racially and socially inclusive neighborhoods.*
> >
> > > ***Policy 3.1.2:*** *Promote new development that furthers Citywide Housing Priorities in balance with the existing architectural and cultural context.*
> > >
> > > ***Policy 3.1.7:*** *Promote complete neighborhoods by planning for housing that includes open space, and other amenities.*
> >
> > ***Objective 3.2:*** *Promote environmentally sustainable buildings and land use patterns that support a mix of uses, housing for various income levels and provide access to jobs, amenities, services and transportation options.*
> >
> > > ***Policy 3.2.2****: Promote new multi-family housing, particularly Affordable and mixed-income housing, in areas near transit, jobs and Higher Opportunity Areas, in order to facilitate a better jobs-housing balance, help shorten commutes, and reduce greenhouse gas emissions.*

Goal 4: *A City that fosters racially and socially inclusive neighborhoods and corrects the harms of historic racial, ethnic, and social discrimination of the past and present.*

> ***Objective 4.1:*** *Ensure that housing opportunities are accessible to all residents without discrimination on the basis of race, color, ancestry, sex, national origin, color, religion, sexual orientation, gender identity, marital status, immigration status, family status, age, intellectual, developmental, and physical disability, source of income and student status or other arbitrary reason.*

In support of Goals 1-4 referenced above, the Housing Element (on Pages 265-266) also includes Program 11, *Land Use and Building Code Policies To Support Aging in Place and Special Needs Housing*. Program 11 is as follows:

> *Assist developers in creating housing for seniors and for physically, intellectually, and developmentally disabled persons through streamlined land use entitlement procedures for a variety of housing types, including: Independent Senior Housing, Assisted Living Care Housing, Skilled Nursing Care Housing and Alzheimer's/Dementia Care Housing, pursuant to the Eldercare Facilities Ordinance. Give senior and physical, intellectual, and developmental disabled housing projects preferential access to Development Services Case Management (development review service). Implement form-based codes, which can be used to promote livable, age-friendly communities that integrate diverse housing types and mixed-use developments; universal design, which ensures housing can be used by people throughout their lifespan; and support multigenerational urban planning, which incorporates an age-friendly approach into community development, so that communities have the features and resources to support aging in place (in keeping with the Age Friendly Action Plan Recommendation #25). Use data collected through program 51, Database of Housing Need, to identify sections of the city where demographics do not align with housing stock, such as areas with large aging populations and exclusively larger housing units. Incentivising housing that meets these changing needs. Further incentivize physically, intellectually, and developmentally disabled and senior housing through density bonus update (see program #48).*

The Project would support the City's objectives to provide a large supply of housing units, and to promote livable neighborhoods with an Eldercare Facility for persons 62 years of age and older, inclusive of 199 dwelling units (140 AL units and 59 IL units) and associated common areas and amenities. This Project would provide for much-needed housing in Studio City for an aging population and would place senior housing near the commercial areas including retail and services along and near Ventura Boulevard.

Additionally, the Project would be located along a major transit corridor (Ventura Boulevard) with linkages to and from the transit center at Universal City Center (north terminus of the Red Line), and near existing commercial centers in Studio City, North Hollywood, Universal City, and Sherman Oaks. This would allow providing the residents of the Project would easy access to the transit. Furthermore, the Project would encourage the use of available public and private transportation modes including Metro and local buses, taxis/rider services, bicycles, and walking. Additionally, the Project would serve as a catalyst for other new residential and commercial uses

and attract other new neighborhood-serving uses such as shopping, eateries, and entertainment businesses that rely upon foot traffic.

Consistent with Policy 3.1.7 of the Housing element, noted above, the Project includes a new pocket park at the northwest corner of the Project Site along Colfax Avenue. The park will connect to the Colfax Avenue entrance to the Los Angeles River which is already improved at this location with a Riverwalk. The park will be publicly accessible and will help promote health and wellness to both the Project residents, guests, and staff, as well as to those living and working in the surrounding neighborhoods.

Mobility Plan 2035

The Mobility Plan 2035 includes goals that define the City's high-level mobility priorities and sets forth objectives and policies to establish a citywide strategy to achieve long-term mobility and accessibility within the City. The Project would be in conformance with the policies of the Mobility Element as described below.

***Chapter 3**: Access for All Angelenos.*

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

***Policy 3.8**: Provide bicyclists with convenient, secure and well-maintained bicycle parking facilities.*

The Mobility Plan 2035 considers the strong link between land use, transportation, and air quality. While the Community Plan guides the location and intensity of the private and public use of land, the Mobility Plan 2035 recognizes the contribution of a proper juxtaposition of land uses to the reduction of vehicle trips. The Project would promote greater choices in the type of housing for the vulnerable and fast-growing senior demographic, and would provide varying levels of housing and assisted-living-care to satisfy a range of housing and care needs, and at the same time, is close to both public transportation and recreational opportunities. Providing these types of housing uses along a major transit corridor better serves the needs of the population by locating residents close to nearby neighborhood-serving land use, thereby reducing the number and distance of vehicle trips and which can result in a decrease in pollution from mobile sources.

The Project would redevelop an underutilized site with an eldercare facility for persons 62 years of age and older, and would promote a livable neighborhood by providing a multi-family residential senior development with close proximity to goods, services, destinations, and other neighborhood amenities. As such, the Project would be consistent and in harmony with the relevant policies of the Mobility 2035 Plan.

Land Use Element (Community Plan)

The Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan designates the Project Site for General Commercial land uses with corresponding zones of C1.5, C2, C4, CR,

RAS3 and RAS4 Zones (with a footnote establishing Height District 1VL). The Community Plan (a part of the Land Use Element of the City's General Plan) establishes goals, objectives, and policies for future developments at a neighborhood level and is further implemented through the LAMC. The goals, objectives, and policies of the Community Plan and the applicable regulations contained within the LAMC would permit the development of the site in a manner that is consistent with the above referenced goals and objectives of the Framework Element.

The Community Plan contains the following relevant goals, objectives, and policies related to the Project:

> ***Goal 1**: A safe, secure, and high-quality residential environment for all economic, age, and ethnic segments of the community.*
>
> > ***Objective 1-1**: To provide for the preservation of existing housing and for the development of new housing to meet the diverse economic and physical needs of the existing residents and projected population of the Plan area to the year 2010.*
> >
> > ***Objective 1-2**: To locate new housing in a manner which reduces vehicular trips and makes it accessible to services and facilities.*
> >
> > > ***Policy 1-2.1**: Locate higher residential densities near commercial centers, rail transit stations and major bus routes where public services facilities, utilities and topography will accommodate this development.*
> > >
> > > ***Policy 1-2.2**: Encourage multiple residential development in commercial zones*
> >
> > ***Objective 1-3**: To preserve and enhance the varied and distinct residential character and integrity in existing single and multi-family neighborhoods.*
> >
> > > ***Policy 1-3.1**: Seek a high degree of compatibility and landscaping for new infill development to protect the character and scale of existing residential neighborhoods.*
> > >
> > > ***Policy 1-3.2**: Consider factors such as neighborhood character and identity, compatibility of land uses, impact on livability, impacts on services and public facilities, and impacts on traffic levels when changes in residential densities are proposed.*
> >
> > ***Objective 1-4**: To promote and insure the provision of adequate housing for all persons regardless of income, age or ethnic background.*
> >
> > > ***Policy 1-4.1**: Promote greater individual choice in type, quality, price and location of housing. Program: The plan promotes greater individual choice through its establishment of residential design standards and its allocation of lands for a variety of residential densities.*

***Policy 1-4.3**: Ensure that new housing opportunities minimize displacement of the residents.*

The Project would locate a 199-dwelling unit Eldercare Facility on an infill site that is designated for General Commercial land uses. The new development would activate an underutilized corner which for years has seen little to no pedestrian activity due primarily to the lack of active uses and a public sidewalk system in need of repair and expansion. With a ground-story visible design and with sidewalk improvements and minimal vehicular driveways, the Project would encourage pedestrian activity and enliven the surrounding area.

The Project includes a five-story 135,454-square-foot building on the western portion of the Project Site with 140 licensed AL dwelling units and associated common areas, amenities, and services and a three-story, 68,826-square-foot Senior Independent Housing building on the eastern portion of the Project site with 59 IL dwelling units and associated common areas and amenities. The Project would have a range of studio, one- two-, and three-bedroom units that would contribute to providing for an adequate multi-family residential development, promote greater individual choice in the type, quality, price, and location of housing, and help to promote the provision of adequate housing for all persons, meeting the diverse economic and physical needs of existing and projected future senior residents within the Community Plan area.

The Project would locate multi-family residential housing for seniors in a commercial zone along a major transportation corridor with strong connections to regional transportation modes and would be constructed where one-story commercial uses (restaurant, office, and automobile sales and service) previously existed, thereby avoiding the displacement of any existing residents. The Project Site is an area accessible to existing and future residents in proximity to existing commercial areas along Ventura Boulevard thereby providing a complementary mix of uses in greater proximity to jobs, destinations, and other neighborhood services. The development would provide ample open space, meet Green Building Code standards, electric vehicle parking, and on-site security features, all of which would ensure a safe, secure high-quality residential environment.

While the Project would exceed the FAR allowed by 1.07:1, the massing would be broken up into two buildings with the lower-scale IL building closer to the single-family residential area to the north with the highest visibility to the Project Site. The Project is thoughtfully designed given the adjacency of low-scale residential areas across the Los Angeles River with large breaks in the massing and expansive open spaces areas. Most of the proposed parking would be in subterranean parking thus avoiding major impacts to surrounding areas like excess light and noise. As such, the Project would be consistent with policies relative to protecting the character of existing neighborhoods and promoting infill development with a high degree of architectural compatibility and landscaping features. Additionally, the Project would locate a needed use permitted by the Community Plan, Specific Plan, and zoning along Ventura Boulevard, a designated Boulevard II.

The Project, once completed, would provide a variety of needed land uses, include a variety of senior housing, associated amenity, and service areas, and a publicly-serving pocket park, which would be an intrinsic part of the service amenities that are necessary for the conservation,

development, and success of a vibrant neighborhood. The redevelopment of the Project Site would also increase street activity by introducing new buildings, residents, and employees, and providing a new local-serving pocket park. The new residential uses near existing employment centers, entertainment, and services would promote pedestrian activity in the general area, and provide gathering points with new recreational and open space amenities for the public as well as for residents, employees, and visitors.

Ventura-Cahenuga Boulevard Corridor Specific Plan

The Project substantially with the Specific Plan, taking into consideration requests for deviations under the concurrent request for an Eldercare Facility Unified Permit which again, per LAMC Section 14.3.1.B, may be requested of the Zoning Administrator "on a lot or lots located in the A1 through the R3 Zones, or in the RAS3, R4, RAS4 and R5, and all C Zones, when an Eldercare Facility does not meet the use, area, or height provisions of the respective zone contained in…[Chapter 1 of the LAMC], or the requirements of any specific plan, supplemental use district, "T" classification, "Q" condition, "D" limitation, or Citywide regulation adopted or imposed by City action." Upon approval of the requested Eldercare Facility Unified Permit, the Eldercare Facility Project will be deemed in substantial compliance with the applicable regulations, findings, standards, and provisions of the Specific Plan. As part of the instant application, the Applicant is also requesting Project Permit Compliance Review (PPCR) pursuant to Section 9 of the Specific Plan and LAMC Section 11.5.7 C.1 and C.2. As further detailed in **Attachment F – Project Permit Compliance Findings**, the Project substantially complies with the applicable regulations, findings, standards, and provisions of the Specific Plan. In granting a Project Permit Compliance, the initial decision-maker shall require compliance with the applicable regulations of the Specific Plan and mitigation of significant adverse effects of the project on the environment and surrounding areas.

River Improvement Overlay ("RIO") District

The Project Site is located in the "RIO" River Improvement Overlay District Overlay (RIO) and is subject to the requirements of LAMC Section 13.17**.** More specifically, it is located within the RIO's inner corridor as it fronts along the Los Angeles River and is subject to certain RIO standards, including but not limited to setbacks, landscaping (planting native vegetation), fencing and screening (screening parking lots, electrical equipment and trash enclosures), fence/wall height, and lighting (implementation of ambient exterior site lighting. The Project is also subject to the Los Angeles River Design Guidelines as specified in LAMC Section 13.17 H.

As part of the subject application, the Applicant is requesting approval of an Administrative Clearance by the Director of Planning for RIO compliance, pursuant to LAMC Section 13.17 G and 12.32 S.4. As part of the Eldercare Facility Unified Permit, the Applicant is also requesting relief from the following RIO development regulations: 1) The "Fence Height" development regulation in LAMC Section 13.17 F.4(c), to allow a CMU retaining walls with a maximum height of 11.9 feet plus a 3.5-foot guard rail on top, within the 10-foot rear landscape buffer along the eastern property line, in lieu of the 6-foot height permitted; 2) The "River Access" development regulation in LAMC Section 13.17 F.4(f), which states "all river adjacent projects that partially or wholly abut the river shall have Americans with Disabilities Act compliant access gates from their

property to the river. The gates shall also be accessible for bicycle entry. Access may be controlled and limited to residents, employees and/or visitors of the project"; and 3) The "Riverfront Door" development regulation in LAMC Section 13.17 F.4(g), which states "All projects located either adjacent to the river corridor or frontage road shall include a riverfront door visible to, and accessible from, the river corridor or frontage road."

Overall, the eldercare facility development would comply with most of the provisions and the intent of the RIO. The request for deviations from the three above provisions of the RIO are designed primarily to ensure grade stability and soil retention on-site and to protect a vulnerable demographic from harm and the threat that would come from a completely open and publicly available access point that co-mingles with the senior housing development. Hours and access points need to be restricted for the safety of the elderly residents. In addition, the request to deviate from the river access provisions is necessary to allow for the preservation of existing Protected Trees planted on the slope (adjoining County property) leading down to the LA River. In lieu of providing new river access, the Applicant would dedicate, improve, and maintain the publicly-accessible pocket park at the northwest corner of the Project Site, along Colfax Avenue, near the southern entrance to the Los Angeles Riverwalk.

Therefore, the Project is in substantial conformance with the purposes, intent, and provisions of the General Plan, the Community Plan, and the Specific Plan and would be compatible with development on adjacent and neighboring properties and its location, design, and operations will be compatible with and would not adversely affect or further degrade surrounding properties and/or the public health, welfare, and safety. Further, the Project fulfills the General Plan and Community Plan Policies by providing a high-quality residential environment for an otherwise underserved segment of the community, creating a project that contributes to making Los Angeles an "age-friendly" City. The Project would also enhance the aesthetic views of Ventura Boulevard and Colfax Avenue with an architecturally attractive and thoughtfully designed building that is well-suited for the neighborhood.

Zoning

The Project is seeking approval of a VTTM, as allowed pursuant to LAMC Section 17.15 of the LAMC, for the merger of the existing Project Site, including mergers of adjoining properties located within the public right-of-way, into one ground lot for the development of an Eldercare Facility with a Main Building and IL Building, and a proposed pocket park. The VTTM also includes a request for haul route approval for the export of approximately 32,970 cubic yards of soil.

Additionally, the Project is seeking approval of an Eldercare Facility Unified Permit, as allowed pursuant to LAMC Section 14.3.1 of the LAMC, to permit an Eldercare Facility to be located within the C2-1VL-RIO Zone when the Eldercare Facility does not meet certain provisions of the underlying zoning regulations. Pursuant to LAMC Section 14.3.1 and as part of the Eldercare Facility Unified Permit, the Project is seeking requests to allow for relief from applicable zoning regulations.

From the Specific Plan:

- Permit an FAR of approximately 2.07:1, in lieu of the otherwise permitted FAR of 1:1 per Specific Plan Section 6.B.3.

- Provide a publicly-accessible, privately-maintained pocket park on site in lieu of meeting the requirement in Specific Plan Section 7.A.1.d, which states "Owners of all lots which have a coterminous lot line with the Los Angeles County Flood Control District (the Los Angeles River), shall make provisions for public access from the bike path to the building on the lot or to the front lot line when the bike path and any public open space along the river is built."

- Permit maximum height as follows, in lieu of the 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i.:

    - Approximately 57 feet-6 inches to the top of the parapet plus an additional 8 feet to the top of the highest structure (stair/elevator overrun), for a maximum overall height of approximately 65 feet-6 inches for the Main Building, in lieu of 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i.

    - Approximately 48 feet-5½ inches to the top of the parapet plus an additional 3 feet-11 inches to the top of the highest structure (mechanical screen), for a maximum overall height of approximately 52 feet-4½ inches for the IL Building, in lieu of the 45-foot maximum height permitted per Specific Plan Section 7.E.1.a.1.i.

- Permit no stepbacks from the roof perimeters for the Main Building and for the IL Building, in lieu of the stepbacks required per Specific Plan Section 7.E.1.f.

From the provisions of the LAMC:

- Permit a maximum height of approximately 57 feet-6 inches to the top of the parapet and approximately 65 feet-6 inches to the top of the highest structure (stair/elevator overrun) for the Main Building, and a maximum height of approximately 48 feet-5½ inches to the top of the parapet and approximately 52 feet-4½ inches to the top of the highest rooftop structure (mechanical screen) for the IL Building, in lieu of the 33-foot transitional height limit within 50-99 feet of the adjacent property located in the OS Zone and in lieu of the 61-foot transitional height limit within 100-199 feet of the adjacent property located in the OS Zone per LAMC Section 12.21.1 A.10.

- Permit encroachments into the 15-foot and 17-foot Building Lines established along Colfax Avenue, by RES-1244 and Ordinance No. 86,306, respectively, to allow for 0-foot Building Lines, as per LAMC Section 12.32 R.4.

- Permit relief from the "Fence Height" development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(c), to allow one retaining wall with a maximum height of approximately 11.9 feet, plus a minimum 3.5-foot-tall guard rail, within the 10-foot rear landscape buffer, in lieu of the 6-foot height permitted.

- Permit relief from the “River Access” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(f), which states “all river adjacent projects that partially or wholly abut the river shall have Americans with Disabilities Act compliant access gates from their property to the river. The gates shall also be accessible for bicycle entry. Access may be controlled and limited to residents, employees, and/or visitors of the project.”

- Permit relief from the “Riverfront Door” development regulation of the "RIO" River Improvement Overlay District, per LAMC Section 13.17 F.4(g), which states “All projects located either adjacent to the river corridor or frontage road shall include a riverfront door visible to, and accessible from, the river corridor or frontage road.”

All other aspects of the Project would comply with the applicable zoning requirements. Thus, the Project would be consistent with the zoning.

Discussion of Section 15332(b)

The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

The 2.41-acre Project Site is located within City limits; is currently developed with four commercial buildings and includes 2,560 square feet of office, 6,720 square feet of retail, 960 square feet of restaurant, 10,160 square feet of auto sales, and 2,085 square feet of auto repair; and is completely surrounded by urban uses. The Project Site is bounded by the Los Angeles River on the north, Ventura Boulevard on the south, Colfax Avenue on the west, and surface parking on the east. The Project Site is located on the Ventura Boulevard corridor, which is developed with a dense mix of commercial and residential uses. The greater Project Site area to the north and south of the Project Site and the Ventura Boulevard corridor is largely developed with residential uses. Therefore, the Project is within City limits on a site of no more than five acres that is substantially surrounded by urban uses.

Discussion of Section 15332(c)

The Project Site has no value as habitat for endangered, rare, or threatened species.

Introduction

The information presented below is based primarily on the *Biological Review and Survey and Regulatory Review Report*, which was prepared for the Project by Glenn Lukos Associates (GLA) on May 13, 2024 (refer to Appendix B). The purpose of this report is to evaluate Project Site conditions relative to determine whether the: *“The project site has no value as habitat for endangered, rare, or threatened species.*” As discussed in detail below, the Project Site does not contain any habitat, or potential value as habitat, for endangered, rare, or threatened plant or animal species.

Project Site Location and Project Description

The Project Site is bounded by Ventura Boulevard to the south, Colfax Avenue to the west, the Los Angeles River to the north, and commercial lots to the east. The site has been developed since prior to the 1950s, as is evident on historic aerials. Land uses within the Project Site consist of commercial businesses ranging from a restaurant to a chauffeur service, as well as associated parking areas. The lot at the eastern Project Site boundary is currently a paved vacant lot. The majority of the buildings within the Project Site are single-story, and the site is surrounded entirely by residential and commercial land use. The Project proposes the demolition of current commercial buildings and the construction of an eldercare facility.

Methodology

GLA performed the biological and regulatory analysis by reviewing existing information for the Project site via an initial desktop review of Project information and relevant databases in February 2021; this desktop review informed the site visit conducted on August 12, 2021. Updated desktop reviews were conducted in 2023 and 2024. The database review included the California Natural Diversity Database (CNDDB) for the Van Nuys, California quadrangle map (and surrounding quadrangles), the California Native Plant Society (CNPS) online inventory, and soil maps. GLA also reviewed data presented in the report prepared by Carlberg Associates (refer to Appendix A).

During the site visit, GLA assessed the Project site to identify native habitats that could support endangered, rare, or threatened species and determine the potential for such species to occur. Site reconnaissance was conducted in such a manner as to allow inspection of the entire site by direct observation, including the use of binoculars.

In accordance with the criteria set forth in Class 32 Categorical Exemption, sensitive biological resources considered for this analysis include endangered, rare, or threatened species (including California Species of Special Concern [SSC]). The regulatory review consisted of an assessment of the site for areas meeting the definition for waters of the United States (including wetlands) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) and the Regional Water Quality Control Board (Regional Board), and waters of the State (including riparian vegetation) subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) and the Regional Board under the Porter-Cologne Water Quality Control Act (Porter-Cologne).

Results

Existing Conditions

The Project Site is developed and is situated in a heavily urbanized setting. The site remains largely unvegetated, aside from manicured Mexican fan palms (*Washingtonia robusta*) located along the frontage of Ventura Boulevard and sporadic weeds consisting of non-native grasses and prickly lettuce (*Lactuca serriola*) within the vacant lot at the eastern Project Site boundary. The segment of the Los Angeles River occurring north of the Project Site boundary remains entirely unvegetated, as it was improved as a concrete-lined channel in 1938.

The northern Project Site boundary abuts a hill that slopes down toward the Los Angeles River. Although this area is outside the Project Site boundary, it is vegetated with ornamental trees, which are predominately non-native and multiple canopies extend into the Project Site footprint. As noted in the Tree Survey, although the trees are not rooted within the Project Site, removal of multiple mature trees rooted outside of the Project Site would occur as a result of the Project and as such, these impacts were considered during the biological analysis. It is unclear whether the trees in this area were planted or constitute a remnant woodland. However, due to their placement within the landscape and the number of ornamental tree species currently present, this area would not be considered a "native vegetation community." This area is primarily vegetated with coast live oak (*Quercus agrifolia*), Aleppo pine (*Pinus halepensis*), and Chinese elm (*Ulmus parviflora*), with non-native grasses dominating the understory. In addition, the entire area exhibits heavy anthropogenic disturbance, and the tree canopy is sparse, as the area appears to be routinely maintained in accordance with County of Los Angeles brush removal requirements for fire protection/public safety.

The entirety of the Project Site exhibits disturbance consistent with long-term commercial land use and thus, vegetation mapping was not performed as the Project Site does not support any native vegetation. No wildlife species were detected during the site visit. However, only those that are well suited for an urban environment and common to the region are expected to utilize the Project Site, such as: western fence lizard (Sc*eloporus occidentalis*), common side-blotched lizard (*Uta stanisburiana*), red-tailed hawk (*Buteo jamaicensis*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaida macroura*), California towhee (*Pipilo crissalis*), rock pigeon (*Columba livia*), racoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*). Topography onsite is flat.

Endangered, Rare, or Threatened Species

CEQA Guidelines Section 15380 defines rare, threatened, and endangered species as follows:

> *(b) A species of animal or plant is:*
>
> *(1) "Endangered" when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or*
>
> *(2) "Rare" when either:*
>
> *(A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or*
>
> *(B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act.*

(c) A species of animal or plant shall be presumed to be endangered, rare or threatened, as it is listed in:

(1) Sections 670.2 or 670.5, Title 14, California Code of Regulations; or

(2) Title 50, Code of Federal Regulations Section 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.

(d) A species not included in any listing identified in subdivision (c) shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subdivision (b).

Endangered, Rare, or Threatened Plants

No endangered, rare, or threatened plant species were observed during the site visit. The Project site is fully developed and does not contain soils or native plant communities that could support endangered, rare, or threatened plant species. In addition, the offsite slope abutting the northern Project boundary has been subject to substantial ongoing anthropogenic disturbance for the past approximately seven decades. As such, the Project site does not exhibit potential to support endangered, rare, or threatened plant species.

Table 3-1 on page 5 of the *Biological Review and Survey and Regulatory Review Report* included as Appendix B provides a summary of all plant species considered for this analysis. Species were considered based on a number of factors, including: (1) species identified by the April 2024 CNDDB as occurring (either currently or historically) on or in the vicinity of the Project Site, and (2) species identified by the CNPS Online Inventory (April 2024) as occurring (either currently or historically) on or in the vicinity of the Project Site.

The California black walnut is listed on the California Rare Plant Rank (CRPR) as a List 4 taxon. However, this species is not considered endangered, rare, or threatened and as such, is not listed on Table 3-1. Nonetheless, as noted in the Carlberg Associates report, one Southern California black walnut tree located within the offsite slope and two Southern California black walnut trees that occur onsite would be protected in place by the Project.

Endangered, Rare, or Threatened Animals

No endangered, rare, or threatened animal species were observed onsite during the visit. In addition, as already noted above, the Project site is entirely developed and situated in a heavily urbanized setting with routine disturbances; therefore, the site does not provide habitat for endangered, rare, or threatened animal species. Some examples of these disturbances that deter animals include continual human occupation, vehicular traffic, artificial lighting, vegetation maintenance, domesticated pets, and pest management.

Table 3-2 on page 10 of the *Biological Review and Survey and Regulatory Review Report* included as Appendix B provides a summary of all animal species considered for this analysis. Species were considered based on a number of factors, including: 1) species identified by the April 2024 CNDDB as occurring (either currently or historically) on or in the vicinity of the Project

Site, and 2) any other endangered, rare, or threatened species that are known to occur within the vicinity of the Project Site.

Special-Status Habitats

The CNDDB identifies the following special-status habitats as occurring within the Van Nuys and surrounding quadrangles: California Walnut Woodland, Riversidean Alluvial Fan Sage Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Mixed Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Valley Oak Woodland.

As noted above, the offsite slope located immediately north of the Project boundary contains native and ornamental trees with canopies that overhang the Project site. The Protected Tree Report states that the majority of the offsite trees in this area appear to have been planted, indicating that they do not constitute a remnant woodland. It is also important to note that the adjacent offsite slope exhibits heavy anthropogenic disturbance and experiences routine maintenance in accordance with County of Los Angeles brush removal requirements for fire protection/public safety. Therefore, the offsite slope does not currently support any special-status woodland or forest habitats including those listed above, nor does it support or have potential to support endangered, rare, or threatened plant or animal species that would rely on woodland or forest habitats for their ecology and survival. The Project site itself is entirely developed and does not contain any special-status habitats.

Jurisdictional Waters

The Project Site does not contain any features, including streams or wetlands, that would be subject to regulation under the Corps, Regional Board, or CDFW.

Migratory Birds

As shown in Table 1, there are 63 trees on the Project Site, 7 trees located in the public right of way adjacent to the site, and 36 trees located in the Los Angeles County Flood Control area adjacent to the site on the north. Of the 63 on-site trees, 54 of the non-protected trees would be removed. Additionally, one non-protected ROW tree would be removed. No protected trees would be removed. All other on-site, ROW, and off-site trees would be preserved. All removed trees would be replaced in accordance with the City's tree replacement requirements. Depending on the season in which construction activities would occur, the trees could contain nesting birds. The Project Applicant would be required to comply with the Migratory Bird Treaty Act (MBTA), as well as the regulations of the California Fish and Game Code, which prohibits take of all birds and their active nests, if present in the trees on the Project Site. Thus, the Project would not harm any species protected by the Federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.), the Native Plant Protection Act (Chapter 10, commencing with Section 1900, of Division 2 of the Fish and Game Code), or the California Endangered Species Act (Chapter 1.5, commencing with Section 2050, of Division 3 of the Fish and Game Code). Thus, the Project would not affect endangered, rare, or threatened species.

Discussion of Section 15332(d)

Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

TRAFFIC

A *Transportation Assessment* was prepared for the Project by Armen Hovanessian Transportation Consulting, dated February 12, 2023 (refer to Appendix C), and approved by the Los Angeles Department of Transportation (LADOT) on March 14, 2023 (refer to Appendix C). As discussed in detail below, the Project would not result in any significant effects relating to traffic.

Introduction

In compliance with CEQA and in accordance with City regulations, LADOT may require applicants to analyze and assess project-specific transportation impacts based on the following criteria:

- If the Development Project is estimated to generate a net increase of 250 or more daily vehicle trips and requires discretionary action, a transportation assessment for a Development Project is required, or

- A transportation assessment is required by City ordinance or regulation.

According to LADOT's Transportation Assessment Guidelines (TAG), the preparation of a transportation impact assessment requires analysis and prediction of impacts or deficiencies to the circulation system generated by Development or Transportation Projects as well as the identification of feasible measures or corrective conditions to offset any impacts or deficiencies identified through a transportation assessment.

City of Los Angeles CEQA Thresholds

LADOT's TAG identifies the three following thresholds to assess a project's transportation impacts:

- **Threshold T-1:** Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

- **Threshold T-2.1:** For a land use project, would the project conflict or be inconsistent with GEQA Guidelines Section 15064.3, subdivision (b)(1)?

    - For residential projects, the project would generate household VMT per capita exceeding 15 percent below the existing average household VMT per capita for the Area Planning Commission (APC) area in which the project is located (refer to Table 7).

- For office projects, the project would generate work VMT per employee exceeding 15 percent below the existing average work VMT per employee for the APC in which the project is located (refer to Table 7).

    - For regional serving retail projects, the project would result in a net increase in VMT.

    - For other land use types, measure VMT impacts for the work trip element using the criteria for office projects above (refer to Table 7).

Table 7
VMT Impact Criteria (15% Below APC Average)

Area Planning Commission	Daily Household VMT per Capita	Daily Work VMT per Employee
Central	6.0	7.6
East LA	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South LA	6.0	11.6
South Valley	9.4	11.6
West LA	7.4	11.1
Source: Table 2.2-1 of the TAG.		

- **Threshold T-3**: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis

Threshold T-1: Conflict with Plans, Programs, Ordinances, or Policies

According to LADOT's TAG, the City has adopted programs, plans, ordinances, and policies that establish the transportation planning regulatory framework for all travel modes. The overall goal of these policies is to achieve a safe, accessible, and sustainable transportation system for all users.

Screening Criteria for Threshold T-1

Table 2.1-1 of LADOT's TAG lists all policies that should be reviewed as part of the analysis to identify any potential conflicts with the proposed project. The TAG also provides a list of questions (refer to Table 8) to guide the review of the documents listed in Table 2.1-1.

Table 8
Screening Criteria Questions for Threshold T-1

Screening Criteria Questions	Answer	Action
1. Does the project require discretionary action?	Yes	If answer is "yes" to 1, answer the next questions. Otherwise no further analysis
2. Does the project require a discretionary action that requires the decision maker to find that the decision substantially conforms to the purpose, intent, and provisions of the General Plan?	Yes	If the answer to 1 and 2 or 3 or (4a & 4b) or (5a & 5b) is "yes" further analysis is required
3. Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?	No	
4a Is the project required to make modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?	Yes	
4b Is the modification along the project frontage on a roadway designated as an Avenue or a Boulevard in the Mobility Plan 2035?	Yes	
5a Is the project proposing voluntarily to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?	No	
5b Is the modification along the project frontage on a roadway designated as an Avenue or a Boulevard in the Mobility Plan 2035?	No	
Source: Armen Hovanessian Transportation Consulting, February 13, 2023. Refer to Appendix C.		

Analysis for Threshold T-1

The TAG requires the completion of the Plan Consistency Worksheet to determine whether a project conflicts with any City circulation system policy. According to the TAG, a mere conflict with adopted transportation-related policies, or standards that require administrative relief or legislative change does not in itself constitute an impact. A copy of the completed Plan Consistency Worksheet is attached in Appendix 5.1 of the Transportation Assessment included as Appendix C.

According to the completed Plan Consistency Worksheet, the Project is consistent with each of the criteria in the Plan Consistency Worksheet. Therefore, the Project would not result in a significant impact under Threshold T-1.

Threshold T-2: Causing Substantial Vehicle Miles Traveled (VMT)

LADOT created a VMT calculator tool which is specifically designed and intended to be used to develop project-specific daily household VMT per-capita and daily work VMT per employee for land use development projects in the City. The calculator implements the methodologies and significance thresholds described in Section 2.2 of the TAG for residential and employment projects. A project's daily trips should be estimated using the VMT calculator tool or the most recent version of the ITE Trip Generation Manual as described in Section 2.2.4 of the TAG.

Screening Criteria for Threshold T-2

According to LADOT's TAG, if a project requires a discretionary action, and the answer is "no" to either Screening Criteria T-2.1-1 or T-2.1-2, further analysis will not be required for Threshold T-2.1, and a "no impact" determination can be made for that threshold.

- T-2.1-1: Would the land use project generate a net increase of 250 or more daily vehicle trips?

- T-2.1-2: Would the project generate a net increase in daily VMT?

In addition to the above screening criteria, the portion or the entirety of a project that contains small-scale or local-serving retail uses is assumed to have less-than-significant VMT impacts. If the answer to the question below is "no," then that portion of the project meets the screening criteria, and a "no impact" determination can be made for the portion of the project that contains retail uses. However, if the retail project is part of a larger mixed-use project, then the remaining portion of the project may be subject to further analysis in accordance with the above screening criteria. Projects that include retail uses in excess of the screening criteria would need to evaluate the entirety of the project's vehicle miles traveled, as specified in Section 2.2.4 of the TAG.

- Does the project include retail uses that exceed a net 50,000 square feet?

Independent of the above screening criteria and the project requires a discretionary action, further analysis will be required if the following statement is true:

- Would the project or plan, located within a one-half mile of a fixed-rail or fixed-guideway transit station, replace an existing number of residential units with a smaller number of residential units?

For the purpose of screening for proposed change in housing units located near fixed-rail or fixed-guideway transit for development projects, the total number of housing units that exist on a project site should be counted and compared to the total number of housing units as proposed by the project to determine if the project would result in a net decrease in housing units. For the purposes of screening for proposed change in housing units that are in proximity to transit for land use

plans, the total number of existing housing units within a one-half mile of a fixed-rail transit station that fall within the land use plan area should be counted and compared to the total housing capacity within the same area that could be built as a result of the land use plan to determine if the plan could result in a net decrease in housing.

Analysis for Threshold T-2

LADOT's VMT calculator was used to estimate Project VMT. Based on the land use and size of the existing and proposed uses, the VMT calculator determined that the Project would generate approximately 607 daily vehicle trips (refer to Table 9). Since the Project's estimated daily vehicle trips exceed the 250 threshold, further transportation impact assessment is required.

Table 9
VMT Analysis Results

Project Area Planning Commision:		South Valley
Total Employees:		80
Total Population:		388
VMT Calculator Report		
	Project Trips	Reductions
Daily Vehicle Trips:	607	0
Daily VMT:	4,070	0
Household VMT/Capita:	0	0
Impact Threshold:	9.4	-
Significant Impact?	No	-
Work VMT Per Employee:	8.3	0
Impact Threshold:	11.6	-
Significant Impact:	No	-
Source: Armen Hovanessian Transportation Consulting, February 13, 2023. Refer to Appendix C.		

As shown in Table 9, the Project would not exceed the household VMT/capita or work VMT/employee thresholds and would not result in significant VMT impacts.

Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use

LADOT's TAG indicates that impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from a project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. The analysis for Threshold T-3 should explore any potential conflicts that may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections.

Screening Criteria for T-3

According to the City's TAG, if the project requires a discretionary action, and the answer is "yes" to either of the following questions, further analysis will be required to assess whether the project would result in impacts due to geometric design hazards or incompatible uses:

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?

- Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?

Analysis for Threshold T-3

Project access and circulation plans were reviewed, considering commonly accepted traffic engineering design standards to ascertain whether any deficiencies are apparent in the site access plans that would be considered significant. According to the TAG, the determination of significance shall be on a case-by-case basis, considering the following factors:

- The relative amount of pedestrian activity at project access points.

- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.

- The type of bicycle facilities the project driveway(s) crosses and the relative level of utilization.

- The physical conditions of the site and surrounding area, such as curves, slopes, walks, landscaping, or other barriers, that could result in vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle impacts.

- The project location, or project-related changes to the public right-of-way, relative to proximity to the High Injury Network or a Safe Routes to School program area.

- Any other conditions, including the approximate location of incompatible uses that would substantially increase a transportation hazard.

The Project proposes one two-way driveway on Ventura Boulevard and one two-way driveway on Colfax Avenue for ingress and egress. The driveway on Colfax Avenue provides access to the elder care facility using a two-way 24-foot access to the visitor parking, shuttle parking, dog/pocket park, and the passenger loading/unloading area. Additionally, the driveway on Ventura Boulevard provides access to the elder care facility as well as to the independent living facility.

Driveway Design

The driveway locations would minimize the potential conflict between the parking facilities and pedestrians, bicycles, and vehicles on the street. Generally, each of the driveways

would comply with LADOT's design standards, and requirements in accordance with the *Manual of Policies and Procedures*.

Project Site Pedestrian and Bicycle

The Project would provide pedestrian access points on Ventura Boulevard and Colfax Avenue. Bicycle parking would be provided on-site in an area of the parking separate from the vehicular parking. Ventura Boulevard and Colfax Avenue adjacent to the Project Site are not part of the High Injury Network. Therefore, the Project access and circulation would be less than likely to result in injuries resulting from collisions between vehicles and pedestrians, bicyclists, or other vehicles.

Based on a review of the Project Site plans and design assumptions, the Project would not present any geometric design hazards related to traffic movement, mobility, or pedestrian accessibility, and no significant impact would occur with respect to Threshold T-3.

NOISE

The analysis below is based primarily on technical data prepared by DKA Planning (refer to Appendix D).

Regulatory Setting

General Plan Noise Element

The City's General Plan contains a Noise Element that includes objectives and policies intended to guide the control of noise to protect residents, workers, and visitors. Its primary goal is to manage long-term noise impacts to preserve acceptable noise environments for all types of land uses. The Noise Element contains no quantitative or other thresholds of significance for evaluating a project's noise impacts. However, the Noise Element does contain a land use and noise compatibility table, which is included as Table10. Policy P16 of the Noise Element instructs to use, "as appropriate," this table "or other measures that are acceptable to the city, to guide land use and zoning reclassification, subdivision, conditional use and use variance determinations and environmental assessment considerations, especially relative to sensitive uses, as defined by this chapter…"[1] "Noise sensitive" uses are defined as "single-family and multi-unit dwellings, long-term care facilities (including convalescent and retirement facilities), dormitories, motels, hotels, transient lodgings, and other residential uses; houses of worship; hospitals; libraries; schools; auditoriums; concert halls; outdoor theaters; nature and wildlife preserves, and parks."[2] The Noise Element further instructs that the table is designed "to help guide determination of appropriate land use and mitigation measures vis-à-vis existing or anticipated ambient noise levels."

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[1] *Noise Element of the Los Angeles City General Plan, February 1999.*

[2] *Ibid.*

Table 10
City of Los Angeles Noise Element – Guidelines for Noise Compatible Land Use

Land Use Category	Day-Night Average Exterior Sound Level (CNEL dB)						
	50	55	60	65	70	75	80
Residential Single Family, Duplex, Mobile Home	A	C	C	C	N	U	U
Residential Multi-Family	A	A	C	C	N	U	U
Transient Lodging, Motel, Hotel	A	A	C	C	N	U	U
School, Library, Church, Hospital, Nursing Home	A	A	C	C	N	N	U
Auditoriums, Concert Halls, Amphitheaters	C	C	C	C/N	U	U	U
Sports Arena, Outdoor Spectator Sports	C	C	C	C	C/U	U	U
Playground, Neighborhood Park	A	A	A	A/N	N	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	N	A/N	U
Office Building, Business, Commercial, Professional	A	A	A	A/C	C	C/N	N
Industrial, Manufacturing, Utilities, Agriculture	A	A	A	A	A/C	C/N	N

A = Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
C = Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.
N = Normally Unacceptable - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
U = Clearly Unacceptable - New construction or development should generally not be undertaken.

Source: Noise Element of the Los Angeles City General Plan – Exhibit I

Los Angeles Municipal Code

The LAMC contains a number of regulations that would apply to the Project's temporary construction activities and long-term operations.

Section 41.40(a) would prohibit the Project's construction activities from occurring between the hours of 9:00 P.M. and 7:00 A.M., Monday through Friday. Subdivision (c) would further prohibit such activities from occurring before 8:00 A.M. or after 6:00 P.M. on any Saturday, or on any Sunday or national holiday.

> *SEC.41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK—WHEN PROHIBITED*
>
> *(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power drive drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the*

job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.

(c) No person, other than an individual homeowner engaged in the repair or construction of this single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair, or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specific…

Section 112.01 of the LAMC would prohibit any amplified noises, especially those from outdoor sources (e.g., outdoor speakers, stereo systems, etc.) from exceeding the ambient noise levels of adjacent properties by more than 5 dBA. Any amplified noises would also be prohibited from being audible at any distance greater than 150 feet from the Project's property line, as the Project is located within 500 feet of residential zones.

SEC.112.01 RADIOS, TELEVISION SETS, AND SIMILAR DEVICES

(a) It shall be unlawful for any person within any zone of the City to use or operate any radio, musical instrument, phonograph, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area.

(b) Any noise level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the noise source, within any residential zone of the City or within 500 feet thereof, shall be a violation of the provisions of this section.

(c) Any noise level caused by such use or operation which exceeds the ambient noise level on the premises of any other occupied property, or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, by more than five (5) decibels shall be a violation of the provisions of this section.

Section 112.02 would prevent Project heating, ventilation, and air conditioning (HVAC) systems and other mechanical equipment from elevating ambient noise levels at neighboring residences by more than 5 dBA.

SEC.112.02. AIR CONDITIONING, REFRIGERATION, HEATING, PLUMBING, FILTERING EQUIPMENT

(a) It shall be unlawful for any person, within any zone of the city, to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property … to exceed the ambient noise level by more than five decibels.

The LAMC also provides regulations regarding vehicle-related noise, including Sections 114.02, 114.03, and 114.06. Section 114.02 prohibits the operation of any motor driven vehicles upon any property within the City in a manner that would cause the noise level on the premises of any occupied residential property to exceed the ambient noise level by more than 5 dBA. Section 114.03 prohibits loading and unloading causing any impulsive sound, raucous or unnecessary noise within 200 feet of any residential building between the hours of 10:00 P.M. and 7:00 A.M. Section 114.06 requires vehicle theft alarm systems to be silenced within five minutes.

Section 112.05 of the LAMC establishes noise limits for powered equipment and hand tools operated within 500 feet of residential zones. Of particular importance is subdivision (a), which institutes a maximum noise limit of 75 dBA at 50 feet for the types of construction vehicles and equipment that would be required for the Project's construction. However, the LAMC notes that these limitations would not necessarily apply if it can be proven that compliance would be technically infeasible despite the use of noise-reducing means or methods.

SEC.112.05 MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS

Between the hours of 7:00 A.M. and 10:00 P.M., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

(a) 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;

(b) 75 dBA for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;

(c) 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.

Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques during the operation of the equipment.

Existing Conditions

Noise-Sensitive Receptors

Land uses sensitive to noise may include residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. The Project Site is located on the Ventura Boulevard corridor, which is largely developed with commercial and retail uses. Most sensitive receptors in the Project Site area are located in residential neighborhoods that flank Ventura Boulevard and the Los Angeles River. These include but are not limited to the following representative sampling:

- Residences, 3900 block of Blue Canyon Drive; 165 feet south of the Project Site
- Residences, 11500 block of Kelsey Street, 220 feet north of the Project Site across the Los Angeles River
- Residences, 11600 block of Picturesque Drive; 250 feet south of the Project Site
- Studio City Inn, 11733 Ventura Boulevard; 410 feet west of the Project Site

Existing Ambient Noise Conditions

The Project Site is developed with various commercial uses, including 2,560 square feet of office, 6,720 square feet of retail, 960 square feet of restaurant, 10,160 square feet of auto sales, and 2,085 square feet of auto repair. Most on-site noise associated with the Project Site is vehicle travel to and from the site.

In February 2023, DKA Planning took short-term noise measurements to determine the ambient noise conditions of the Project Site area.[3] The measured noise levels are shown in Table 11. Transportation noise is the main source of noise in urban environments, largely from the operation of internal combustion engines and frictional contact between the vehicle and the ground and air.[4]

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[3] *Noise measurements were taken using a Quest Technologies Sound Examiner SE-400 Sound Level Meter. The Sound Examiner meter complies with the American National Standards Institute (ANSI) and International Electrotechnical Commission (IEC) for general environmental measurement instrumentation. The meter was equipped with an omni-directional microphone, calibrated before the day's measurements, and set at approximately five feet above the ground.*

[4] *World Health Organization, https://www.who.int/docstore/peh/noise/Comnoise-2.pdf accessed September 28, 2021.*

Consistent with this, noise levels in the vicinity of the Project Site are affected by traffic volumes along roadways near the site.

Table 11
Existing Noise Levels

Noise Measurement Locations	Primary Noise Source	Sound Levels		Nearest Sensitive Receptor(s)	Noise/Land Use Compatibility[2]
		dBA (L_{eq})	dBA (CNEL)[1]		
A. 3931 Blue Canyon Dr.	Traffic on Ventura Bl.	64.5	62.5	Residences – Blue Canyon Dr.	Conditionally Acceptable
B. 11554 Kelsey St.	Traffic on Kelsey St.	53.3	51.3	Residences – Kelsey St.	Normally Acceptable
C. 11651 Picturesque Dr.	Traffic on Picturesque Dr.	57.2	55.2	Residences – Picturesque Dr.	Normally Acceptable
D. Studio City Inn	Traffic on Ventura Bl.	69.9	67.9	Studio City Inn	Conditionally Acceptable

[1] *Estimated based on short-term (15-minute) noise measurement using Federal Transit Administration procedures from 2018 Transit Noise and Vibration Impact Assessment Manual, Appendix E, Option 4.*

[2] *Pursuant to California Office of Planning and Research "General Plan Guidelines, Noise Element Guidelines, 2017. When noise measurements apply to two or more land use categories, the more noise-sensitive land use category is used.*

Source: DKA Planning, 2024. Refer to Appendix D.

Thresholds of Significance

On-Site Construction Noise Threshold

On-site construction noise impact would be considered significant if the following occurred:

- Construction activities lasting more than one day would exceed existing ambient exterior sound levels by 10 dBA (hourly L_{eq}) or more at a noise-sensitive use;
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or
- Construction activities of any duration would exceed the ambient noise level by 5 dBA (hourly L_{eq}) at a noise-sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday.

Operational Noise Thresholds

In addition to applicable City standards and guidelines that would regulate or otherwise manage a project's operational noise impacts, the following criteria are adopted to assess the impacts of the Project's operational noise sources:

- Project operations would cause ambient noise levels at off-site locations to increase by 3 dBA CNEL or more to or within "normally unacceptable" or "clearly unacceptable" noise and land use compatibility categories, as defined by the City's General Plan Noise Element (refer to Table 5).

- Project operations would cause any 5 dBA or greater noise increase.[5]

Project Impacts

On-Site Construction Activities

Project construction would generate noise during the estimated 27 months of demolition, grading, building construction, architectural coatings, and other related construction activities (refer to Table 6). During all construction phases, noise-generating activities would be permitted to occur at the Project Site between the hours of 7:00 A.M. and 9:00 P.M. Monday through Friday, in accordance with Section 41.40(a) of the LAMC. On Saturdays, construction activities would be permitted to occur between 8:00 A.M. and 6:00 P.M.

The Project's construction noise levels would generally peak during demolition and grading phases, when diesel-fueled heavy-duty equipment such as excavators and dozers would be used. This heavy-duty equipment is mobile in nature and does not always operate at a steady-state mode full load, but rather powers up and down depending on the duty cycle needed to conduct work. As such, equipment is occasionally idle during which time no noise is generated by that equipment. Equipment will often operate away from off-site receptors, as mobile equipment generally does not operate continuously in one place.

During other phases of construction (e.g., trenching, paving, building construction), noise levels would be generally lower than during demolition and grading, because these phases are less reliant on using heavy equipment with internal combustion engines. Smaller equipment such as forklifts, generators, and various powered hand tools and pneumatic equipment would generally be utilized. Off-site secondary noises would be generated by construction worker vehicles, vendor deliveries, and haul trucks.

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[5] *As a 3 dBA increase represents a barely noticeable change in noise level, this threshold considers any increase in ambient noise levels to or within a land use's "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories to be significant so long as the noise level increase can be considered barely perceptible. For instances when the noise level increase would not necessarily result in "normally unacceptable" or "clearly unacceptable" noise/land use compatibility, a readily noticeable 5 dBA increase would still be considered significant. Increases less than 3 dBA are unlikely to result in noticeably louder ambient noise conditions and would therefore be considered less than significant.*

Because the Project's construction phase would occur for more than three months, the applicable City threshold of significance for the Project's construction noise impacts is an increase of 5 dBA over existing ambient noise levels. As shown in Table 12, when considering ambient noise levels and compliance with LAMC Section 112.05, the use of multiple pieces of powered equipment simultaneously would increase ambient noise negligibly. This assumes the use of best practices techniques required by the City's Building and Safety code to meet these requirements, such as the use of quieter equipment and/or advanced mufflers.[6] These construction noise levels would not exceed the City's significance threshold of 5 dBA. Therefore, the Project's on-site construction noise impact would be less than significant.

Table 12
Construction Noise Impacts at Sensitive Receptors

Receptor	Maximum Construction Noise Level (dBA L_{eq})	Existing Ambient Noise Level (dBA L_{eq})	New Ambient Noise Level (dBA L_{eq})	Increase	Significant?
1. Residences 3900 block of Blue Canyon Dr.	53.5	64.5	64.8	0.3	No
2. Residences, 1500 block of Kelsey St.	56.0	53.3	57.9	4.6	No
3. Residences, 11600 block of Picturesque Dr.	35.2	57.2	57.2	0.0	No
4. Studio City Inn, 11733 Ventura Boulevard	40.6	69.9	69.9	0.0	No
Source: DKA Planning 2024. Refer to Appendix D.					

Off-Site Construction Activities

The Project would also generate noise at off-site locations from haul truck, vendor and contractor, and worker commute trips. As shown in Table 13, Project construction would generate up to an estimated 312 peak-hour, passenger-car-equivalent (PCE) vehicle trips. This would represent approximately 14.6 percent of the 2,137 vehicles traveling westbound/eastbound on Ventura Boulevard near the Project Site, east of the intersection of Colfax Avenue during the AM peak hour.[7] Because it takes a doubling of traffic volumes to create a noticeable increase in noise levels associated with traffic and because the Project's construction-related trips would not cause a doubling in traffic volumes on this major arterial, the Project's construction-related traffic would

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[6] *Use of quieter equipment, such as electronic-powered equipment, is quieter than diesel-powered equipment. Similarly, hydraulically-powered equipment is quieter than pneumatic power. Overall, newer equipment is generally quieter due to design improvements (e.g., tighter manufacturing tolerances, better gear meshing, quieter cooling fans). Deploying newer equipment also avoids unnecessary noise from poor maintenance (e.g., worn gear teeth or bearings, slackness between loose parts, poor lubrication, imbalance in rotating parts, obstructing in airways, damaged silencers).*

[7] *Transportation Assessment Report, Armen Hovanessian Transportation Consulting, February 13, 2024. Refer to Appendix B.*

not result in a noticeable increase in noise levels. Therefore, the Project's noise impacts from construction-related traffic would be less than significant.

Table 13
Estimated Hourly Construction Vehicle Trips

Construction Phase	Worker Trips[a]	Vendor Trips	Haul Trips	Total
Demolition	13	0	44[b]	56.4
Site Preparation	8	0	3[c]	11
Grading	10	0	302[d]	312
Trenching	3	0	0	3
Building Construction	168	115[e]	0	283
Paving	15	0	0	15
Architectural Coating	34	0	0	34

[a] *Assumes all worker trips occur in the peak hour of construction activity.*
[b] *The Project would generate approximately 660 haul trips over a 41-day period with seven-hour workdays. Because haul trucks emit more noise than passenger vehicles, a 19.1 passenger car equivalency (PCE) was used to convert haul truck trips to a passenger car equivalent.*
[c] *The Project would generate 26 haul trips over a 22-day period with seven-hour workdays. Assumes a 19.1 PCE.*
[d] *The Project would generate 4,876 haul tirps over a 44-dy period with seven-hour workdays. Assumes a 19.1 PCE.*
[e] *This pahse would generate about 31 vendor truck trips daily over a seven-hour workday. Assumes a blend of medium- and heavy-duty vehicle types and a 13.1 PCE.*

Source: DKA Planning, 2024. Refer to Appendix D.

On-Site Operational Activities

As discussed below, the Project's operational noise levels would not exceed applicable thresholds, and impacts would be less than significant.

Mechanical Equipment

The Project would operate mechanical equipment on the roof of the main building 53 feet above grade and on the east building 43 feet above grade that would generate incremental long-term noise impacts. This would include the use of typical HVAC equipment for cooling or heat pumps for cooling and heating for multi-family residences (e.g., 2.5-ton Carrier 24ABC630A003 Carrier 25HBC5), with each unit distributed across the roof as needed to serve each residence. Noise from heat pumps and air conditioners is a function of the model, airflow, and pressure flow generated by fans and compressors. Most modern heat pumps are relatively quiet, with sound ratings of up to 60 decibels, equivalent to normal human conversation, while other HVAC units

could have a sound power of up to 76 dBA.[8] Equipment would be designed to not elevate ambient noise levels by 5 dBA in accordance with City regulations.

However, noise impacts from rooftop mechanical equipment on nearby sensitive receptors would be negligible for several reasons. First, there would be no line-of-sight from these rooftop units to the sensitive receptors, as screening around each bloc of rooftop units would shield the transmission of noise. As blocking the line of sight to a noise source generally results in a 5-decibel reduction, each rooftop unit could generate about 50.3 dBA at ten feet of distance.[9] Second, the presence of the Project's roof edge creates an effective noise barrier that further reduces noise levels from rooftop units by 8 dBA or more.[10] A 4-foot and 3-inch parapet would further shield sensitive receptors near the Project Site. Compliance with LAMC Section 112.02 would further limit the impact of HVAC equipment on noise levels at adjacent properties. As a result, noise from rooftop units would negligibly elevate ambient noise levels, far less than the 5 dBA CNEL threshold of significance for operational impacts.

A pad-mounted oil transformer that lowers high voltage to standard household voltage used to power electronics, appliances, and lighting would be located on the ground level fronting Colfax Avenue. This transformer would serve both buildings and be housed in steel cabinets and generally would not involve pumps, though fans may be needed on some units. Switchgear responsible for distributing power through the development could be located externally, though no mechanical processes that generate noise would be necessary.

Otherwise, all other mechanical equipment would be fully enclosed within each of the development's buildings. This would include mechanical, electrical, and plumbing rooms in each building, as well as elevator equipment (including hydraulic pump, switches, and controllers) in the subterranean basement. All these activities would generally occur within the envelope of the development, operational noise would be shielded from off-site noise-sensitive receptors.

Parking-Related Activities

The majority of parking-related noise impacts at the Project Site would come from vehicles entering and exiting the residential development from driveways off Ventura Boulevard and Colfax Avenue. During the P.M. peak hour, up to 29 vehicles would generate noise in and out of the garage, with up to 66 net vehicles using the garage in the A.M. peak hour.[11] Vehicles accessing the main building would enter and exit off a driveway on Colfax Avenue or on Ventura Boulevard. Vehicles accessing the east building would use the driveway on Ventura Boulevard. These

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[8] *Clean British Columbia. Heat Pumps and Noise. https://vancouver.ca/files/cov/heat-pump-noise-guide.pdf*

[9] *Washington State Department of Transportation, Noise Walls and Barriers. https://wsdot.wa.gov/construction-planning/protecting-environment/noise-walls-barriers. Assumes the Carrier's rated sound power of 76 dB.*

[10] *Ibid.*

[11] *DKA Planning, 2024, based on CalEEMod 2020.4.0 model using ITE Trip Generation rates (10th Edition). Hourly trip generation based on Institute of Transportation Engineer's hourly trip generation factors for Multifamily Housing (Mid-Rise) (land use code 221).*

vehicles would generate incremental noise from tire friction as they navigate to and from the parking and minor engine acceleration.

There are no sensitive receptors with a line of sight to the entrances to the development from Ventura Boulevard and Colfax Avenue. As such, auto-related impacts from cars accessing the development would be negligible. Auto-related noise impacts for other receptors would also be negligible given their more remote locations and/or the lack of a line of sight from the garage.

Parking-related noise would include also include door slamming (generally instantaneous) and car alarms, while could last a few seconds. These activities would be within the two enclosed garage structures and as such, shielded largely from nearby sensitive receptors. Therefore, the Project's parking garage activities would not have a significant impact on the surrounding noise environment.

Other Operational Activities

As discussed below, noise associated with the Project would include a variety of sources, including human conversation and activities, trash collection, landscape maintenance, and commercial loading operations.

- Trash collection. On-site trash and recyclable materials for the residents would be managed from the rear parking lot. Dumpsters would be moved to the street manually or with container handler trucks that use hydraulic-powered lifts that use beeping alerts during operation. Haul trucks would access solid waste from Ventura Boulevard and/or Colfax Avenue, where solid waste activities would include use of trash compactors and hydraulics associated with the refuse trucks themselves. Noise levels of approximately 71 dBA L_{eq} and 66 dBA L_{eq} could be generated by collection trucks and trash compactors, respectively, at 50 feet of distance.[12] These noise events would be comparable to those serving the existing commercial uses on the premises.

- Landscape maintenance. Noise from gas-powered leaf flowers, lawnmowers, and other landscape equipment can generated substantial bursts of noise during regular maintenance. For example, gas powered leaf blowers and other equipment with two-stroke engines can generated 100 dBA Leq and cause nuisance or potential noise impacts for nearby receptors.[13] Any intermittent equipment use would occur during the day and represent a negligible impact and ultimately be subject to compliance with LAMC Section 112.05 governing powered equipment and hand tools, LAMC Section 112.06 regulating amplified equipment in a place of public entertainment, and other nuisance regulations.

- Loading. On-site loading and unloading activities for new residents would be managed in the open parking lot along the north side of the Project Site. Moving activities would involve

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[12] *RK Engineering Group, Inc. Wal-Mart/Sam's Club reference noise level, 2003.*

[13] *Erica Walker et al, Harvard School of Public Health; Characteristics of Lawn and Garden Equipment Sound; 2017.*

the use of non-powered equipment and/or hydraulically-powered equipment that would generate negligible levels of noise. Loading activities for the commercial kitchen in the main building would likely occur in the rear parking lot as well. These noise events would be comparable to those serving the existing commercial development. As such, noise from loading activities associated with moving or the commercial kitchen would be considered less than significant. Further, LAMC Section 114.03 would regulate loading and unloading activities between 10:00 P.M. and 7:00 A.M.

Off-Site Operational Noise

The majority of the Project's operational noise impacts would be off-site from vehicles traveling to and from the development. The Project could add up to 607 net vehicle trips to the local roadway network on a peak weekday at the start of operations in 2027.[14] During the P.M. peak hour, about 55 net vehicles would generate noise in and out of the development via driveways on Ventura Boulevard and Colfax Avenue, with about 29 net vehicles using the garage in the A.M. peak hour.[15] This would represent a small addition to traffic volumes on local roadways. For example, it would represent 1.4 percent of the 2,137 vehicles currently using the intersection of Ventura Boulevard and Colfax Avenue in the A.M. peak hour.[16]

Because it takes a doubling of traffic volumes (i.e., 100 percent) to increase ambient noise levels by 3 dBA L_{eq}, the Project's traffic would neither increase ambient noise levels 3 dBA or more into "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories, nor increase ambient noise levels 5 dBA or more. Twenty-four-hour CNEL impacts would similarly be minimal, far below the criterion for significant operational noise impacts, which begin at 3 dBA. As such, this impact would be less than significant.

AIR QUALITY

The analysis below is based primarily on air quality modeling conducted by DKA Planning (refer to Appendix E).

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. Generally speaking, sensitive land uses, or sensitive receptors, are those where sensitive individuals are most likely to spend time. Individuals most susceptible to poor air quality include children, the elderly, athletes, and those with cardiovascular and chronic respiratory diseases. As a result, land uses sensitive to air quality may include schools (i.e., elementary schools or high schools), child care centers, parks and playgrounds, long-term health care facilities, rehabilitation facilities, convalescent facilities,

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[14] *Transportation Assessment Report, Armen Hovanessian Transportation Consulting, February 13, 2024. Refer to Appendix C.*

[15] *Ibid.*

[16] *Ibid.*

retirement facilities, residences, and athletic facilities. Sensitive receptors in the vicinity of the Project Site include, but are not limited to, the following:

- Residences, 3900 block of Blue Canyon Drive; 165 feet south of the Project Site
- Residences, 11500 block of Kelsey Street, 220 feet north of the Project Site across the Los Angeles River
- Residences, 11600 block of Picturesque Drive; 250 feet south of the Project Site
- Studio City Inn, 11733 Ventura Boulevard; 410 feet west of the Project Site

Existing Project Site Emissions

The Project Site is developed with various commercial uses, including 2,563 square feet of office, 6,720 square feet of retail, 960 square feet of restaurant, 10,160 square feet of auto sales, and 4,085 square feet of auto repair.[17] To ensure a conservative analysis, this technical report does not "credit" any emissions from existing uses against the gross emissions from the Project.

Air Quality Management Plan Consistency

The Air Quality Management Plan (AQMP), prepared by the South Coast Air Quality Management District (SCAQMD), is a regional blueprint for achieving air quality standards and healthful air throughout the South Coast Air Basin. The AQMP represents a comprehensive analysis of emissions, meteorology, regional air quality modeling, regional growth projections, and the impact of control measures. SCAQMD adopted the 2022 AQMP, which relies the growth assumptions in the Southern California Association of Government's (SCAG) 2020-2045 regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS) on December 2, 2022, updating the region's air quality attainment plan to address the "extreme" ozone non-attainment status for the Basin and the severe ozone non-attainment for the Coachella Valley Basin by laying a path for attainment by 2037. This includes reducing nitrogen oxide (NO_x) emissions by 67 percent more than required by adopted rules and regulations in 2037. The AQMP calls on strengthening many stationary source controls and addressing new sources like wildfires but still concludes that the region will not meet air quality standards without a significant shift to zero emission technologies and significant federal action.

In accordance with the SCAQMD's CEQA Air Quality Handbook, the following criteria are used to evaluate a project's consistency with the AQMP:

- Will the project result in any of the following:
    - An increase in the frequency or severity of existing air quality violations;
    - Cause or contribute to new air quality violations; or
    - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?

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[17] *Transportation Impact Assessment for the Eldercare Facility at 11611-11695 West Ventura Boulevard/4010-4028 Colfax Avenue, LADOT, March 2023. Refer to Appendix C.*

- Will the Project exceed the assumptions utilized in preparing the AQMP?
    - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
    - Does the Project include air quality mitigation measures; or
    - To what extent is Project development consistent with the AQMP land use policies?

Would the Project increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?

As discussed below, the Project would not generate pollutant emissions in excess of SCAQMD's significance thresholds. Thus, the Project would not increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP. Therefore, the Project would be consistent with this criterion.

Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

The AQMP is based on the growth assumptions in the 2020-2045 RTP/SCS, which provides socioeconomic forecast projections of regional population growth. The 2020-2045 RTP/SCS accommodates 21.3 percent growth in population from 2016 (3,933,800) to 2045 (4,771,300) and a 15.6 percent growth in jobs from 2016 (1,848,300) to 2045 (2,135,900).

The Project would result in a residential population of approximately 388 people and employment of approximately 80 people.[18] The Project's residential population would represent approximately 0.051 percent of the forecasted population growth between 2016 and 2045, while the Project's employment would represent approximately 0.002 percent of the forecasted employment growth between 2016 and 2045. Thus, the Project would be consistent with the growth projections in the AQMP. Therefore, the Project would be consistent with this criterion.

Would the Project implement feasible air quality mitigation measures?

As discussed below, the Project would not result in any significant air quality impacts and as a result, no mitigation measures are required. Therefore, the Project would be consistent with this criterion.

Would the Project be consistent with the land use policies set forth in the AQMP?

With regard to land use developments, the AQMP's air quality policies focus on the reduction of vehicle trips and VMT. The Project would implement a number of land use policies of the City of Los Angeles, SCAQMD, and SCAG, as it would be designed and constructed to support and promote environmental sustainability. The Project represents an infill development within an urbanized area that would concentrate housing, jobs, and population within a high quality transit

[18] *Ibid.*

area (HQTA). “Green” principles are incorporated throughout the Project to comply with the City of Los Angeles Green Building Code and CALGreen through energy conservation, water conservation, and waste reduction features. In accordance with City Ordinance 187714, the Project would be all-electric with the exception of any cooking equipment associated with any restaurants or eating facilities and any gas-powered emergency backup systems.

The air quality plan applicable to the Project area is the 2022 AQMP, the current management plan for progression toward compliance with State and federal clean air requirements. The Project would be required to comply with all regulatory measures set forth by the SCAQMD. Implementation of the Project would not interfere with air pollution control measures listed in the 2022 AQMP. As noted earlier, the Project is consistent with the land use policies of the City that were reflected in the regional growth projections for the AQMP. As demonstrated in the following analysis, the Project would not result in significant emissions that would jeopardize regional or localized air quality standards.

For all of the reasons discussed above, the Project would be consistent with the AQMP.

Construction Emissions

Construction of the Project is anticipated to last approximately 27 months (refer to Table 6). During this time, a variety of diesel-powered vehicles and equipment would be operated on-site. Demolition and grading for the Project would require vehicles such as excavators, graders, and other heavy equipment. The building construction phase would require equipment such as forklifts and welding tools.

The Project’s maximum daily regional and local emissions from construction, as estimated using SCAQMD’s CalEEMod 2022.1.22 model, are shown in Table 14. As shown, the Project’s regional construction emissions would not exceed SCAQMD regional significance thresholds for VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$. Local emissions also would not exceed SCAQMD’s significance thresholds for NO_X, CO, PM_{10}, or $PM_{2.5}$. Therefore, the Project’s construction-related air quality impacts would be less than significant.

Table 14
Maximum Daily Regional and Localized Construction Emissions

Construction Phase Year	Emissions in lbs per day					
	VOC	NO_X	CO	SO_x	PM_{10}	$PM_{2.5}$
Regional Emissions						
2025	2.9	40.3	32.1	1.1	8.6	3.7
2026	6.3	18.9	33.6	<0.1	3.7	1.3
2027	6.2	18.2	32.5	<0.1	3.7	1.3
Maximum Regional Emissions	***6.3***	***40.3***	***33.6***	***0.1***	***8.6***	***3.7***
Regional Daily Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum Localized Emissions	***6.3***	***25.0***	***15.5***	***<0.1***	***3.9***	***1.8***
Localized Significance Threshold	*-*	*111*	*1,068*	*-*	*21*	*6*
Exceed Threshold?	**-**	**No**	**No**	**-**	**No**	**No**

Based on CalEEMod 2022.1.22 model runs. LST analyses based on 2-acre site with 50-meter distances to receptors in East San Fernando Valley source receptor area.

Source: DKA Planning, 2024. Refer to Appendix E.

Operational Emissions

Emissions associated with the Project's operations were also calculated using CalEEMod 2022.1.22. As shown in Table 15, the Project's maximum daily emissions would not exceed SCAQMD's regional significance thresholds for VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$, nor would the emissions exceed SCAQMD localized thresholds for NO_X, CO, PM_{10}, or $PM_{2.5}$. Therefore, the Project's operational-related air quality impacts would be less than significant.

Table 15
Maximum Daily Regional and Localized Operational Emissions

Emissions Source	Emissions in lbs per day					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area	6.4	0.	13.9	<0.1	<0.1	<0.1
Energy	<0.1	0.4	0.1	<0.1	<0.1	<0.1
Mobile Sources	1.8	1.2	13.4	<0.1	2.9	0.8
Regional Total	***8.0***	***1.9***	***27.5***	***<0.1***	***3.0***	***0.8***
Regional Daily Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Localized Total	***6.1***	***0.8***	***14.0***	***<0.1***	***<0.1***	***<0.1***
Localized Significance Thresholds	*-*	*111*	*1,068*	*-*	*5*	*2*
Exceed Threshold?	**-**	**No**	**No**	**-**	**No**	**No**

LST analyses based on 2-acre site with 50-meter distances to receptors in East San Fernando Valley source receptor area.

Source: DKA Planning, 2024. Refer to Appendix E.

GREENHOUSE GAS EMISSIONS

An assessment of greenhouse gas (GHG) emissions impacts is an assessment of impacts related to global climate change and not an assessment of "air quality" impacts, which is a requirement for a Class 32 Categorical Exemption. Although not expressly required for a Class 32 Categorical Exemption, below is a GHG emissions impacts analysis for the Project. As shown, the Project would not result in any significant GHG emissions impacts.

The City's significance threshold for assessing a project's GHG emissions impacts is based on the project's consistency with applicable plans, policies, or regulations of an agency adopted for the purpose of reducing GHG emissions. Additionally, the City requires an estimation of a project's GHG emissions for informational purposes.

For purposes of this analysis, the Project's consistency with the Southern California Association of Government's (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), California Air Resources Board's (CARB) 2022 Scoping Plan Update, and the City's Green New Deal has been assessed. As discussed below, the Project would be substantially consistent with the GHG-reduction strategies included in the 2020-2045 RTP/SCS, the 2022 Scoping Plan Update, and the City's Green New Deal. As a result, the Project's impacts related to GHG emissions and climate change would be less than significant.

Consistency with the 2020-2045 RTP/SCS

To implement SB 375 and reduce GHG emissions by correlating land use and transportation planning, SCAG adopted the 2020-2045 RTP/SCS on September 3, 2020. The land use pattern emphasized by the 2020-2045 RTP/SCS involves concentrating new, dense housing and/or job growth in infill locations and Priority Growth Areas (PGAs) in an effort to facilitate alternative transportation modes and reduce vehicle trips and VMT. Projects fitting this land use pattern are consistent with the 2020-2045 RTP/SCS. The Project proposes to develop an eldercare facility on an infill site that is located within a PGA identified by the 2020-2045 RTP/SCS. The Project would place senior residents and employees in close proximity to existing sources of housing, shopping, and entertainment, thereby reducing traffic trips, VMT, and associated GHG emissions. As discussed previously, the Project would not exceed applicable household VMT/capita or work VMT/employee thresholds and would not result in significant VMT impacts. Therefore, the Project would support the 2020-2045 RTP/SCS and its smart growth strategies to efficiently coordinate land use and transportation as a means of reducing VMT-related GHG emissions, consistent with Senate Bill (SB) 375 requirements for the SCAG region. Thus, the Project would be substantially consistent with the 2020-2045 RTP/SCS.

Consistency with the 2022 Scoping Plan Update

The Scoping Plan is a GHG emission reduction roadmap developed and updated by CARB at least once every five years, as required by Assembly Bill (AB) 32, and lays out the transformations needed across various sectors to reduce GHG emissions and reach the State's climate targets. The 2022 Scoping Plan Update is the most comprehensive and far-reaching Scoping Plan

developed to date, identifying a technologically feasible, cost-effective, and equity-focused path to achieve new targets for carbon neutrality by 2045 and to reduce anthropogenic GHG emissions to at least 85 percent below 1990 levels, while also assessing the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan.Several criteria demonstrate that the Project would be consistent with the City's efforts to support the 2022 Scoping Plan Update. First, regarding transportation electrification, the Project would be consistent with the City's EV charging station and parking requirements, which generally meet or exceed CALGreen requirements. Second, regarding VMT reduction, the Project would be built in an infill site that is located within a PGA. This demonstrates that the Project would be consistent with the region's VMT-reduction strategies for land use and transportation. Third, regarding building decarbonization, the Project would comply with the City's Green Building Code, incorporating water and energy efficiency measures into the Project, and the All-Electric Ordinance and would not include natural gas appliances for residential uses. LADWP will also be required to increase the amount of renewable energy it provides to comply with escalating SB 100 requirements, meaning that the Project's electricity usage will trend closer to 100 percent renewables mix over time. Further, the Project would not conflict with future anticipated statewide GHG emissions reductions goals. Specifically, CARB has outlined strategies for achieving the 2030 reduction target of 40 percent below 1990 levels, as mandated by SB 32 as well as carbon neutrality by 2045. These strategies include renewable resources for the state's electricity, increasing the fuel economy of vehicles and the penetration of zero-emission or hybrid vehicles into the vehicle fleet, reducing the rate of growth in VMT, supporting high-speed rail and other alternative transportation options, and use of high-efficiency appliances, water heaters, and HVAC systems. Thus, the Project would be substantially consistent with the 2022 Scoping Plan Update.

Consistency with the Green New Deal

The Sustainable City pLAn was a mayoral initiative in 2015 and includes both short-term and long-term aspirations through 2035 in various topic areas, including: water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others. The Green New Deal was a 2019 mayoral initiative that updated the Sustainable City pLAn, including both short-term and long-term aspirations through 2035 for water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.[19] Targets include ensuring 75 percent of new housing units within 1,500 feet of transit by 2046, reducing vehicle miles traveled per capita by 45 percent by 2050, and moving toward 100 percent zero emission vehicles by 2050. Although the Green New Deal is not an adopted plan or directly applicable to private development projects, the Project would benefit from local access to Metro bus service. Further, the Project would comply with CALGreen and would comply with the City's Solid Waste Management Policy Plan, the RENEW LA Plan, and the Exclusive Franchise System Ordinance (Ordinance No. 182,986) in furtherance of the aspirations included in the Green New Deal regarding energy-efficient buildings and waste and landfills. The

[19] City of Los Angeles, Green New Deal, 2019.

Project would also provide secure short- and long-term bicycle storage areas for employees and residents. Therefore, the Project would be substantially consistent with the Green New Deal.

Project GHG Emissions

For informational purposes, the Project's GHG emissions from construction and operations were estimated using CalEEMod Version 2022. Construction of the Project is estimated to generate approximately 2,363 $MTCO_2e$.[20] Amortized over a 30-year project lifetime (per SCAQMD recommendations), this results in annual Project construction emissions of approximately 79 $MTCO_2e$. Operation of the Project is estimated to generate approximately 1,089 $MTCO_2e$ per year at buildout, including the previously calculated annualized construction emissions, the Project would generate.[21] Emissions would decline over time due to factors such as increased renewables mix in electricity usage and increased zero-emissions vehicle (ZEV) mix in the Project's vehicle fleet, consistent with Statewide trends.

WATER QUALITY

During construction of the Project, particularly during the grading and excavation phases, stormwater runoff from precipitation events could subject exposed and stockpiled soils to erosion and could convey sediments into municipal storm drain systems. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Pollutant discharges relating to the storage, handling, use, and disposal of chemicals, adhesives, coatings, lubricants, and fuel could also occur. However, the Project Applicant would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit including the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of best management practices (BMPs), required to minimize soil erosion and sedimentation from entering the storm drains during the construction period. In addition, the Project would be subject to the City's Stormwater and Urban Runoff Pollution Control regulations (Ordinance No. 172,176 and No. 173,494) to ensure pollutant loads from the Project Site would be minimized for downstream receiving waters. Compliance with the NPDES and implementation of the SWPPP and BMPs, as well as the City's discharge requirements would ensure that construction stormwater runoff would not violate water quality and/or discharge requirements.

Stormwater runoff generated during operation of the Project could have the potential to introduce small amounts of pollutants typically associated with a residential development (e.g., household cleaners, landscaping pesticides, and vehicle petroleum products) into the stormwater system. Stormwater runoff from precipitation events could carry urban pollutants into municipal storm drains. However, during operation the Project would be required to comply with the City's Low Impact Development (LID) Ordinance. The LID Ordinance applies to all development and redevelopment in the City that requires a building permit. LID plans are required to include a site design approach and BMPs that address runoff and pollution at the source. Further, to comply

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[20] *GHG emissions modeling results are included in Appendix F.*

[21] *Ibid.*

with LID Ordinance the Project would be required to capture and treat the first 3/4-inch of rainfall in accordance with established stormwater treatment priorities. Compliance with the LID Ordinance would reduce the amount of surface water runoff leaving the Project Site as compared to the current conditions. Compliance with the LID Plan and Standard Urban Stormwater Mitigation Plan (SUSMP), including the implementation of BMPs, would ensure that operation of the Project would not violate water quality standard and discharge requirements or otherwise substantially degrade water quality.

Conformance with these regulations would ensure construction and operational activities would not violate water quality standards, waste discharge requirements, or otherwise substantially degrade water quality. Therefore, no significant Project impacts related to water quality would occur.

Discussion of Section 15332(e)

As discussed below, the Project can be adequately served by all required utilities and public services.

PUBLIC SERVICES

Fire Protection

The Project includes demolition and removal of approximately 22,485 square feet of commercial uses from the Project Site and development of the Project Site with an eldercare facility, adding a residential and employment population to the Project Site that could result in an increased need for fire protection services at the Project Site. The factors that the Los Angeles Fire Department (LAFD) considers in determining whether fire protection services for a project is adequate include whether the project: (1) is within the maximum response distance for the land uses proposed; (2) complies with emergency access requirements; (3) complies with fire-flow requirements; and (4) complies with fire hydrant placement. Pursuant to LAMC Section 57.507.3.3, the maximum response distance between a high-density residential/commercial neighborhood land use and a LAFD station that houses an engine or truck company is 1.5 miles. If this distance is exceeded, all structures shall be constructed with automatic fire sprinkler systems. The Project Site is served by several fire stations, as shown in Table 16. The fire station closest to the Project Site is Fire Station 78, which is 1.2 miles away. The Project would be constructed with automatic fire sprinkler systems pursuant to LAMC Section 57.507.3.3. Additionally, as required by LAFD, the Project would install three new fire hydrants on Ventura Boulevard.

All ingress/egress associated with the Project would be designed and constructed in conformance to all applicable City Building and Safety Department and LAFD standards and requirements for design and construction. Therefore, the Project would not result in impacts related to emergency access. The required fire flow for the Project would be confirmed in consultation with the LAFD during the plan check approval process. Therefore, no significant Project impacts related to fire protection services would occur.

Table 16
Fire Stations Serving the Project Site

No.	Address	Distance from Project Site
60	5320 Tujunga Avenue	2.4 miles
78	4041 Whitsett Avenue	1.2 miles
86	4305 Vineland Avenue	1.8 miles
88	5101 Sepulveda Boulevard	5.7 miles

Source: LAFD, http://www.lafd.org/fire-stations/find-your-station, 2024.

Police Protection

The Project Site is within the boundaries of the North Hollywood Community Police Station. The Project includes the demolition and removal of approximately 22,485 square feet of commercial uses from the Project Site and development of the Project Site with an eldercare facility, adding a residential and employment population to the Project Site that could result in an increased need for police protection services at the Project Site. However, in accordance with the City's regulations, the Project developer would be required to refer to "Design Out Crime Guidelines: Crime Prevention Through Environmental Design," published by the Los Angeles Police Department (LAPD). Contact the Community Relations Division, located at 100 W. 1st Street, #250, Los Angeles, CA 90012; (213) 486-6000. The Project would include standard security measures such as adequate security lighting, controlled residential access, and secure parking facilities. Through compliance with LAPD requirements, no significant Project impacts related to police protection services would occur.

Schools

The Project includes demolition and removal of approximately 22,485 square feet of commercial uses from the Project Site and development of the Project Site with an eldercare facility. However, no school-aged children would live at the Project. Additionally, pursuant to the California Government Code Section 65995/California Education Code Section 17620, mandatory payment of the school fees established by the LAUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, fully address any potential direct and indirect impacts to schools as a result of the Project. Therefore, no significant Project impacts to school services would occur.

Parks

The Project includes demolition and removal of approximately 22,485 square feet of commercial uses from the Project Site and development of the Project Site with an eldercare facility. Due to the need for care that most of the Project residents would require, most of residents would not leave the proposed facility to visit off-site parks and recreational facilities. To accommodate the needs of the residents, the Project would provide approximately 21,471 square feet of open space. Additionally, the Project includes development of a 1,941-square-foot Pocket Park at the northwest corner of the Project Site for use by the public and Project residents. Additionally,

pursuant to Ordinance 184,505 (Parks Dedication and Fee Update), the Project Applicant would be required to pay an in-lieu fee to the City for the purpose of developing park and recreational facilities. Thus, the Project would not create a need for off-site parks and recreational facilities. Therefore, no significant Project impacts related to parks and recreational facilities would occur.

Other Public Facilities

The Project includes demolition and removal approximately 22,485 square feet of commercial uses from the Project Site and development of the Project Site with an eldercare facility. Due to the need for care that most of the Project residents would require, most of residents would not leave the proposed facility to visit off-site library facilities. The Project would include on-site computer and reading facilities for residents. Thus, the Project would not create a need for off-site library facilities. Therefore, no significant Project impacts related to library facilities would occur.

UTILITIES AND SERVICE SYSTEMS

Wastewater

The Project Site is located within the service area of the Hyperion Treatment Plant (HTP), which has been designed to treat a maximum dry-weather daily flow of 450 million gallons per day (mgd) and a peak wet-weather flor of 800 mgd.[22] Full secondary treatment prevents virtually all particles suspended in effluent from being discharged into the Pacific Ocean and is consistent with the Los Angeles Regional Water Quality Control Board's (LARWQCB) discharge policies for the Santa Monica Bay. The HTP currently treats an average daily flow of approximately 275 mgd. Thus, there is an available capacity of no less than approximately 175 mgd available capacity. The Project would generate a net increase of approximately 15,765 gallons of wastewater per day (or 0.01 mgd) (refer to Table 17). It should be noted that this amount does not take into account the net decrease associated with the effectiveness of water conservation measures required in accordance with the City's Green Building Code, which would likely reduce the Project's water consumption (and wastewater generation) shown on Table 17. With a remaining daily capacity of 175 mgd, the HTP would have adequate capacity to serve the Project. Therefore, no significant Project impacts related to wastewater treatment would occur.

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[22] *City of Los Angeles Department of Sanitation, https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-hwrp;jsessionid=eZqfxN9kH7JNCMKvC8S0n8GklyH7VwNMZ03aN9oSSgGtF5ixQkRV!2143003606!2064592652?_afrLoop=1169814258527711 3&_afrWindowMode=0&_afrWindowId=null&_adf.ctrl-state=1dl2da31dl_1#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D1169814258527711 3%26_afrWindowMode%3D0%26_adf.ctrl-state%3D1dl2da31dl_5, accessed April 2024.*

Table 17
Estimated Wastewater Generation and Water Consumption[1]

Land Use	Size	Water Consumption Rate[2]	Total (gpd)
Existing			
Office	2,560 sf	120 gpd/1,000 sf	307
Retail	6,720 sf	50 gpd/1,000 sf	336
Restaurant	32 seats[3]	30 gpd/seat	690
Auto Sales and Repair	12,245 sf	50 gpd/1,000 sf	612
		Total Existing	***1,945***
Project			
Eldercare Facility	253 beds	70 gpd/bed	17,710
		Less Existing	***(1,945)***
		Net Total	***15,765***

sf = square feet *gpd = gallons per day* *du = dwelling unit*

1 *Conservatively assumes that water consumption is equal to wastewater generation.*
2 *Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Factors, April 6, 2012.*
3 *Assumes 30 square feet per seat.*

Pursuant to City policy, the Bureau of Sanitation would analyze the gauging of the sewer lines and make the appropriate decisions on how best to connect to the local sewer lines at the time of construction. A final approval for sewer capacity and connection permit would be made at the time of construction. Therefore, no significant Project impacts related to local sewer infrastructure would occur.

Water

The Los Angeles Department of Water and Power (LADWP) provides water service to the Project Site. LADWP's water supply sources include the Los Angeles Aqueduct (LAA), local groundwater, the SWP (supplied by the Metropolitan Water District [MWD]), the Colorado River Aqueduct (also supplied by MWD), and recycled water.

The California Urban Water Management Planning Act of 1984 requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 acre-feet per year (AFY) of water to prepare an Urban Water Management Plan (UWMP) every five years to identify short-term and long-term water resources management measures to meet growing water demands during normal, single-dry, and multiple-dry years. In the UWMP, the water supplier must describe the water supply projects and programs that may be undertaken to meet the total water use of the service area. The UWMP that is applicable to the Project is LADWP's 2020 UWMP. The 2020 UWMP provides historical and forecasted water demands for the City. Total water demand varies annually and is contingent on various factors including: population growth, weather, water conservation, drought, and economically activity.

Table 18 shows a breakdown of historical water demand for the LADWP service area. Table 19 provides LADWP's projected water demand from 2025 to 2045 for average year, single dry year, and multi dry year hydrological conditions. Demographic projections were provided for the LADWP service area by the Metropolitan Water District (MWD), who received the data from SCAG. SCAG applied its 2020 Regional Transportation Plan demographic data to water service areas for MWD's member agencies. These data were used for water demand projections in LADWP's 2020 UWMP. The Project's uses are allowed under the existing zoning and land use designation for the Project Site and as such, the residential population associated with the Project was accounted for in the 2020 UWMP. Service area population is expected to continue to grow over the next 25 years at a rate of 0.7 percent annually.[23] Based on its 2020 UWMP, LADWP has supply capabilities that would be sufficient to meet expected demands from 2025 through 2045 under single dry-year and multiple dry-year hydrologic conditions.

More frequent and longer-lasting dry periods, regulatory constraints, and seismic risks that can result in water delivery system outages are causing increased stress on water supply reliability for LADWP. As such, in preparation for taking reasonable actions to balance water demands with limited water supplies, LADWP has prepared a Water Shortage Contingency Plan (WSCP) that outlines a set of actions that the City can take in the event of a declared water supply shortage or emergency situation. The City has six standard water shortage levels and response actions, as summarized in Table 20. Under state law, LADWP has the authority to implement the water shortage actions outlined in the WSCP. In all water shortage cases, shortage response actions to be implemented are at the discretion of LADWP based on an assessment of the supply shortage, customer response, and the need for demand reductions. Upon proclamation by the Governor of a state of emergency under the California Emergency Services Action based on extended dry conditions, the state will defer to implementation of locally adopted water shortage contingency plans to the extent practicable. LADWP will coordinate with regional and local water suppliers for which it provided water supply services for a possible proclamation of a local emergency, as necessary.

[23] *2020 Urban Water Management Plan, LADWP, p. 1-5.*

Table 18
Breakdown of Historical Water Demand for LADWP's Service Area

Fiscal Year Ending Average	Single Family		Multi-Family		Commercial		Industrial		Government		Non-Revenue		Total
	AF	%	AF	%	AF	%	AF	%	AF	%	AF	%	AF
2016-2020	170,660	35%	141,088	28%	88,680	18%	14,938	3%	39,628	8%	40,690	8%	495,685
2011-2015	206,652	37%	161,592	29%	96,832	18%	17,855	3%	43,573	8%	26,139	6%	552,768
2006-2010	236,154	38%	180,277	29%	106,964	17%	23,196	4%	42,956	7%	30,617	5%	620,165
2001-2005	239,754	37%	190,646	29%	109,685	17%	21,931	3%	41,888	6%	52,724	8%	656,628
1996-2000	222,748	36%	191,819	31%	111,051	18%	23,560	4%	39,421	6%	33.696	5%	622,295
1991-1995	197,322	34%	177,104	30%	110,724	19%	21,313	4%	38,426	7%	39,364	7%	584,253
30-Year Average	212,215	36%	173,755	30%	103,990	18%	20,465	3%	40,982	7%	37,205	6%	588,611

AF = Acre Feet

Source: 2020 Urban Water Management Plan, LADWP.

Table 19
Service Area Reliability Assessment (AFY)

Hydrological Conditions[1]	Years				
	2025	2030	2035	2040	2045
Average Year	642,600	660,200	678,800	697,800	710,500
Single Dry Year	674,700	693,200	712,700	732,700	746,000
Multi-Dry Year (Year 1)	657,900	675,800	694,900	714,400	727,400
Multi-Dry Year (Year 2)	661,700	679,700	698,900	718,500	731,500
Multi-Dry Year (Year 3)	674,400	693,200	712,800	732,700	746,000
Multi-Dry Year (Year 4)	661,600	679,600	698,900	718,400	731,500
Multi-Dry Year (Year 5)	655,700	673,600	692,600	712,000	724,900

AFY = acre-feet per year

Source: 2020 UWMP, LADWP, Exhibits 11E, 11F, and 11G.

Table 20
Water Shortage Response Actions

Water Shortage Level	Percent Shortage	Shortage Response Actions
Level 1: No Shortage	≤10%	Water Shortage Level 1 constitutes a consumer demand reduction of up to 10%. Shortage response actions under this level include the permanent water use restrictions listed below. **Phase I Restrictions** No LADWP customer shall use a water hose to wash any paved surfaces, except to alleviate immediate safety or sanitation hazards. No LADWP customer shall use water to clean, fill or maintain levels in decorative fountains, ponds, lakes, or similar structures used for aesthetic purposes, unless such water is part of a recirculating system. No restaurant, hotel, cafe, cafeteria, or other public place where food is sold, served, or offered for-sale, shall serve drinking water to any person unless expressly requested. No LADWP customer shall permit water to leak from any pipe or fixture on the customer's premises.
Level 2: Moderate Shortage	≤20%	Water Shortage Level 2 is implemented when there is a reasonable probability of supply shortage from LADWP-controlled supplies in the long-term and a demand reduction of up to 20% is necessary to mitigate this long-term shortage risk. Conservation Ordinance Phase 2 will be implemented to achieve the necessary demand reduction. Additionally, to reduce consumption during this phase and all higher levels of conditions, LADWP may increase its public education and outreach efforts and enforcement measures to build awareness of voluntary water conservation practices and all permanent water waste prohibitions. **Actions**

Table 20
Water Shortage Response Actions

Water Shortage Level	Percent Shortage	Shortage Response Actions
		Mandatory Conservation Phase 2 Restrictions on landscape irrigation watering days (Monday, Wednesday, or Friday for odd-numbered street addresses and Tuesday, Thursday, or Sunday for even-numbered street addresses). Irrigation of Sports Fields may deviate from the non-watering days to maintain play areas and accommodate event schedules. Irrigation of large landscape areas may deviate from the non-watering days under certain conditions. Provisions do not apply to drip irrigation supplying water to a food source or to hand-held hose watering of vegetation. Increase outreach efforts for high-volume customers and provide one on one assessments. Expand enforcement of unreasonable use of water. Increase water conservation rebates and incentives. Increase conservation messaging (radio, TV, social media, educational events).
Level 3: Significant Shortage	≤30%	A Water Shortage Level 3: Significant Shortage is implemented when demand must be reduced up to 30% to ensure sufficient supplies. During a Significant Shortage, a new set of mandatory water conservation practices takes effect, in addition to all Permanent Water Waste Prohibitions and Level 1 and Level 2 conservation practices. Beginning with Water Shortage Level 3, LADWP may elect to withdraw from available emergency storage along the LAA system and from local groundwater basins. Emergency storage along the LAA may come in the form of emergency reservoir storage and/or emergency groundwater pumping in the Owens Valley with the approval of the LA/Inyo Standing Committee. Emergency storage from local groundwater basin may

Table 20
Water Shortage Response Actions

Water Shortage Level	Percent Shortage	Shortage Response Actions
		come in the form of storied water credits. Withdrawals from emergency supplies may provide only short-term relief and the extent of withdrawals will be determined based on assessments of long-term shortage risk. **Actions** Mandatory Conservation Phase 3 Further restrictions on landscape irrigation watering days (Monday or Friday for odd-numbered street addresses and Sunday or Thursday for even-numbered street addresses) Recommend use of pool covers to decrease water loss from evaporation. Recommend washing of vehicles at commercial car wash facilities. Irrigation of sports fields may deviate from the non-watering days to maintain play areas and accommodate event schedules. Irrigation of large landscape areas may deviate from the non-watering days under certain conditions. Provisions do not apply to drip irrigation supplying water to a food source or to hand-held hose watering of vegetation. Withdraw from available emergency storage along the LAA System and local groundwater basins.
Level 4: Severe Shortage	≤40%	Water Shortage Level 4: Severe Shortage is implemented when demand must be reduced up to 40% to ensure sufficient supplies. During a Severe Shortage, a new set of mandatory water conservation practices takes effect, in addition to all Permanent Water Waste Prohibitions and additional restriction practices that became mandatory under Water Shortage Level 1, Level 2, and Level 3. LADWP may also elect to increase withdrawals from available emergency storage along the LAA system and from local groundwater basins.

Table 20
Water Shortage Response Actions

Water Shortage Level	Percent Shortage	Shortage Response Actions
		Actions Mandatory Conservation Phase 4 Further restrictions on landscape irrigation watering days (Monday for odd-numbered street addresses and Tuesday for even-numbered street addresses). Mandate use of pool covers on all residential swimming pools when not in use. No washing of vehicles allowed except at commercial car wash facilities. No filling of decorative fountains, ponds, lakes, or similar structures used for aesthetic purposes, with potable water. Irrigation of sports fields may deviate from the non-watering days to maintain play areas and accommodate event schedules. Irrigation of large landscape areas may deviate from the non-watering days under certain conditions. Provisions do not apply to drip irrigation supplying water to a food source or to hand-held hose watering of vegetation. Withdraw from available emergency storage along the LAA System and local groundwater basins
Level 5: Critical Shortage	≤50%	Water Shortage Level 5: Critical Shortage is implemented when a water shortage emergency requires that demand be reduced up to 50% to ensure sufficient supplies. Mandatory conservation practices imposed under Water Shortage Levels 1 through 4 remain in effect and LADWP may elect to further increase withdrawals from available emergency storage along the LAA system and from local groundwater basins. **Actions** Mandatory Conservation Phase 5 No landscape irrigation allowed. No filling of residential swimming pools and spas with potable water.

Table 20
Water Shortage Response Actions

Water Shortage Level	Percent Shortage	Shortage Response Actions
		No washing of vehicles allowed except at commercial car wash facilities. No filling of decorative fountains, ponds, lakes, or similar structures used for aesthetic purposes, with potable water. Golf courses and professional sports fields may apply water to sensitive areas, such as greens and tees, during non-daylight hours and only to the extent necessary to maintain minimum levels of biological viability. Provisions do not apply to drip irrigation supplying water to a food source or to hand-held hose watering of vegetation. Withdraw from available emergency storage along the LAA System and local groundwater basins
Level 6: Super Critical Shortage	> 50%	Water Shortage Level 6: Supercritical Shortage is implemented when a water shortage emergency requires that demand be reduced greater than 50% to ensure sufficient supplies. During a Supercritical Shortage, a new set of mandatory conservation measures takes effect, in addition to all Permanent Water Waste Prohibitions. Mandatory conservation practices that were imposed Levels 1 through 5 remain in effect. LADWP may elect maximize withdrawals from available emergency storage along the LAA system and from local groundwater basins for supply augmentation. **<u>Actions</u>** Mandatory Conservation Phase 6 No landscape irrigation allowed. No filling of residential swimming pools and spas with potable water. No washing of vehicles allowed except at commercial car wash facilities. No filling of decorative fountains, ponds, lakes, or similar structures used for aesthetic purposes, with potable water.

Table 20
Water Shortage Response Actions

Water Shortage Level	Percent Shortage	Shortage Response Actions
		Golf courses and professional sports fields may apply water to sensitive areas, such as greens and tees, during non-daylight hours and only to the extent necessary to maintain minimum levels of biological viability. Provisions do not apply to drip irrigation supplying water to a food source or to hand-held hose watering of vegetation. The Board is hereby authorized to implement additional prohibited uses of water based on the water supply situation. Any additional prohibition shall be published at least once in a daily newspaper of general circulation and shall become effective immediately upon such publication and shall remain in effect until cancelled. Withdraw from available emergency storage along the LAA and local groundwater basin. Additional measures authorized by the Board
Source: 2020 UWMP, Appendix I, LADWP.		

As shown on Table 17, the Project would consume a net increase of approximately 15,765 gallons of water per day (or 0.01 mgd). According to the Los Angeles Department of Water and Power (LADWP), any project that is consistent with the City's General Plan, the projected water demand associated with that project is considered to be accounted for in the most recently adopted Urban Water Management Plan (UWMP), which is prepared by the LADWP to ensure that existing and projected water demand within its service area can be accommodated.[24] As discussed previously, the Project is consistent with the City's General Plan land use designation for the Project Site. Additionally, the Project Applicant would be required to comply with the water efficiency standards outlined in Los Angeles City Ordinance No. 180822 and in the Los Angeles Green Building Code (LAGBC) to minimize water usage. Further, prior to issuance of a building permit, the Project Applicant would be required to consult with LADWP to determine Project-specific water supply service needs and all water conservation measures that shall be incorporated into the Project. As

[24] *Los Angeles Department of Water and Power, Amir Tabakh, correspondence, February 11, 2015.*

such, the Project would not require new or additional water supply or entitlements. Therefore, no significant Project impacts related to water supply would occur.

Solid Waste

The landfills that serve the City and the capacity of these landfills are shown in Table 21. As shown, the landfills have an approximate available daily intake of 16,531 tons. As shown in Table 22, the Project would generate a net increase of approximately 0.35 tons of solid waste per day. This total is conservative and does not account for the net decrease associated with the previous use and the effectiveness of recycling efforts, which the Project would be required by the City to implement. With a remaining daily intake capacity of approximately 16,531 tons of solid waste per day, the landfills serving the City could accommodate the Project's approximately net increase of 0.35 tons of solid waste per day.

Table 21
Landfill Capacity

Landfill Facility	Estimated Remaining Life (years)	Estimated Remaining Disposal Capacity (million tons)	Permitted Intake (tons/day)	Daily Disposal (tons/day)	Available Daily Intake (tons/day)
Sunshine Canyon	17	35.9	12,100	7,420	4,680
Chiquita Canyon	27	54.4	12,000	6,114	5,886
Antelope Valley	13	10.1	3,600	2,785	815
Lancaster	81	9.9	3,000	395	2,605
Calabasas	14	1.0	3,500	955	2,545
				Total	**16,531**

Source: County of Los Angeles, Countywide Integrated Waste Management Plan, 2019 Annual Report, September 2020.

Table 22
Estimated Project Solid Waste Generation

Land Use	Size	Generation Rate[1]	Total (tpd)
Existing			
Commercial	22,485 sf	0.005 lbs/sf/day	0.05
Project			
Multi-Family Residential	199 du	4 lbs/du/day	0.40
		Less Existing	***(0.05)***
		Net Total	***0.35***

tpd = tons per day sf = square feet du = dwelling unit

[1] *Source: City of Los Angeles Bureau of Sanitation, "Solid Waste Generation," 1981.*

The Project's solid waste would be handled by private waste collection services. Pursuant to Section 66.32 of the LAMC, the Project's solid waste contractor must obtain, in addition to all other required permits, an Assembly Bill 939 (AB 939) Compliance Permit from the Los Angeles Bureau of Sanitation (LASAN). The Project would be required to comply with LAMC Section 12.21 A.19, which requires new development to provide an adequate recycling area or room for collecting and loading recyclable materials. Additionally, the Project would be required to comply with CALGreen Code waste reduction measures for the operation of the Project. Recycling bins shall be provided at appropriate locations to promote recycling of paper, metal, glass, and other recyclable material. These bins shall be emptied and recycled accordingly as a part of the Project's regular solid waste disposal program. For these reasons, the Project would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, and would not otherwise impair the attainment of solid waste reduction goals. Therefore, no significant Project impacts related to solid waste would occur.

Categorical Exemption Exceptions

Section 15300.2 (Exceptions), Article 19, Chapter 3, Title 14 of the California Code of Regulations includes Exceptions to Categorical Exemptions for certain activities. For the reasons discussed below, none of the Exceptions apply to the Project.

15300.2. Exceptions

(a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located -- a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

(b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

(c) Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

(d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

(e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

(f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

Discussion of Exceptions

Section 15300.2 (a) - Location:

Not applicable. The Project does not fall under the definitions of Classes 3, 4, 5, or 11.

Section 15300.2(b) - Cumulative Impacts

The cumulative impact analysis considers the potential impacts associated with implementation of the Project in conjunction with other "related projects" in the vicinity of the Project Site that could be developed within the same timeframe as the Project. The list of related projects includes three projects and is included in Table 12 on page 30 of the *Transportation Assessment* that was prepared for the Project (refer to the Appendix C). As discussed below, the Project would not contribute to any significant cumulative impacts resulting from successive projects of the same type in the same place over time, and this Exception does not apply.

Air Quality

The SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above also be considered cumulatively considerable.[25] Individual projects that generate emissions not in excess of SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. As discussed previously, the Project would not produce VOC, NO_X, CO, SO_X, $PM_{2.5}$, and PM_{10} emissions in excess of SCAQMD's significance thresholds. Therefore, the cumulative air quality impact of successive projects of the same type in the same place over time would not be significant.

Water Quality

The sites of the Project and the related projects are located in an urbanized area where most of the surrounding properties are already developed. The existing storm drainage system serving this area has been designed to accommodate runoff from an urban built-out environment. When new construction occurs it generally does not lead to substantial additional runoff, since new developments is required to control the amount and quality of stormwater runoff coming from their respective sites. Moreover, little if any additional cumulative runoff is expected from the Project

[25] *White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, p. D-3.*

and the related project sites, since the area is highly developed with impervious surfaces. Additionally, all new development in the City is required to comply with the City's LID Ordinance and incorporate appropriate stormwater pollution control measures into the design plans to ensure that water quality impacts are minimized. Any subsequent developments would be required to perform the same level of water quality impact analysis as the Project, and any impacts would be mitigated as necessary/appropriate. Therefore, the cumulative water quality impact of successive projects of the same type in the same place over time would not be significant.

Noise

The sites of the three related projects are separated from the Project Site by several streets and intervening development. The closest related project is located 0.5 miles east of the Project Site at 11311 Ventura Boulevard. The Project and related projects do not have sensitive receptors in common. Thus, noise generated by concurrent construction and operational activities would not be cumulatively audible. Because it takes a doubling of traffic volumes to create a noticeable increase in noise levels associated with traffic and because the Project and related projects' construction- and operational-related trips would not cause a doubling in traffic volumes on any road segment, the cumulative construction- and operational related traffic noise impacts would not be significant. Thus, cumulative noise impacts would not be significant.

Traffic

The Office of Planning and Research's (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* states the following regarding cumulative traffic impacts:

> *Cumulative Impacts. A project's cumulative impacts are based on an assessment of whether the "incremental effects of an individual 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." (Pub. Resources Code, § 21083, subd. (b)(2); see CEQA Guidelines, § 15064, subd. (h)(1).) When using an absolute VMT metric, i.e., total VMT (as recommended below for retail and transportation projects), analyzing the combined impacts for a cumulative impacts analysis may be appropriate. However, metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance. (See Center for Biological Diversity v. Department of Fish & Wildlife (2015) 62 Cal.4th 204, 219, 223; CEQA Guidelines, § 15064, subd. (h)(3).)*

As discussed previously, the Project would not result in a significant VMT impact. For this reason, the Project's cumulative contribution to traffic impacts would not be significant.

Public Services

Fire Protection

Implementation of the Project and the related projects could result in a net increase in the number of residents and employees in the area and could cumulatively increase demand for fire protection services. Cumulative development requires the LAFD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. As with the proposed Project, the related projects would be subject to the Fire Code and other applicable regulations of the LAMC including, but not limited to, automatic fire sprinkler systems for high-density buildings and/or residential projects located farther than 1.5 miles from the nearest LAFD Engine or Truck Company to compensate for additional response time, and other recommendations made by the LAFD to ensure fire protection safety. Compliance with the applicable regulatory measures would ensure that LAFD would be able to provide adequate facilities to accommodate future growth and maintain acceptable levels of service. Furthermore, the increased demands for additional LAFD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which the Project and related projects would contribute. Additionally, any subsequent development would be required to perform the same level of fire protection impact analysis as the Project, and any impacts would be mitigated as necessary/appropriate. Therefore, the cumulative impact to fire protection from successive projects of the same type in the same place over time would not be significant.

Police Protection

Implementation of the Project and the related projects could result in a net increase in the number of residents and employees in the Project Site area and could cumulatively increase the demand for police protection services. Cumulative development requires the LAPD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. As with the proposed Project, the related projects would be subject to the review and oversight of the LAPD related to crime prevention features, and other applicable regulations of the LAMC. The review process would ensure the ability of the LAPD to provide adequate facilities to accommodate future growth and maintain acceptable levels of service. Furthermore, the increased demands for additional LAPD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which the Project and related projects would contribute. Additionally, any subsequent development would be required to perform the same level of police protection impact analysis as the Project, and any impacts would be mitigated as necessary/appropriate. Therefore, the cumulative impact to police protection from successive projects of the same type in the same place over time would not be significant.

Schools

The related projects could increase the number students in the Project Site area, resulting in a cumulative increase in demand for school services. As discussed previously, due to the nature of the Project (i.e., an eldercare facility), the Project would not create a demand for school services. Similar to the Project Applicant, the applicants of all the related projects would be required to pay

the state mandated applicable school fees to the LAUSD to ensure that no significant impacts to school services would occur. Therefore, the cumulative impact to schools from successive projects of the same type in the same place over time would not be significant.

Parks

The residential related projects could increase the number of residents in the Project Site area, resulting in a cumulative increase in demand for parks. As discussed previously, due to the nature of the Project (i.e., an eldercare facility) and the inclusion of on-site open space, including a Pocket Park, the Project's need for parks would be minimal. The applicant of the residential related projects would be subject to the City's Park and Recreation Ordinance and must comply with LAMC open space requirements, ensuring that any potential impacts to parks and recreational facilities would be less than significant. Therefore, the cumulative impact to parks from successive projects of the same type in the same place over time would not be significant.

Other Public Facilities

Implementation of the residential related projects could result in a net increase in the number of residents in the Project Site area, resulting in a cumulative increase in demand for library services. As discussed previously, due to the nature of the Project (i.e., an eldercare facility) and the inclusion of on-site computer and reading facilities for residents, the Project's need for library services would be minimal. Cumulative development would not cause the need for new or altered library facilities, the construction of which could result in significant environmental impacts. Therefore, the cumulative impact to library services from successive projects of the same type in the same place over time would not be significant.

Utilities

Wastewater

Implementation of the related projects in concert with the Project could increase the need for wastewater treatment. Table 23 shows that the cumulative development in the Project Site area could result in the need to treat approximately 34,863 gallons of water per day (or 0.34 mgd per day). It should be noted that this amount does not take into account the net decrease in wastewater generation (and water consumption) that would occur as a result of removal of existing uses for the related project or the effectiveness of water conservation measures required in accordance with the City's Green Building Code, both of which would likely substantially reduce the cumulative water consumption and wastewater generation shown on Table 23. With a remaining treatment capacity of approximately 175 mgd, the HTP would have adequate capacity to accommodate the wastewater treatment requirements of cumulative development. No new or upgraded treatment facilities would be required. Therefore, the cumulative wastewater impacts related to water treatment would be less than significant.

Table 23
Estimated Cumulative Water Consumption and Wastewater Generation[1]

Land Uses	Size	Water Consumption/ Wastewater Generation Rate[2]	Total (gpd)
Multi-Family Residential	120 du	150 gpd/du	18,000
Commercial	43,932 sf	25 gpd/1,000 sf	1,098
		Total Related Projects	***19,098***
		Plus Project	*15,765*
		Total	**34,863**

gpd = gallons per day *du = dwelling unit*

[1] *Assumes wastewater generation equals water consumption.*
[2] *Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Factors, April 6, 2012. This rate does not assume the effectiveness of any current water conservation measures that are required in the City.*

Water

Implementation of the related projects could increase the need for water supply in the City. Table 23 shows that the cumulative development in the Project Site area could result in the need to treat approximately 34,863 gallons of water per day (or 0.34 mgd per day). It should be noted that this amount does not take into account the net decrease in water consumption (and wastewater generation) that would occur as a result of removal of existing uses for the related project or the effectiveness of water conservation measures required in accordance with the City's Green Building Code, both of which would likely substantially reduce the cumulative water consumption (and wastewater generation) shown on Table 23.

LADWP (through its 2020 UWMP) anticipates that its projected water supplies will meet demand through the year 2045. In terms of the City's overall water supply condition, any related project that is consistent with the City's General Plan has been taken into account in the planned growth of the water system. In addition, any related project that conforms to the demographic projections from SCAG's Regional Transportation Plan and is located in the service area is considered to have been included in LADWP's water supply planning efforts so that projected water supplies would meet projected demands. Similar to the Project, each related project would be required to comply with City and State water code and conservation programs for both water supply and infrastructure.

Related projects that propose changing the zoning or other characteristics beyond what is within the General Plan would be required to evaluate the change under CEQA review process. The CEQA analysis would compare the existing to the proposed uses and the ability of LADWP supplies and infrastructure to provide a sufficient level of water service. Future development projects within the service area of the LADWP would be subject to the water conservation measures outlined in the City's Green Building Code, which would partially offset the cumulative demand for water. LADWP undertakes expansion or modification of water service infrastructure to serve future growth in the City as required in the normal process of providing water service. For these reasons, cumulative impacts related to water supply would be less than significant.

Solid Waste

Implementation of the related projects could increase the need for landfill capacity in the region. As shown in Table 24, implementation of the Project in conjunction with the related projects would result in an estimated solid waste generation of approximately 0.69 tons per day. It should be noted that this amount does not take into account the net decrease in solid waste generation that would occur as a result of removal of existing uses or the effectiveness of recycling measures required in accordance with existing City's recycling regulations, both of which would likely substantially reduce the cumulative solid waste generation.

Table 24
Estimated Cumulative Solid Waste Generation

Land Uses	Size	Solid Waste Generation Rate[1]	Total (tpd)
Multi-Family Residential	120 du	4 lbs/day/du	0.24
Commercial	43,922 sf	0.005 lbs/day/sf	0.10
		Total Related Projects	***0.34***
		Plus Project	*0.35*
		Total	**0.69**

tpd = tons per day *du = dwelling unit* *lbs = pounds* *sf = square feet*

[1] *CalRecycle.*

With a remaining daily capacity of approximately 16,531 tons of solid waste per day, the landfills serving the Project and related project would have adequate capacity to accommodate cumulative solid waste generation. Additionally, all development in the City is require to comply with City and state recycling regulations. Therefore, cumulative impacts related to solid waste generation would be less than significant.

Section 15300.2(c) – Significant Effects Due to Unusual Circumstances

There are no unusual circumstances related to implementation of the Project. The Project includes infill development of a site located on Ventura Boulevard in an urbanized portion of the City. The Project includes development of an eldercare facility, a use found throughout the Project Site region. The Project Site is not located in a designated "environmentally sensitive area." In addition to the lack of unusual circumstances, as described above, there is also not a reasonable possibility that any significant effects could result from development of the Project. Specifically, no significant impacts related to traffic, noise, air quality, water quality, public services, and/or utilities would occur as a result of the Project. Therefore, this Exception does not apply to the Project.

Section 15300.2(d) – Scenic Highways

The Project Site is not visible from any state-designated scenic highway. The closest state-designated scenic highway to the Project Site is the Arroyo Seco Historic Parkway Scenic Byway,

which is located approximately 9.5 miles east-southeast of the site.[26] Therefore, this Exception does not apply to the Project.

Section 15300.2(e) – Hazardous Waste Sites

The Project Site is not included on any list compiled pursuant to Government Code Section 65962.5.[27] Thus, the Project would not create a hazard to the public or the environment as a result of being listed on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, this Exception does not apply to the Project.

Section 15300.2(f) – Historic Resources

The information and analysis below are based on a *Historical Resource Memo* prepared by Teresa Grimes|Historic Preservation, dated October 20, 2021 (refer to Appendix G).

HISTORICAL RESOURCES UNDER CEQA

CEQA defines a historical resource as a property listed in the California Register of Historical Resources (California Register) or determined to be eligible for listing in the California Register by the State Historical Resource Commission. A property designated under a local preservation ordinance or identified as eligible in a historic resource survey is presumed to be a historical resource unless a preponderance of evidence demonstrates that the property is not architecturally, historically, or culturally significant. The lead agency has the discretion to treat a property as a historical resource, if the resource meets statutory requirements and substantial evidence supports the conclusion. Thus, there are three categories of historical resources.

- *Mandatory historical resources* are properties listed or determined to be eligible for listing in the California Register by the State Historical Resource Commission. The California Register automatically includes properties listed and formally determined to be eligible for listing in the National Register of Historic Places (National Register) as well as some California State Landmarks and Points of Historical Interest.

- *Presumptive historical resources* are properties included in a local register of historical resources as defined by subdivision (k) of Section 5020.1 of the Public Resources. The Los Angeles Cultural Heritage Ordinance and the Historic Preservation Overlay Zone Ordinance meet this definition. Thus, properties designated Los Angeles Historic Cultural Monuments (HCMs) and areas designated as Historic Preservation Overlay Zones (HPOZs) are presumed to be historical resources by the City. Presumptive historical resources also include properties deemed significant pursuant to criteria set forth in

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[26] *Caltrans, California State Scenic Highway System Map, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed April 15, 2024.*

[27] *Department of Toxic Substances Control, https://www.envirostor.dtsc.ca.gov/public/map/?myaddress, accessed April 15, 2024.*

subdivision (g) of Section 5024.1 of the Public Resources Code, unless a preponderance of the evidence demonstrates that the property is not significant.

SurveyLA does not meet these requirements. Nevertheless, the City presumes properties identified as significant by SurveyLA to be historical resources unless a Historical Resource Assessment Report demonstrates otherwise.

- *Discretionary historical resources* are properties determined to be eligible for listing in the California Register by the lead agency. The determination must be supported by evidence in light of the whole record.

PREVIOUS DESIGNATIONS AND EVALUATIONS

The following sources were consulted to determine if the Project Site includes properties currently designated under national, state, or local landmark or historic district programs or identified as significant in a historic resource survey or study:

1. The Built Environment Resources Directory (BERD) was reviewed to determine if any of the properties are listed or determined eligible for listing in the National Register, listed or determined to be eligible for listing in the California Register, California Registered Historical Landmarks, Points of Historical Interest, or evaluated in historic resource surveys and other planning activities.

    a. This research revealed there are no properties located on the Project Site listed or determined to be eligible for listing or previously surveyed as potential historical resources.

2. The Los Angeles Historic Resources Inventory website, HistoricPlacesLA.org, was reviewed to determine if any of the properties are designated HCMs or within a designated HPOZ.

    a. This research revealed there are no HCMs or HPOZs located on the Project Site.

3. The findings of SurveyLA, the citywide historic resource survey of Los Angeles, are also included in HistoricPlacesLA.org as well as individual survey reports for each Community Plan Area (CPA). The Project Site is located within the Sherman Oaks – Studio City – Toluca Lake CPA.

    a. This research revealed there are no properties located on the Project Site identified by SurveyLA. SurveyLA was conducted from the public right-of-way and all of the building on the Project Site are visible.

Therefore, none of the properties on the Project Site are mandatory and presumptive historical resources as defined by CEQA and interpreted by the City of Los Angeles.

Additional research was conducted to determine if any of the properties associated with the Project Site have the potential to meet the relevant eligibility standards set forth in the *Los Angeles Citywide Historic Context Statement (LACHCS).* Historical aerial photographs indicate the Project Site was undeveloped from at least 1923 until the 1940s. Photographs also indicate the Project Site was developed with automotive sales offices, a car washing rack, and a gas station between 1950 and 1960. The car washing rack and gas station were removed between 1960 and 1966. Historical city directories indicate that the Project Site has been occupied by various businesses at all addresses associated with the Project Site.

APN 2368-007-001: This property is occupied by three buildings. The building permits for all three buildings use the address 4028 Colfax Avenue. However, the plot plans indicate three addresses: 4000-14, 4026, and 4028 Colfax Avenue.

The building located at *4000-14 Colfax Avenue* was constructed in 1961 according to the Los Angeles County Office of the Assessor. However, there is no permit on record with the Los Angeles Department of Building and Safety for the original construction. The one-story building has a long, rectangular shape, a flat roof, and a stucco exterior. The building has been occupied by various commercial businesses over time.

4026 Colfax Avenue was constructed as a one-story building with an echo chamber and storage in 1968. Carl Howard was the owner. No architect was used in the design of the building. As the building is now two-stories in height, an addition was added. The date is unknown as there is not a permit for an addition with Building and Safety. The building has a flat roof and a stucco exterior. The address does not appear in the city directory until 1990. At that time, it was occupied by SMV Inc.

4028 Colfax Avenue is an office building constructed in 1963 for Carl Howard. The one-story building has a multi-gabled roof and stucco exterior. No architect was used in the design of the building. It does not appear in the city directory until 1970. At that time, it was occupied by Independent Records Inc. There are a few building permits on record for minor alterations.

The buildings were not designed in a particular architectural style so there are no relevant themes in the Architecture and Engineer Context to apply. None of these buildings exhibit quality of design through distinctive features that would make them good examples of a type, period, or method of construction. Therefore, the buildings have no potential to qualify as historical resources for architectural significance.

Research also did not reveal information regarding any specific individuals associated with the property who could be considered persons significant in our past. The City directory research indicates the buildings have been used by a variety of businesses including recording and production companies. The Entertainment Industry Context includes themes for commercial properties such as office buildings and industrial properties such as recording studios. To qualify, a property must be proven to have played a significant role in the motion picture and recording industries. No evidence was found indicating that the businesses associated with the property played a significant role in the history of the entertainment industry. “Hey, Hey We’re The

Monkees" is rumored to have been recorded in the building at *4028 Colfax Avenue*. The song was the theme to the television show *The Monkees*. Online sources document that the song was recorded in 1966 at the RCA Victor Studios in Hollywood at 6363 Hollywood Boulevard. Even if the song had been recorded in the building, the recording of a single famous song in the building would not meet the eligibility standards in the *LACHCS.* Therefore, the buildings have no potential to qualify as historical resources for historic associations with people or events.

APN 2368-007-028: This property is occupied by two buildings. According to the Los Angeles County Office of the Assessor, the building at the east end of the lot with the address *11647 Ventura Boulevard* was constructed in 1963 with an addition or major alteration in 1970. The building at the west end of the lot with the address *11685 Ventura Boulevard* was constructed in 1950 with an addition or major alteration in 1964. The building permits for these addresses document the property has been used for automobile sales and services since 1948. However, original buildings were demolished, new buildings were constructed, and alterations were made regularly. Thus, the building permit record does not clearly corroborate the Assessor construction dates, but documents sustained changes to the buildings. Additionally, historic aerial photographs document the presences of two, relatively small buildings in 1970, the one on the east had been enlarged by 1977 and the one on the west had been enlarged 1989.

These two buildings have no potential to qualify as historical resources regardless of any significance they may or may not possess. The buildings are either less than 45 years of age and not old enough to warrant evaluation or lack all aspects of integrity (other than location) as a result of alterations.

HISTORIC REPORT CONCLUSIONS

The properties composing the Project Site are not historical resources as defined by CEQA. Thus, the Project would not cause a substantial adverse change in the significance of a historical resource.

APPENDIX A – TREE DATA

Carlberg ASSOCIATES

Horticulturists and
Registered Consulting
ARBORISTS

CITY OF LOS ANGELES PROTECTED TREE REPORT
11611-11695 VENTURAL BLVD. AND 4000-4028 COLFAX AVE. LOS ANGELES, CALIFORNIA 91604

SUBMITTED TO:

JAMES D. RIVARD
MANAGING PARTNER, REAL ESTATE
SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200
SPOKANE, WA 99201
CC: JESSICA PAKDAMAN
ROSENHEIM & ASSOCIATES, INC.

PREPARED BY:

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

CHRISTY CUBA
ASCA REGISTERED CONSULTING ARBORIST #502
ISA CERTIFIED ARBORIST #WE 1982A
ISA QUALIFIED TREE RISK ASSESSOR

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

DANIEL COWELL
STAFF ARBORIST, BIOLOGIST

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

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

www.cycarlberg.com

FEBRUARY 13, 2024

CITY OF LOS ANGELES PROTECTED TREE REPORT – COLFAX & VENTURA

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Carlberg ASSOCIATES
Horticulturists and
Registered Consulting
ARBORISTS

February 13, 2024

James D. Rivard
Managing Partner, Real Estate
SRM Development, LLC
111 N. Post, Suite 200
Spokane, WA 99201
Cc: Jessica Pakdaman, Rosenheim & Associates, Inc.

Re: Colfax & Ventura, 11611-11695 Ventura Blvd. and 4000-4028 Colfax Ave., Los Angeles, CA 91604

Dear Mr. Rivard,

This Protected Tree Report is submitted in response to your request for arboricultural consulting services for the proposed eldercare facility to be located at 11611-11695 Ventura Boulevard and 4000-4028 Colfax Avenue in Los Angeles, California ("subject property"). This is a redevelopment project.

EXECUTIVE SUMMARY

MG at Studio City, LLC (c/o SRM Development, LLC) is proposing the development of Colfax & Ventura, an eldercare facility comprising a five-story building with 140 licensed assisted living care dwelling units and associated common areas, amenities, and services. Also proposed is a three-story senior independent housing building with 59 unlicensed independent living dwelling units and associated common areas and amenities. The development includes a publicly accessible, privately-owned and maintained local-serving pocket park. Both buildings will share one level of subterranean parking. The existing commercial and industrial structures are proposed to be demolished.

A wrought iron fence and retaining wall separates the subject property from the Los Angeles River channel embankment (Los Angeles County property) immediately to the north. This property is part of the Los Angeles River Watershed and is maintained by the County of Los Angeles Department of Public Works. Some City trees exist on the north side of the fence and retaining wall along the top of the channel embankment where the property line veers downslope. North of the property line and along the embankment, there are numerous Los Angeles County protected oak trees.

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

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

www.cycarlberg.com

The subject property is within City of Los Angeles limits and is subject to the requirements set forth by the City of Los Angeles's Tree Protection Ordinance No. 186,873 (Ordinance). County-owned oak trees overhanging the subject property may be protected by the Los Angeles County Oak Tree Ordinance. We applied the size thresholds, definitions, and report requirements of the County Ordinance to these trees.

Carlberg arborists conducted the tree inventory on September 3 and December 28, 2023. We assessed a total of 106 trees:

- 63 private property trees (5 are protected).
- 36 off-site Los Angeles County Flood Control property trees (including 32 coast live oaks and 1 Southern California black walnut).
- Seven (7) public right-of-way (PROW) trees.

One (1) PROW tree and 54 private, non-protected trees are proposed for removal. No private property City Ordinance-protected trees or offsite trees are proposed to be removed. Five City Ordinance-protected trees and 32 County of Los Angeles oak trees are proposed to remain with varying degrees of encroachment.

Recommendations for tree protection and construction monitoring contained within this report and shown on the Tree Impact and Protection Plan are excerpted from the following arboricultural industry standards, best practices, and applicable Ordinances and tree reporting requirements:

- *ANSI A300 - 2023, Tree Care Standards for trees, shrubs, palms and other woody landscape plants.* Manchester, NH: Tree Care Industry Association, 2023.
- *Los Angeles County Oak Tree Ordinance,* Section 22.56.2050: Oak Tree Permit Regulations.
- *Management of Trees and Shrubs During Site Development and Construction, 3rd Ed. Best Management Practices.* Companion publication to the ANSI A300 Part 5: Tree Shrub, and Other Woody Plant Maintenance—Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction). Atlanta, Georgia: International Society of Arboriculture, 2023.
- *City of Los Angeles Standard Tree Removal Application Checklist*
- *City of Los Angeles Tree Protection Ordinance No. 186,873*

ASSIGNMENT AND PURPOSE OF THE TREE REPORT

Carlberg Associates (Carlberg) was retained to conduct a tree inventory and prepare a Protected Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance No. 186,873 and Planning Department's Tree Report Template (CP-4068, July 13, 2023). We applied the requirements of the Los Angeles County Oak Tree Ordinance to the county-owned oak trees.

This Tree Report will be used during the entitlement and environmental approval process to aid decision-makers and the public in understanding the existing tree resources present on and immediately adjacent to the project site, and the potential impacts of the project on those tree resources.

Governing Documents:

City of Los Angeles's Tree Protection Ordinance No. 186,873 (Ordinance)
Protected trees and shrubs as set forth in the Ordinance comprise the following species that measure four inches or greater in additive trunk diameter (measured at 4.5 feet above natural grade):

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

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

Los Angeles City Planning CP-4068 [07.07.2022] Tree Report Template (Template)
The Template (dated July 13, 2023) requires the collection and reporting on additional data beyond that required by the Ordinance, both on- and offsite. Some key requirements of the Template include inventory and assessment of all onsite trees regardless of species or size, inventory of offsite trees whose protected zones may be impacted by the project, inventory of all adjacent street trees, photographs of each tree, mapping of all trees' locations and their canopies (driplines) plus protected zones, and the tree expert's opinion as to whether the tree occurs naturally or was planted.

Los Angeles County Oak Tree Ordinance (Chapter 22.56, Part 16, Oak Tree Permits)
Protected trees as set forth in the Ordinance are any tree in the oak genus which is
(a) 25 inches or more in circumference (eight inches in diameter) as measured four and one-half feet above mean natural grade; in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) as measured four and one half feet above mean natural grade, on any lot or parcel of land within the unincorporated area of Los Angeles County, or
(b) any tree that has been provided as a replacement tree, pursuant to Section 22.56.2180, on any lot or parcel of land within the unincorporated area of Los Angeles County.

Note: The Template sets forth two definitions of a tree protection zone: "a distance from the tree trunk that equates to 12 x the trunk diameter at standard or breast height" (p. 5) and "The Tree Protection Zone usually measures 15 feet beyond the dripline" (p. 12).

The Los Angeles County Oak Tree Ordinance defines the tree protection zone as 5 feet from the dripline of a tree or a minimum of 15 feet from the trunk of an unbalanced or young tree, whichever is greater. We applied the County Ordinance definition of a tree protection zone to the County trees.

PROJECT OVERVIEW

Project Location

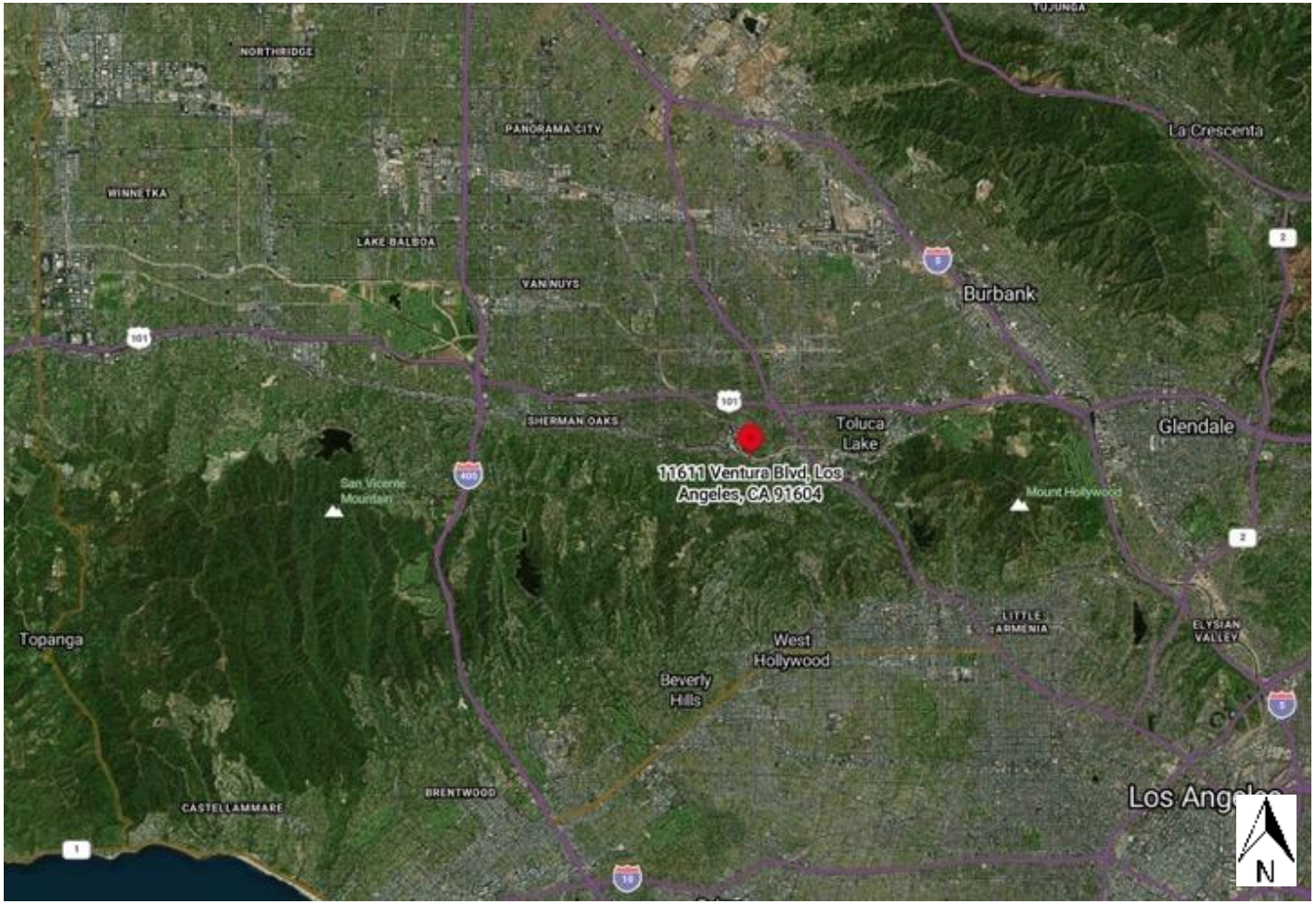
The proposed Project is located at the northeast corner of Ventura Boulevard and Colfax Avenue, in the Studio City neighborhood of the City of Los Angeles. **Table 1** provides basic information for the Project.

TABLE 1 – PROJECT INFORMATION

Project Name	Colfax & Ventura
Project Address	11611-11695 Ventura Blvd. and 4000-4028 Colfax Ave., Los Angeles, CA 91604
Project APN	2368-007-001, 2368-007-030, 2368-007-029, 2368-007-028, 2368-007-002
Project Site Area	2.408 acres (104,885 SF)
Project Timeline (approximate)	Remaining entitlement process: 4-11 months Building permitting process: 8-15 months Construction process: Anticipated completion +/- 22 months after permit received
Entitlement Case No.	ZA-2021-9477-ELD-CUB-SPP-DD-SPR, VTT-83460
Environmental Case No.	ENV-2021-9478-EAF
Owner / Applicant	MG at Studio City, LLC (c/o SRM Development, LLC)
Owner Representative	James D. Rivard, Ryan B. Leong Managing Partner, Real Estate SRM Development, LLC 111 N. Post, Suite 200 Spokane, WA 99201 Cc: Jessica Pakdaman, Rosenheim & Associates, Inc.

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

EXHIBIT A – PROJECT LOCATION MAP

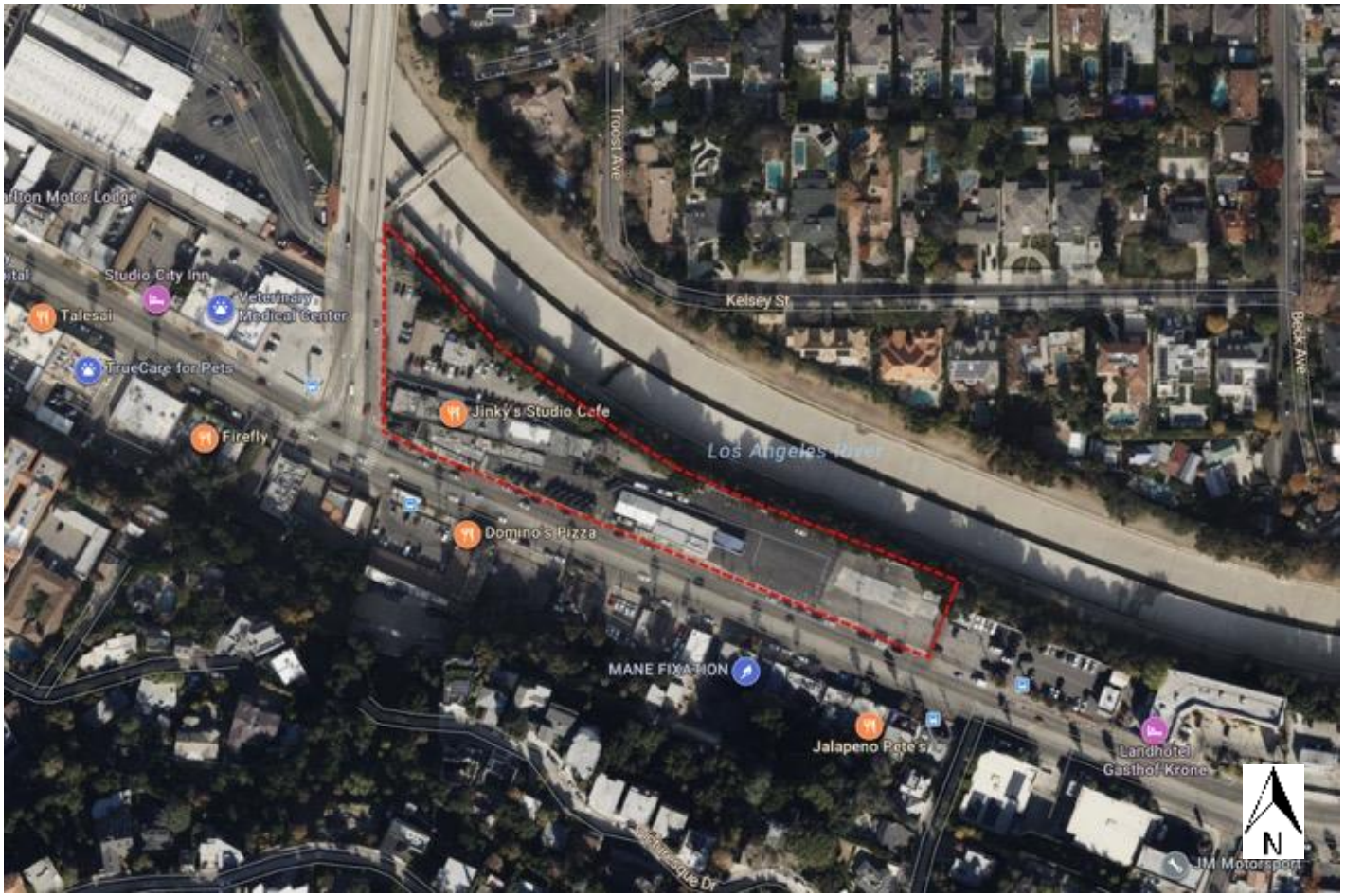


11611-11695 Ventura Blvd. and 4000-4028 Colfax Avenue, Los Angeles, CA 91604

Source – Bing Maps

No Scale

EXHIBIT B – AERIAL IMAGE OF THE PROJECT SITE



11611-11695 Ventura Blvd. and 4000-4028 Colfax Avenue, Los Angeles, CA 91604

Source – Bing Maps

No Scale

Project Description

MG at Studio City, LLC (c/o SRM Development, LLC) is proposing the development of Colfax & Ventura, an eldercare facility comprising a five-story building with 140 licensed assisted living care dwelling units and associated common areas, amenities, and services. Also proposed is a three-story senior independent housing building with 59 unlicensed independent living dwelling units and associated common areas and amenities. The development includes a publicly accessible, privately-owned and maintained local-serving pocket park. Both buildings will share one level of subterranean parking. The new building square footage (floor area) for the eldercare facility will total approximately 204,280 square feet. The existing commercial structures with a total of approximately 22,488 square feet of floor area are proposed to be demolished.

An approximately 390-foot long retaining wall separating the subject property from the adjacent Los Angeles River (County) property has been found to be at high risk of collapse. This wall, spanning from approximately the middle to the east end of the site, is proposed to be removed. As discussed in the structural engineer's report (DCI Engineers, see Appendix A), the existing retaining wall does not meet stability requirements under the existing code. Soil has eroded away from the outside face of the footing. In some cases, erosion has left the bottom of the footing exposed and not in contact with the substrate. Due to the poor soil conditions, erosion, and the undersized footing, it is the opinion of the structural engineer that the wall is at high risk of overturning and sliding. DCI Engineers recommends the wall and footing be removed to avoid collapse of the wall.

In order to preserve a number of County oak trees, this wall will not be rebuilt. The project has been designed in that area with a lower finish grade that will generally match the adjacent elevations. This will eliminate the need to install a new retaining wall and associated footing.

Oak trees that occur on that river channel embankment north of the subject property line are within the jurisdiction of the Los Angeles County Stormwater Maintenance Division - Department of Public Works. Those oak trees may be protected by the Los Angeles County Oak Tree Ordinance (Section 22.56.2050: Oak Tree Permit Regulations, Los Angeles County Date of Adoption: September 13, 1988). We applied the size thresholds and report requirements of that Ordinance to those trees.

TREE ASSESSMENT METHODOLOGY AND DATA PRESENTATION

Project Trees

Carlberg arborists and field technicians conducted the tree inventory on September 3 and December 28, 2023. Weather conditions were mostly sunny throughout the duration of the inventory. The tree inventory was conducted on foot. We walked the entire project site to inventory and assess all onsite trees and all offsite (County) trees whose canopies or protected zones[1] extended into the project site.

The trees were identified, their health and structural condition evaluated[2], trunk diameters measured, heights and canopy spreads approximated, and trunk locations plotted on the topographic survey map provided to us by the project team.

[1] 'Protected zone' in this case refers to the definition in the Los Angeles County Oak Tree Ordinance: 5 feet from the dripline of a tree or 15 feet from the trunk of an unbalanced or young tree, whichever is greater. (Section 22.56.2050: Oak Tree Permit Regulations, 1988).

[2] Each tree is assigned two letter grades, one for overall health and one for structure. Definitions for the letter grades are included in the appendices of this report.

More specifically, the inventory included the following assessment factors for protected and non-protected, onsite, immediately offsite, and street / PROW trees:

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

Field data was collected on tablets, tree trunk locations were generally mapped on a 50-scale, 36” x 48” topographic sheet map, and photographs were taken with digital cameras. Tree identification numbers, trunk locations, and tree canopies with protection zones are graphically represented on the Tree Location Exhibit prepared by Carlberg in AutoCAD.

The Tree Photograph Exhibit provides captioned photographs of the trees and provides an idea of site context, tree densities, conformation, and vigor.

OBSERVATIONS

Project Trees

The subject property is generally flat land comprising commercial buildings and asphalt hardscape. Most trees are located adjacent to the property line separating the County Flood Control and City properties. As the enclosed graphics illustrate, a number of private property, City-protected trees are located on the channel embankment, between the fence line situated at the top of the slope and the northern property boundary, which veers downslope at the west end of the property. On the northeast side of the site, the northern property line and the top of the embankment, where the fence and wall are located, converge. Since this can be confusing, we color-coded City and County trees in the exhibits.

We inventoried and assessed 106 trees of 16 different species on and immediately adjacent to the 2.408-acre property; 36 are off-site trees with canopies that overhang the subject property.

- City of Los Angeles Private Property Non-protected Trees (City NP): 58
- City of Los Angeles Private Property Protected Trees (City P): 5
- City of Los Angeles Public Rights-of-Way (PROW) Trees: 7
- City of Los Angeles Street (Parkway) Trees: 0

- County of Los Angeles Flood Control Property Trees whose Canopies Overhang the Project Site (offsite, OS) trees: 36
    - Of these, 32 are coast live oaks and one is a Southern California black walnut.

Table 2 summarizes the 16 types of trees found, their onsite, offsite, or public right-of-way status, and how many of each type are included in the inventory. For the purposes of this report, public right-of-way trees are defined as intentionally planted or volunteer trees located in public right-of-way areas that are not clearly defined parkways between roads and sidewalks or in specific street-tree designated cutouts in a sidewalk. Street trees are defined as intentionally planted or voluntary trees located in clearly defined parkways between streets and sidewalks or in specific street-tree designated cutouts in a sidewalk.

TABLE 2 – SUMMARY OF INVENTORIED PROJECT SITE, PROW, AND OFFSITE TREES WHOSE CANOPIES OVERHANG THE SITE

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE	TOTAL NO. PROW	TOTAL NO. TREE SPECIES
Aleppo pine	*Pinus halepensis*	5			5
Canary Island pine	*Pinus canariensis*			1	1
Chinese elm	*Ulmus parvifolia*	1			1
citrus	*Citrus sp.*	1			1
coast live oak	*Quercus agrifolia*	8	32		40
common myrtle	*Myrtus communis*	1			1
Indian laurel fig	*Ficus microcarpa*	1	1		2
Mexican fan palm	*Washingtonia robusta*	11			11
mulberry	*Morus alba*		1		1
peach	*Prunus persica*	1			1
pecan	*Carya illinoinensis*	2			2
Shamel ash	*Fraxinus uhdei*	2	1		3
Southern California black walnut	*Juglans californica*	2	1		3
Texas privet	*Ligustrum texanum*	28			28
Torrey pine	*Pinus torreyana*			5	5
weeping fig	*Ficus benjamina*			1	1
		63	**36**	**7**	**106**

Tables 3-5 on the following pages are summaries of protected trees, offsite trees, and private property trees. **Exhibit C** – **Reduced Copy of the Tree Location Exhibit** on page 18 provides an illustrative presentation of the existing trees. A full-size, 30" x 42", 1":30'-scale, color copy of the Tree Location Exhibit is submitted separately in PDF format.

More detailed information for each tree may be found in **Exhibit H - Tree Inventory Field Data.** Captioned photographs of each tree, or groups of trees where appropriate, are located in **Exhibit I - Tree Photograph Exhibit**. Both of those exhibits are enclosed near the end of this report.

TABLE 3 – ONSITE PROTECTED TREES
(ALL TO BE PRESERVED)

ON-SITE	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
City P	53	Southern California black walnut	*Juglans californica*	9.1, 12.1, 3, 3, 4	24	15	12	12	18	A-	B
City P	55	coast live oak	*Quercus agrifolia*	7.4	20	11	10	10	8	B+	B
City P	62	Southern California black walnut	*Juglans californica*	6.2, 6.5, 5.3	16	14	14	9	2	A-	B-
City P	65	coast live oak	*Quercus agrifolia*	13.3	32	15	14	19	8	B	B
City P	74	coast live oak	*Quercus agrifolia*	26.5	42	25	28	44	20	A-	B

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

TABLE 4 – OFFSITE TREES
WHOSE PROTECTED ZONES OVERHANG THE PROJECT SITE (ALL TO BE PRESERVED)

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
OS	59	coast live oak	*Quercus agrifolia*	7.7, 9, 4.8	20	13	13	12	13	A	B
OS	60	coast live oak	*Quercus agrifolia*	5.8, 5.8, 4, 3.6, 2.7, 3	20	13	11	14	13	B	B
OS	63	coast live oak	*Quercus agrifolia*	10.8	28	16	14	0	14	B	B
OS	64	coast live oak	*Quercus agrifolia*	18.2	35	17	16	23	20	B	B-
OS	66	coast live oak	*Quercus agrifolia*	6.5	18	0	10	14	10	C	C
OS	67	coast live oak	*Quercus agrifolia*	8.7	20	2	9	14	10	B	B
OS	68	coast live oak	*Quercus agrifolia*	8.1	18	0	8	9	9	B-	B-
OS	70	Shamel ash	*Fraxinus uhdei*	15.9, 13.5, 2.5, 2	40	17	14	14	15	B	B
OS	71	coast live oak	*Quercus agrifolia*	6.7, 9	20	18	12	5	6	B	B-
OS	73	coast live oak	*Quercus agrifolia*	8.3, 13.3, 2.5	30	16	14	18	10	B	B-
OS	75	coast live oak	*Quercus agrifolia*	10.5	25	14	24	10	0	A-	B-
OS	77	coast live oak	*Quercus agrifolia*	9.5	28	13	8	8	8	B	B
OS	78	coast live oak	*Quercus agrifolia*	9.1	26	22	16	9	12	A	B

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
OS	79	coast live oak	*Quercus agrifolia*	13.3	30	20	15	0	14	A	B
OS	80	coast live oak	*Quercus agrifolia*	13	32	0	18	20	16	A-	B-
OS	81	coast live oak	*Quercus agrifolia*	6.7	18	10	15	5	12	A	B
OS	82	coast live oak	*Quercus agrifolia*	5.3, 6, 32.2, 16.6	40	33	33	20	27	A	B+
OS	83	coast live oak	*Quercus agrifolia*	20.1	38	27	25	13	26	A-	B
OS	84	coast live oak	*Quercus agrifolia*	21.8	32	25	19	20	20	A	B
OS	85	coast live oak	*Quercus agrifolia*	18.9, 4	30	29	20	20	14	A-	B
OS	86	coast live oak	*Quercus agrifolia*	8.1, 7.6, 2.5, 2	20	13	15	20	0	B	B-
OS	87	coast live oak	*Quercus agrifolia*	9.5, 5.8, 10, 11.5	18	25	14	8	17	B-	B-
OS	88	coast live oak	*Quercus agrifolia*	24.4	35	28	28	20	27	A	B+
OS	89	coast live oak	*Quercus agrifolia*	13, 7.6	24	26	18	20	2	A-	B
OS	90	coast live oak	*Quercus agrifolia*	12.2, 15.4, 2.4	28	30	26	20	10	A	B
OS	91	Indian laurel fig	*Ficus microcarpa*	2, 3.8, 3.9, 3.5, 3.6	18	9	10	6	6	A	B+
OS	92	coast live oak	*Quercus agrifolia*	18.3	40	23	16	20	20	A	B

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
OS	93	coast live oak	*Quercus agrifolia*	24.4	35	22	22	15	24	A	B
OS	94	mulberry	*Morus alba*	11.1, 14	26	14	14	15	14	C-	C-
OS	95	coast live oak	*Quercus agrifolia*	~22	28	8	30	18	20	A-	B
OS	98	coast live oak	*Quercus agrifolia*	6.7	18	10	10	13	8	A	B
OS	99	Southern California black walnut	*Juglans californica*	1.1, .7	10	4	5	4	5	B	B
OS	100	coast live oak	*Quercus agrifolia*	3.8, 6.5	20	14	13	11	12	A	B
OS	101	coast live oak	*Quercus agrifolia*	6.5	25	11	4	13	12	A	B
OS	102	coast live oak	*Quercus agrifolia*	2.8	10	13	4	6	8	B	B
OS	111	coast live oak	*Quercus agrifolia*	4.1	16	16	5	6	6	B	B

TABLE 5 – SUMMARY OF ONSITE, NON-PROTECTED TREES

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	BT (brown trunk for palms)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
1	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
2	Texas privet	*Ligustrum texanum*	3.5		15	3	3	3	3	A	B
3	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B
4	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B
5	Texas privet	*Ligustrum texanum*	6.8		15	3	3	3	3	A	B
6	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B
7	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B
8	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B
9	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B
10	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B
11	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
12	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
13	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B
14	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B
15	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
16	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B
17	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B
18	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B
19	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B
20	Texas privet	*Ligustrum texanum*	8.5		15	3	3	3	3	A	B
21	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B
22	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B
23	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B
24	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	BT (brown trunk for palms)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
25	Texas privet	*Ligustrum texanum*	6		15	3	3	3	3	A	B
26	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B
27	Texas privet	*Ligustrum texanum*	7		15	3	3	3	3	A	B
28	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B
29	peach	*Prunus persica*	8.2		18	8	6	10	8	A-	B
30	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
31	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
32	Mexican fan palm	*Washingtonia robusta*		50'	55	5	5	5	5	B	B
33	Mexican fan palm	*Washingtonia robusta*		60'	65	5	5	5	5	B	B
34	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
35	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
36	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
37	Mexican fan palm	*Washingtonia robusta*		1'	7	4	0	4	4	A	B
38	citrus	*Citrus sp.*	1.5		12	7	7	8	7	A-	A-
39	Indian laurel fig	*Ficus microcarpa*	35 at 2 feet		18	9	11	10	12	A	B+
40	common myrtle	*Myrtus communis*	8		20	10	9	12	7	A	B+
41	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	A	A-
42	Mexican fan palm	*Washingtonia robusta*		35'	40	5	5	5	5	A	A-
43	Mexican fan palm	*Washingtonia robusta*		40'	45	5	5	5	5	A	A-
44	weeping fig	*Ficus benjamina*	~14		28	20	25	15	18	A	B
45	Torrey pine	*Pinus torreyana*	5.8		16	8	6	3	4	A	B+
46	Torrey pine	*Pinus torreyana*	7.2		18	8	7	8	10	A	B+
47	Torrey pine	*Pinus torreyana*	7		18	11	9	8	8	A	B+
48	Torrey pine	*Pinus torreyana*	7.6		24	11	12	7	10	A	B+
49	Torrey pine	*Pinus torreyana*	11		26	12	10	12	10	A	B+
50	Canary Island pine	*Pinus canariensis*	10.5		22	11	8	9	9	A	B+

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	BT (brown trunk for palms)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
51	pecan	*Carya illinoinensis*	7.7		20	12	10	12	10	A	B
52	Shamel ash	*Fraxinus uhdei*	1, 1.5		12	8	6	6	8	A	A
54	pecan	*Carya illinoinensis*	6.4		22	8	12	9	10	A	A-
56	Aleppo pine	*Pinus halepensis*	20.5		55	0	16	18	16	A	B-
57	Shamel ash	*Fraxinus uhdei*	2.3, 1.8, 2.1, 2.4, 2.3, 1.6		15	10	9	8	10	A	A-
58	Aleppo pine	*Pinus halepensis*	26.8		40	16	22	21	6	A	C
61	Aleppo pine	*Pinus halepensis*	29		44	20	23	21	23	A	B
69	Chinese elm	*Ulmus parvifolia*	4.1, 3.7, 2.5, 4.8		15	0	10	18	10	A	B
72	Aleppo pine	*Pinus halepensis*	31		40	21	20	11	20	A-	B
96	Aleppo pine	*Pinus halepensis*	31.5		40	20	24	10	20	A	B
97	coast live oak	*Quercus agrifolia*	3.6		10	13	6	5	12	A	B
103	coast live oak	*Quercus agrifolia*	.8, 1, .3, .3		6	3	2	2	4	B	B
114	coast live oak	*Quercus agrifolia*	1.2, .7, .4, .6, .5		10	7	7	6	6	A	B
115	coast live oak	*Quercus agrifolia*	.7, 1.2		10	9	7	2	0	A	B
116	coast live oak	*Quercus agrifolia*	1.3, .7, .8		10	7	6	6	5	B	B

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

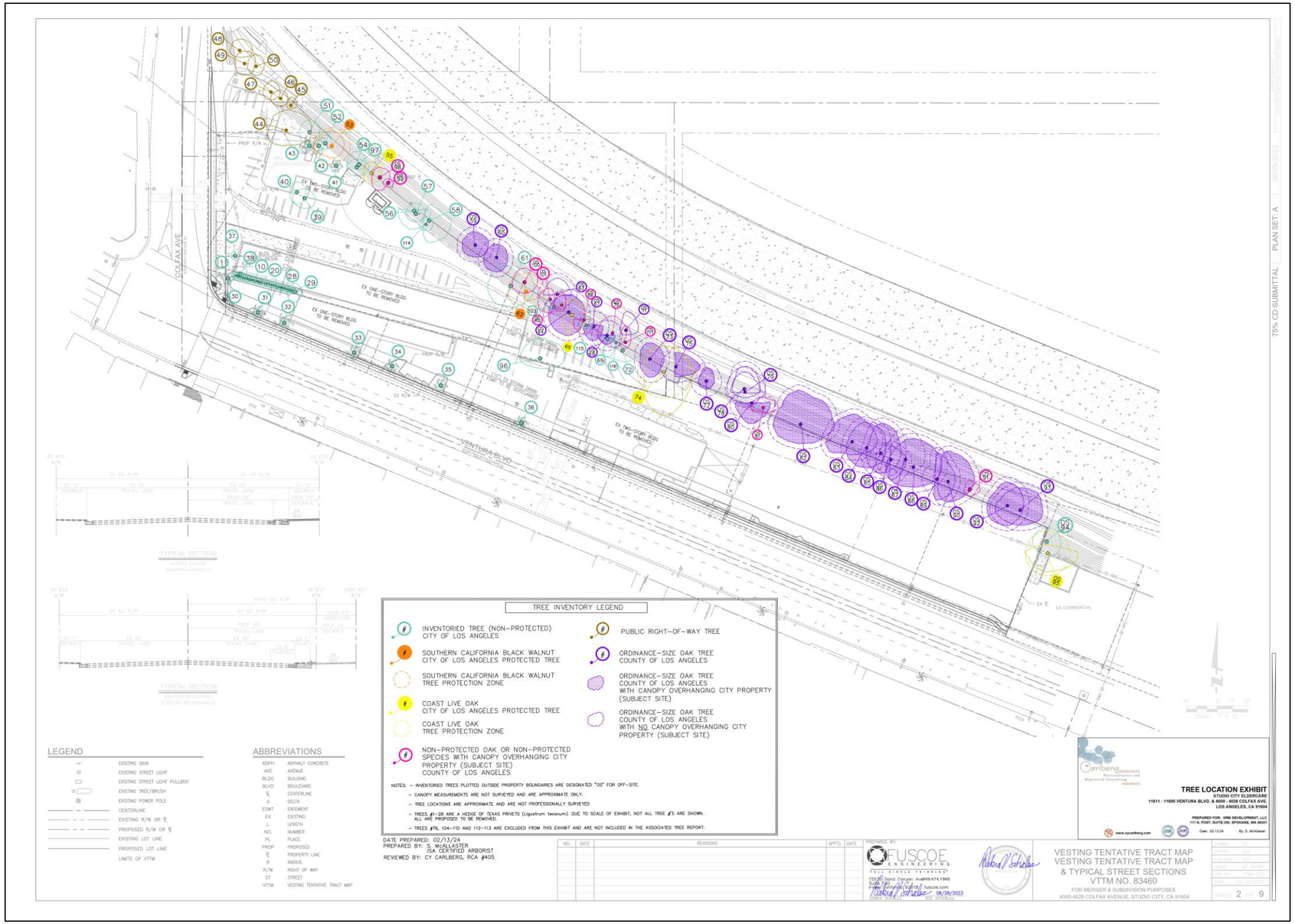
Tree nos. 44-50 are currently in the PROW. No. 44 is proposed to be removed (and replaced according to City street tree replacement ratios), 45 will be preserved become an onsite (private property) tree, and 46-50 will be preserved and remain PROW trees.

Tree No. 51 straddles the City/PROW property line and for purposes of this report is considered a City tree.

In our opinion, two southern California black walnuts (tree nos. 53 and 62), two pecan trees (nos. 51 and 54), one Chinese elm (no. 69), and three shamel ash (nos. 52, 57, and OS70) grew as volunteers[3]. The remaining private property trees appear to have been intentionally planted into the landscape.

[3] A plant that grows on its own from a random seed rather than being deliberately planted.

EXHIBIT D – REDUCED COPY OF THE TREE LOCATION EXHIBIT
(Not to Scale)



DISCUSSION OF PROJECT IMPACTS

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

- EXCAVATION/TRENCHING - ROOT SEVERANCE
- SOIL COMPACTION
- CHANGES IN GRADE
- ALTERATION OF THE WATER TABLE/SITE DRAINAGE
- CANOPY AND ROOT PRUNING

Excavation/Trenching—Root Severance

Trenching can include excavation for irrigation, utility, or drainage lines. Trenching and excavation can also be required for foundations of structures and free-standing walls. Trenching and excavation removes soil and tree roots. When performed in the critical root zone (which is in some calculations, approximately 5x to 6x the trunk diameter of any tree[4]), or within the dripline (outer edge of the natural canopy), there is the potential to remove large areas of root mass, and to shatter and tear roots that will remain connected to the tree(s). Torn and shattered roots cannot callous over or generate new roots in the manner of cleanly-cut roots. Torn and shattered roots are potentially unstable, are entry points for disease and decay organisms, and eventually die. Significant root loss and/or severance can be critical to the health and structure of trees to remain in a landscape.

Cutting roots closer than six times the DBH on one side of the tree can cause sustained and chronic water stress symptoms in some species, which can lead to other tree health problems, such as increased susceptibility to pests, diseases, drought, or other environmental pressures. When cuts are made closer to the trunk, stability and health may be compromised and should therefore be avoided. Immediate tree stability has been found to be compromised on some species when cuts are made at a distance from the trunk that is within three times the DBH. For most species, when roots are cut at a distance from the trunk that is closer than one to one-and-a-half times the DBH, immediate stability will be reduced, and long-term health and survival will be impacted.[5]

Soil Compaction

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

Changes in Grade

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

[4] Management of Trees and Shrubs During Site Development and Construction – Best Management Practices. (Atlanta Georgia: International Society of Arboriculture, 2023), p. 45.

Alteration of the Water Table/Site Drainage

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

Structures such as footings, basements, subterranean buildings, and retaining walls may intercept impermeable layers in the soil on which water perches. If adequate drainage is not provided, the water table uphill may gradually rise and interfere with tree roots. This type of damage usually takes a period of time to be recognized and diagnosed.[5]

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

Canopy and Root Pruning

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

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

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

Trees to be preserved or removed, along with the proposed location of recommended protective fencing, are illustrated on the reduced and full-sized copies of the Tree Location Exhibit and Impact Plan. Full-size, 30" x 42", 1":20'-scale, color copies of the Tree Location Exhibit and Impact Plan are submitted separately in PDF format.

[5] Nelda Matheny and James R. Clark, Trees and Development: A Technical Guide to Preservation of Trees During Land Development, (Champaign, Illinois: International Society of Arboriculture, 1998), pp. 88-89.

Tables 6-10 on the following pages provide details of the trees proposed for preservation and removal and summarize the construction impacts. As summarized in the tables:

- **54 non-protected, onsite trees will be removed**
- **4 non-protected, onsite trees will be preserved**
- **0 offsite trees will be removed**
- **36 offsite trees will be preserved**
- **0 Ordinance-protected, onsite trees will be removed**
- **5 Ordinance-protected, onsite trees will be preserved**
- **1 Public Right-of-Way tree will be removed**
- **6 Public Right-of-Way trees will be preserved**

AVOIDANCE AND MINIMIZATION MEASURES

Tree Retention/Preservation Efforts for Private Property and Off-Site (Los Angeles County Flood Control) trees:

- The Applicant is seeking a deviation from the River Improvement Overlay (RIO) District Ordinance requirement to provide new ADA access and an access gate to the LA River to the north. Satisfying the RIO District requirement would require construction of a concrete ADA access ramp in the existing landscape slope. Due to the significant difference in grade between the project site and the river trail, the ADA access ramp would include four switchbacks and new retaining walls. Grading the ramp and retaining walls would require removal of mature Protected Trees on the adjoining slope (Los Angeles County Flood Control property). To avoid tree removals on the slope, and since there is an existing access ramp to the LA River located on Colfax Avenue just northwest of the project site, the Applicant instead proposes to construct a publicly accessible, but privately-owned and maintained, local-serving pocket park at the northwest corner of the project site. California native trees are proposed to be planted in the pocket park.

- The grading plan was revised to lower the grade on the east side of the project site by approximately 10 feet to avoid the need to construct a new retaining wall to replace the existing failing retaining wall. A new retaining wall would have required shoring and the removal of approximately 15 Los Angeles County protected oak trees.

- The retaining wall originally proposed along the northwestern property boundary was moved farther to the south, and the location of the drive aisle near the northwest portion of the project site was adjusted to provide additional distance between the drive aisle and the Southern California black walnut near that location.

- The revised grading plan adjusted grades and eliminated the proposed retaining walls along the north property line to preserve two onsite walnuts and three coast live oaks. A raised curb with safety guardrails replaced the previously proposed retaining walls.

- Additional revisions to the grading plan were made to provide more space between the center drive aisle along the northern portion of the project and a large, adjacent coast live oak tree. This necessitated revisions to the design and location of the Modular Wetland System (necessary to comply with City of Los Angeles Sanitation Low Impact Development requirements).

- An east-west running retaining wall at the midpoint of project site was eliminated and replaced with a 2:1 slope to provide additional distance from two large coast live oaks.

- The northern façade of the Independent Living building on the east end of the project site was modified by pulling several sections of the building to the south, away from the existing branches of the protected trees on the County property. This reduced the unit count and floor area and impacted the design of the subterranean parking level below.

- To reduce impacts to County oaks, the Independent Living Building trash room was moved from Level L1 to Level P1 to eliminate an exterior walkway at the northwest corner of that building. This change also impacted the subterranean parking level below, resulting in the loss of parking stalls.

- The landscape plan was revised to include new landscaping in the City's public right-of-way area to remain between the proposed pocket park and the existing access to the LA River. This area will include installations of Southern California black walnuts (a concept which is subject to approval by the City of Los Angeles Bureau of Engineering, Department of Public Works).

- Carlberg recommended potholing to determine if roots from the County trees on the north side of the retaining wall had migrated under the footing of the retaining wall and into the subject property. There is an approximately 8-10 feet grade difference between the top of the slope where these trees' trunks are located near the wall interface and the hardscape elevations present on the current project site. A company was retained to perform this work and to determine the condition of the wall footing. The results of the potholing revealed roots less than one inch in diameter in the various potholes dug along the length of the wall.

TABLE 6 – CONSTRUCTION IMPACTS TO ONSITE PROTECTED TREES (ALL PROPOSED TO BE PRESERVED)

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
53	Southern California black walnut	*Juglans californica*	9.1, 12.1, 3, 3, 4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the Critical Root Zone (CRZ). Above-ground clearance pruning will be necessary to draw the canopy back approximately 8 feet.
55	coast live oak	*Quercus agrifolia*	7.4	Root impacts: Excavation is proposed on the south side of the tree approximately 6 feet from the trunk and into the CRZ. Above-ground clearance pruning will be necessary to draw the canopy back approximately 2 feet.
62	Southern California black walnut	*Juglans californica*	6.2, 6.5, 5.3	Root impacts: Excavation is proposed on the south side of the tree approximately 4.5 feet from the trunk and into the CRZ. Above-ground clearance pruning will be necessary to draw the canopy back approximately 3 feet.
65	coast live oak	*Quercus agrifolia*	13.3	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. Above-ground clearance pruning will be necessary to draw the canopy back approximately 8 feet.
74	coast live oak	*Quercus agrifolia*	26.5	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. Canopy pruning will be extensive on the side of the subject property (canopy extends ~37' south into the subject property). Approx. 15 feet of canopy will be required to be pruned for building clearance.

TABLE 7 – CONSTRUCTION IMPACTS TO OFFSITE PROTECTED TREES (ALL PROPOSED TO BE PRESERVED)

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
OS	59	coast live oak	*Quercus agrifolia*	7.7, 9, 4.8	No impacts into the TPZ are foreseen.
OS	60	coast live oak	*Quercus agrifolia*	5.8, 5.8, 4, 3.6, 2.7, 3	No impacts into the TPZ are foreseen.
OS	63	coast live oak	*Quercus agrifolia*	10.8	No impacts into the TPZ are foreseen.
OS	64	coast live oak	*Quercus agrifolia*	18.2	Root impacts: Excavation is proposed on the south side of the tree approximately 9 feet from the trunk and into the CRZ. 13 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	66	coast live oak	*Quercus agrifolia*	6.5	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. 3 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	67	coast live oak	*Quercus agrifolia*	8.7	Root impacts: Excavation is proposed on the south side of the tree approximately 9 feet from the trunk and into the CRZ. 4 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	68	coast live oak	*Quercus agrifolia*	8.1	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. 1 foot of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	71	coast live oak	*Quercus agrifolia*	6.7, 9	No impacts into the TPZ are foreseen.
OS	73	coast live oak	*Quercus agrifolia*	8.3, 13.3, 2.5	Root impacts: Excavation is proposed on the south side of the tree approximately 8 feet from the trunk and into the CRZ. 9 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	75	coast live oak	*Quercus agrifolia*	10.5	Root impacts: Excavation is proposed on the south side of the tree approximately 8 feet from the trunk and into the CRZ. 4 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
OS	77	coast live oak	*Quercus agrifolia*	9.5	Root impacts: Excavation is proposed on the south side of the tree approximately 4 feet from the trunk and into the CRZ. 3 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	78	coast live oak	*Quercus agrifolia*	9.1	No impacts into the TPZ are foreseen.
OS	79	coast live oak	*Quercus agrifolia*	13.3	No impacts into the TPZ are foreseen.
OS	80	coast live oak	*Quercus agrifolia*	13	Root impacts: Excavation is proposed on the south side of the tree approximately 3 feet from the trunk and into the CRZ. 17 feet of the canopy overhangs subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	81	coast live oak	*Quercus agrifolia*	6.7	Root impacts: Excavation is proposed on the south side of the tree approximately 3 feet from the trunk. 4 feet of the canopy overhangs subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	82	coast live oak	*Quercus agrifolia*	5.3, 6, 32.2, 16.6	Root impacts: Excavation is proposed on the south side of the tree approximately 2 feet from the trunk and into the CRZ. 18 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	83	coast live oak	*Quercus agrifolia*	20.1	Root impacts: Excavation is proposed on the south side of the tree approximately 6 feet from the trunk and into the CRZ. 10 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	84	coast live oak	*Quercus agrifolia*	21.8	Root impacts: Excavation is proposed on the south side of the tree approximately 6 feet from the trunk and into the CRZ. 14 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	85	coast live oak	*Quercus agrifolia*	18.9, 4	Root impacts: Excavation is proposed on the south side of the tree approximately 7 feet from the trunk and into the CRZ. 12 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	86	coast live oak	*Quercus agrifolia*	8.1, 7.6, 2.5, 2	Root impacts: Excavation is proposed on the south side of the tree approximately 4 feet from the trunk and into the CRZ. 14 feet of the canopy overhangs the subject property.

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
					If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	87	coast live oak	*Quercus agrifolia*	9.5, 5.8, 10, 11.5	Root impacts: Excavation is proposed on the south side of the tree approximately 9 feet from the trunk and into the CRZ. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	88	coast live oak	*Quercus agrifolia*	24.4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. 16 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	89	coast live oak	*Quercus agrifolia*	13, 7.6	Root impacts: Excavation is proposed on the south side of the tree approximately 3 feet from the trunk and into the CRZ. 15 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	90	coast live oak	*Quercus agrifolia*	12.2, 15.4, 2.4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. 14 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	92	coast live oak	*Quercus agrifolia*	18.3	Root impacts: Excavation is proposed on the south side of the tree approximately 4 feet from the trunk and into the CRZ. 15 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	93	coast live oak	*Quercus agrifolia*	24.4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. 10 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	95	coast live oak	*Quercus agrifolia*	~22	Root impacts: Excavation is proposed on the west side of the tree approximately 8 feet from the trunk and into the CRZ. 10 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	98	coast live oak	*Quercus agrifolia*	6.7	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. No pruning is foreseen.
OS	100	coast live oak	*Quercus agrifolia*	3.8, 6.5	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. No pruning is foreseen.

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
OS	101	coast live oak	*Quercus agrifolia*	6.5	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	111	coast live oak	*Quercus agrifolia*	4.1	No impacts into the TPZ are foreseen.

TABLE 8 – PUBLIC RIGHT-OF-WAY TREES TO BE REMOVED

PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Remove, Preserve)
PROW	44	weeping fig	*Ficus benjamina*	~14		28	20	25	15	18	A	B	Remove

TABLE 9 – PUBLIC RIGHT-OF-WAY TREES TO BE PRESERVED

PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Remove, Preserve)
PROW	45	Torrey pine	*Pinus torreyana*	5.8		16	8	6	3	4	A	B+	Preserve
PROW	46	Torrey pine	*Pinus torreyana*	7.2		18	8	7	8	10	A	B+	Preserve
PROW	47	Torrey pine	*Pinus torreyana*	7		18	11	9	8	8	A	B+	Preserve
PROW	48	Torrey pine	*Pinus torreyana*	7.6		24	11	12	7	10	A	B+	Preserve
PROW	49	Torrey pine	*Pinus torreyana*	11		26	12	10	12	10	A	B+	Preserve
PROW	50	Canary Island pine	*Pinus canariensis*	10.5		22	11	8	9	9	A	B+	Preserve

TABLE 10 – NON-PROTECTED, ONSITE TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
1	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
2	Texas privet	*Ligustrum texanum*	3.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
3	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
4	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Grading of entire site	None required
5	Texas privet	*Ligustrum texanum*	6.8		15	3	3	3	3	A	B	P	Grading of entire site	None required
6	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
7	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
8	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B	P	Grading of entire site	None required
9	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B	P	Grading of entire site	None required
10	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
11	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
12	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
13	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
14	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B	P	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
15	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
16	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B	P	Grading of entire site	None required
17	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Grading of entire site	None required
18	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Grading of entire site	None required
19	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B	P	Grading of entire site	None required
20	Texas privet	*Ligustrum texanum*	8.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
21	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Grading of entire site	None required
22	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B	P	Grading of entire site	None required
23	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Grading of entire site	None required
24	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Grading of entire site	None required
25	Texas privet	*Ligustrum texanum*	6		15	3	3	3	3	A	B	P	Grading of entire site	None required
26	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
27	Texas privet	*Ligustrum texanum*	7		15	3	3	3	3	A	B	P	Grading of entire site	None required
28	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B	P	Grading of entire site	None required
29	peach	*Prunus persica*	8.2		18	8	6	10	8	A-	B	P	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
30	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
31	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
32	Mexican fan palm	*Washingtonia robusta*		50'	55	5	5	5	5	B	B	P	Grading of entire site	None required
33	Mexican fan palm	*Washingtonia robusta*		60'	65	5	5	5	5	B	B	P	Grading of entire site	None required
34	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
35	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
36	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
37	Mexican fan palm	*Washingtonia robusta*		1'	7	4	0	4	4	A	B	P	Grading of entire site	None required
38	citrus	*Citrus sp.*	1.5		12	7	7	8	7	A-	A-	P	Grading of entire site	None required
39	Indian laurel fig	*Ficus microcarpa*	35 at 2 feet		18	9	11	10	12	A	B+	P	Grading of entire site	None required
40	common myrtle	*Myrtus communis*	8		20	10	9	12	7	A	B+	P	Grading of entire site	None required
41	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	A	A-	P	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
42	Mexican fan palm	*Washingtonia robusta*		35'	40	5	5	5	5	A	A-	P	Grading of entire site	None required
43	Mexican fan palm	*Washingtonia robusta*		40'	45	5	5	5	5	A	A-	P	Grading of entire site	None required
44	weeping fig	*Ficus benjamina*	~14		28	20	25	15	18	A	B	P	Grading of entire site	None required
52	Shamel ash	*Fraxinus uhdei*	1, 1.5		12	8	6	6	8	A	A	N	Grading of entire site	None required
56	Aleppo pine	*Pinus halepensis*	20.5		55	0	16	18	16	A	B-	P	Grading of entire site	None required
57	Shamel ash	*Fraxinus uhdei*	2.3, 1.8, 2.1, 2.4, 2.3, 1.6		15	10	9	8	10	A	A-	N	Grading of entire site	None required
58	Aleppo pine	*Pinus halepensis*	26.8		40	16	22	21	6	A	C	P	Grading of entire site	None required
61	Aleppo pine	*Pinus halepensis*	29		44	20	23	21	23	A	B	P	Grading of entire site	None required
69	Chinese elm	*Ulmus parvifolia*	4.1, 3.7, 2.5, 4.8		15	0	10	18	10	A	B	N	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
72	Aleppo pine	*Pinus halepensis*	31		40	21	20	11	20	A-	B	P	Grading of entire site	None required
96	Aleppo pine	*Pinus halepensis*	31.5		40	20	24	10	20	A	B	P	Grading of entire site	None required
114	coast live oak	*Quercus agrifolia*	1.2, .7, .4, .6, .5		10	7	7	6	6	A	B	P	Grading of entire site	None required
115	coast live oak	*Quercus agrifolia*	.7, 1.2		10	9	7	2	0	A	B	P	Grading of entire site	None required
116	coast live oak	*Quercus agrifolia*	1.3, .7, .8		10	7	6	6	5	B	B	P	Grading of entire site	None required

EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 1 OF 4)

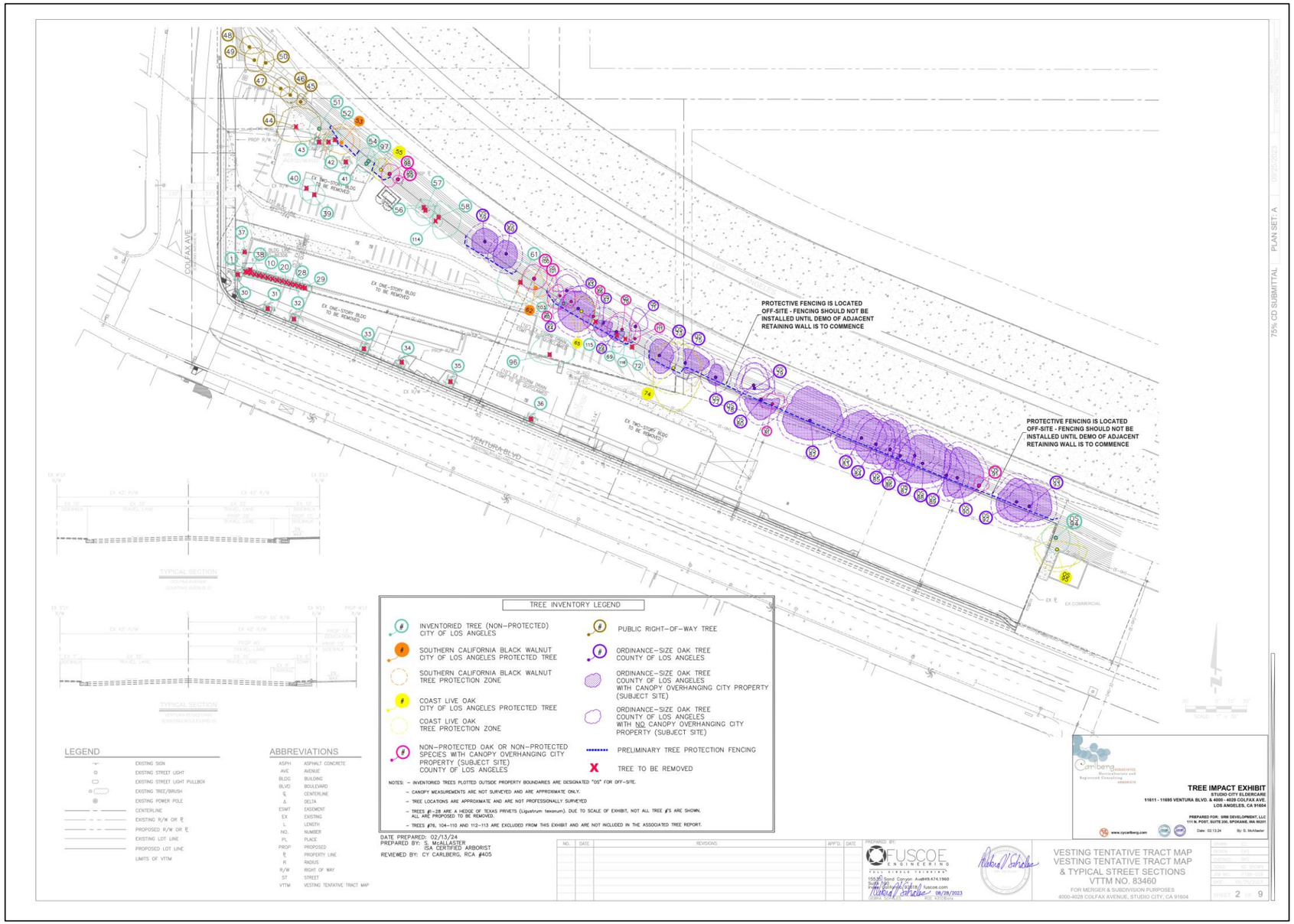


EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 2 OF 4)

EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 3 OF 4)

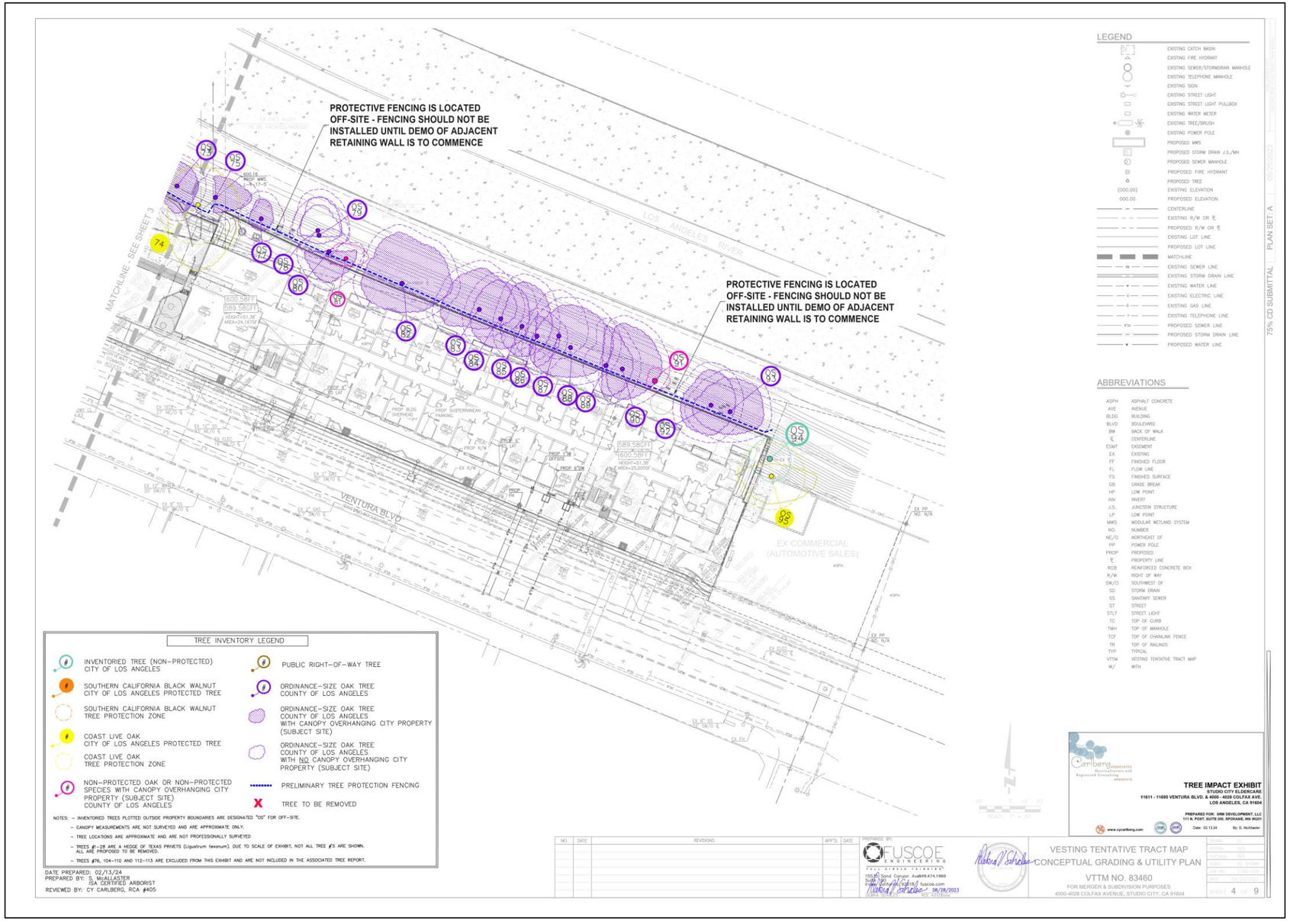


EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 4 OF 4)

TREE INVENTORY DATA TABLE

City Protected/ City Non-Protected/ Offsite/PROW	Tree #	Common Name	Botanical Name	Diameter at 4.5 feet (DBH) (in inches)	Brown Trunk # palm (in feet)	Height (in feet)	Canopy Spread N (in feet)	Canopy Spread E (in feet)	Canopy Spread S (in feet)	Canopy Spread W (in feet)	Health	Structure	Planted (P) or Naturally Occurring (N)	Preserve/ Remove
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

City of Los Angeles Tree Protection Notes:

Root Protection Zone

Tree roots are generally located in the top 12 - 36 inches of soil and can extend to a distance exceeding the trees height and/or width. The larger, structural roots located 3-5 feet from the trunk are often relatively inactive, and if cut, can become infected with root disease that may cause a column of decay or sapwood death in the trunk and root collar. Dieback related to cambium death will reach the lateral branches and top of the tree with time. The smaller feeder/absorptive roots of the tree can sustain damage during construction from lack of water, soil compaction or physical damage resulting from cutting. The following guidelines are designed to minimize damage to the root system of protected trees. The following establish a "Root Protection Zone" to safeguard the health of protected trees and other trees to remain.

1. Some encroachments may be unavoidable. The Project Arborist shall monitor all work that must be performed in the Root Protection Zone.
2. Protective chain-link fencing, at least five feet in height, with an access gate of minimal width should be installed at the Root Protection Zone of protected trees (or as drawn on the Tree Protection Plan) and approved in place by the Project Arborist and city staff prior to the commencement of any demolition, grubbing, grading or construction. This pertains to both public (parkway trees, etc.) and private trees.
3. When chain link fencing cannot be placed to the limits of the Root Protection Zone, the Project Arborist may require that orange snow fencing be placed at the limits of the Root Protection Zone as a temporary protection measure until the encroachment work will be performed. This will be determined at a pre-demo/pre-construction job site meeting with the contractor and/or applicant.
4. The tree protection zone should be irrigated sufficiently with clean potable water to keep the tree in good health and vigor before, during, and after construction. This may mean deeply soaking the ground periodically. Installation of layers of sand bags or other material to create a watering well, or berm, may be necessary. The Project Arborist will recommend this activity, if necessary.
5. No construction staging or disposal of construction materials or byproducts including but not limited to paint, plaster, or chemical solutions is allowed in the Root Protection Zone.
6. The Root Protection Zone should not be subjected to flooding incidental to the construction work.
7. All work conducted in the ground within the Root Protection Zone of any protected tree should be accomplished with hand tools, unless an air-spade is utilized. Trenches in the Root Protection Zone should be tunneled, or completed with an air-spade to avoid damage to small feeder roots within the root protection zone. Information regarding air-spades is available from the project arborist.
8. Where structural footings are required and major roots (over 3" in diameter) will be impacted, the engineer of record should submit acceptable footing design alternatives and/or location alternatives to city staff before proceeding with further plan review.
9. Where more than 50% of the root zone is impacted or roots greater than 3 inches in diameter are to be removed within four feet of the trunk, the engineer of record should submit acceptable design alternatives to staff for review.
10. Any required trenching should be routed in such a manner as to minimize root damage. Radial trenching (radial to the tree trunk) is preferred as it is less harmful than tangential trenching. Construction activity should be diverted from the Root Protection Zone. Cutting of roots should be avoided (i.e. place pipes and cables below uncut roots). Wherever possible and in accordance with applicable code requirements, the same trench should be used for multiple utilities.
11. "Natural" or pre-construction grade should be maintained in the Root Protection Zone. At no time during or after construction should soil be in contact with the trunk of the tree above the basal flair.
12. In areas where the grade around the protected tree will be lowered, some root cutting may be unavoidable. Cuts should be clean and made at right angles to the roots. When practical, cut roots back to a branching lateral root. The Project Arborist shall monitor all root pruning.
13. When removing existing pavement in the Root Protection Zone, avoid the use of heavy equipment, which will compact and damage the root system. The Project Arborist shall monitor all demolition activities in the Root Protection Zones.
14. If the Project Arborist requires mulch in the Root Protection Zone, the mulch materials and location will be shown on the plan.
15. Larger projects may require construction staging plans to indicate where materials will be stored and how the equipment will move in and around the property to minimize damage to the Root Protection Zone and tree canopies. Those plans will be prepared by the project engineer.
16. Root damage and soil compaction may be mitigated in some cases by using plywood, mulch, or mulch and plywood in the Root Protection Zone. Where applicable, this will be illustrated on the Tree Protection Plan.
17. Weather proof, minimum 8 x 10 inches, signage shall be applied to the fencing on all sides that states:

Tree Protection Fencing

Do Not Remove Without Authorization From

The City of Los Angeles

Questions - call Project Arborist: Carlberg Associates

Christy Cuba (626) 428-5072 or Cy Carlberg (310) 451-4804

Pruning

1. Pruning shall be monitored by the Project Arborist at intervals and durations as they see fit to maintain tree integrity.
2. Pruning of all trees should be in accordance with industry standards (International Society of Arboriculture or ANZI 133.1).
3. Pruning of oaks should be limited to the removal of dead wood and the correction of potentially hazardous conditions, as evaluated by the Project Arborist. Excessive pruning is harmful to oaks and many other trees. Removal or reduction of major structural limbs should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i. e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.
4. Pruning of trees other than oaks should be limited to the removal or reduction of major structural limbs and should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i. e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.
5. Landmark Trees must be pruned by or under the direction of a qualified arborist.

D. Inspections

1. Inspection of Protective Fencing: The Project Arborist shall inspect the tree protection fencing prior to demolition, grubbing, grading, or construction. City staff may also inspect fencing to verify placement and approval of materials prior to the commencement of demolition, grading, or construction.
2. Pre-construction meeting. City staff may require an on-site pre-construction meeting with the contractor and or applicant to discuss tree protection with the site supervisor, grading equipment contractors, and demolition crew. The Project Arborist shall be present at that meeting.
3. Inspection of rough grading. City staff my require inspection to ensure protected trees will not be injured by compaction, cut or fill, drainage and trenching activities.
4. Special Activity in the Tree Protection Zone: The Project Arborist shall provide direct on-site supervision of work in the tree protection zone, as they deem appropriate.
5. Periodic Inspections: City staff may require inspections verifying adherence to tree protection measures during the on-going construction process. Allow a minimum of 48 hours for scheduling inspections.
6. The Project Arborist shall report discrepancies or deficiencies in Tree Protection to the site superintendent for corrective action. If corrective actions are not taken in a reasonable time frame, the Project Arborist may notify City staff for enforcement action.

E. Definitions

1. Basal flair or root crown means the tree trunk where it emerges from the root system and flairs out to create the base of the tree.
2. Canopy means the area of a tree that consists primarily of branches and leaves.
3. Dripline means the outermost area of the tree canopy (leafy area of tree).
4. Certified Arborist means an individual who has demonstrated knowledge and competency through obtainment of the current International Society of Arboriculture arborist certification.
5. Root Protection Zone means the area within a distance from the tree trunk that equates to 12 times the Diameter at Standard Height (DSH): e.g., 20" DSH x 12 = 240 inches (20 feet).

Public Trees-Maintained by the City of Los Angeles

Trees that are located in the parkway between the curb face and the property line, and therefore are public trees. To have any work done on these trees, including installation of Tree Protection Fencing, contact Urban Forestry at (213) 847-3077.

Carlberg ASSOCIATES Horticulturists and Registered Consulting ARBORISTS

TREE IMPACT EXHIBIT
STUDIO CITY ELDERCARE
11611 - 11695 VENTURA BLVD. & 4000 - 4028 COLFAX AVE.
LOS ANGELES, CA 91604

PREPARED FOR: SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200, SPOKANE, WA 99201

www.cycarlberg.com Date: 02.13.24 By: S. McAllaster

NO.	DATE	REVISIONS	APP'D.	DATE

PREPARED BY: FUSCOE ENGINEERING FULL CIRCLE THINKING
15535 Sand Canyon Ave 949.474.1960
Suite 100
Irvine, California 92618 fuscoe.com
DEBRA SCHALES RCE 43101 Date 08/28/2023

VESTING TENTATIVE TRACT MAP
CONCEPTUAL GRADING & UTILITY PLAN
VTTM NO. 83460
FOR MERGER & SUBDIVISION PURPOSES
4000-4028 COLFAX AVENUE, STUDIO CITY, CA 91604

DRAWN:	CC
DESIGN:	DVS
CHECKED:	DVS
SCALE:	AS SHOWN
JOB NO.:	1198–009
DATE:	09/25/2023
SHEET 4 OF 9	

09/25/2023 | PLAN SET: A | 75% CD SUBMITTAL

CONCLUSION AND RECOMMENDATIONS

Implementation of Colfax & Ventura Project, including demolition, grading, construction of improvements, and installation of streets and utilities for the proposed new parking, roads (driveways), new entry, buildings and utility changes, and the public right-of-way merger/vacation will likely result in the following:

Total Onsite Ordinance-Protected trees = 5
Removals = 0
Preserve = 5

Total Street trees = 7
Removals = 1
Preserve = 6

Total Offsite Ordinance-Protected trees = 31
Removals = 0
Preserve = 31

Total Offsite Non-Protected trees = 5
Removals = 0
Preserve = 5

Total Onsite Non-Protected trees = 58
Removals = 54
Preserve = 4

The preservation of onsite protected trees (nos. 53, 55, 62, 65 and 74) has been discussed at length with the developer, engineer, and architect. While engineering and design modifications to retain these trees have been made, the critical root zones[6] of these trees will be significantly impacted. Large roots may require removal to accomplish proposed grading. If large roots are found under the existing hardscape and must be removed from within the CRZ, some or all of these trees may become destabilized. Additionally, if masses of smaller, absorptive roots are found under the existing hardscape and significant amounts of those roots are removed, these trees may experience an irreversible decline in health and vigor.

The preservation of offsite (Los Angeles County) trees is proposed through the removal of the unstable retaining wall and grading the project site down to a level where a new retaining will not be required. The trunks of many of the large oak trees are within a few feet of the retaining wall separating the two properties. Along the existing retaining wall, the current grade of the subject property ranges between eight and ten feet above the grade at the top of the slope on the County property. The current design proposes a curb with 3.5-foot high guard rail to replace the existing fence and retaining wall along the top of the embankment.

[6] Critical root zone is defined as the area of ground approximately 5x the trunk diameter radially from the trunk outward.

Tree Replacements

Non-protected, Onsite Tree Removals:

New trees are proposed in accordance with the requirements set forth by the Ventura Boulevard Corridor Specific Plan (Section 7.D.1) and LAMC Section 12.21.G. The Applicant is proposing to plant 50 trees for the Project, including 21 street trees and 29 on-site trees (see the conceptual landscape plans, Landscape Development, Inc., February 12, 2024). To our knowledge, there is no code provision nor written City of Los Angeles policy that requires the replacement of on-site non-protected trees.

City Protected Tree Removals:

No onsite City of Los Angeles protected trees are proposed for removal; therefore, no replacements are proposed.

Offsite County Tree Removals:

No offsite County of Los Angeles protected oak trees are proposed for removal; therefore, no replacements are proposed.

Street Tree / Public Right-of-way Removals:

1. The one protected PROW tree proposed for removal will be replaced at a 2:1 ratio, as required for parkway trees by the City of Los Angeles, Bureau of Street Services, Urban Forestry Division's standard application for a tree removal permit.

2. Right of way trees are usually replaced with 24-inch box specimens using a 2:1 ratio. (Policy of Bureau of Street Services, Urban Forestry Division).

3. The subdivider posts a bond or other assurance acceptable to the City Engineer to guarantee the survival of the trees for a period of three years (Sec.5. Subsection R. of Section 17.05, 4.d). The bond amount will be determined through negotiations between the City Engineer and the Urban Forestry Division.

Findings for Protected Tree Removal

Since no protected tree removals are proposed, no recommended Findings for Protected Tree Removal are included.

General Recommendations and Best Management Practices for Preservation of Trees During Construction

During a typical demolition and construction project, the following should occur:

- Implementation of a tree protection plan
- Monitoring the site on the specified schedule, and
- Documenting or reporting as specified in the scope of work, such as:
  - Compliance with tree protection plan
  - Monitoring plant health, soil moisture, change in tree risk status, and/or tree damage;
  - Changes or damage to the tree protection zone barriers;
  - Documentation and communication of severely damaged plants and recommendations for minor damage; and,
  - Additional factors as specified.

It is common in the arboricultural industry to use the following sources when identifying project tree protection measures:

- *ANSI A300 - 2023 Tree Care Standards for trees, shrubs, palms and other woody landscape plants.*
- *Los Angeles County Oak Tree Ordinance, Section 22.56.2050: Oak Tree Permit Regulations.*
- *Management of Trees and Shrubs During Site Development and Construction, 3rd Ed. Best Management Practices.*
- *City of Los Angeles Standard Tree Removal Application Checklist*
- *City of Los Angeles's Tree Protection Ordinance No. 186,873*

In my professional opinion the excerpted recommendations below, as well as those appearing on the Tree Impact and Protection Plan, should be implemented for tree protection prior to and during Project demolition and construction.

1. During the pre-construction phase: Tree protection objectives, plans, specifications, and consequences for non-compliance should be communicated to the project manager, property owner and relevant contractors. (ANSI A300-2023, 9.6.1)
2. Exposed roots to remain should be covered with burlap, carpet remnants or other material that may be kept moist until soil can be replaced. (ANSI A300-2023, 9.10.3.8)
3. This report shall be part of the set of plans given to the contractors. Contractors should be familiar with the specific instructions and responsibilities pertaining to protected trees. It is recommended that a professional arborist be retained and meet with the contractor and his personnel prior to commencement of the project. (ANSI A300-2023, 9.6.1)
4. If canopy pruning is found to be necessary for trees to remain, it should only be performed by qualified arborists or other qualified professionals who, through related training and on-the-job experience, are familiar with the standards, practices, and hazards or arboriculture operations and equipment. (ANSI A300-2023, 4.4.3) Climbing "spurs" shall not be used by any tree climber except in an emergency to reach an injured climber, when removing a tree, or in situations that are impractical, as outlined in the ANSI 300-2023 Tree Care Standards. (ANSI A300-2023, 4.5.3, 5.5.14)

5. City of Los Angeles protected trees shall not be removed until/unless approval is granted by the City of Los Angeles' Urban Forestry Division. (City of Los Angeles's Tree Protection Ordinance No. 186,873, Sec. 46.00)
6. County of Los Angeles protected trees shall not be removed until/unless approval is granted by the appropriate county agency. (Los Angeles County Oak Tree Ordinance, Section 22.56.2060)
7. Pruning activities may affect wildlife either directly through disturbance or by manipulation of habitat such as food supplies, cover, nesting or roosting sites. Pruning activities may also violate certain regulations including the federal Migratory Bird Treaty Act, the Endangered Species Act, and other federal, state, and local regulations. Arborists need to be aware of regulations and modify work procedures as appropriate to avoid disturbing injuring or killing protected wildlife. (ANSI 300-2023, A-10)
8. Equipment, materials, and vehicles should not be stored, parked, or operated within the protected zone of trees to remain without approval by the project arborist or qualified professional and with appropriate mitigation. (ANSI 300-2023, 9.10.3.1)
9. Equipment with overhead exhaust should not be placed in such a manner as to scorch overhanging branches or foliage. Smaller equipment should be used in such areas as deemed necessary by the monitoring arborist. (ANSI A300-2023, 9.10.3.3)
10. Five (5) foot high chain link fencing shall be installed as illustrated on the Tree Impact and Protection Plan prior to submission of this report to the Urban Forestry Division of the City of Los Angeles (reports may not be deemed complete by the Division if fencing is not in place). Photographs of the fencing should be submitted with the report. When performing their inspection, Urban Forestry requires that the protective fencing be in place. (City of Los Angeles Standard Tree Removal Application Checklist)
11. Oak tree protection fencing and other protection measures for Los Angeles County oak trees to remain will be implemented in accordance with the Los Angeles County Oak Tree Ordinance. (Los Angeles County Oak Tree Ordinance Chapter 22.56.2180.B)
12. Construction Monitoring

    - Site visits are necessary for the arborist to assess project compliance with the Tree Impact and Protection Plan. Monitoring visits will be conducted at regular intervals during site demolition, grading, excavation, and site preparation. A monitoring schedule will be developed according to the project timeline. (ANSI A300-2023, 4.7).

    - Where grading or any other similar activity is specifically approved within the protected zone, the applicant shall provide an individual with special expertise acceptable to the director to supervise all excavation or grading proposed within the protected zones and to further supervise, monitor and certify to the county forester and fire warden the implementation of all conditions imposed in connection with the applicant's oak tree permit. (Los Angeles County Oak Tree Ordinance Chapter 22.56.2180.B)

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

Respectfully submitted,

Cy Carlberg, Registered Consulting Arborist
Principal, Carlberg Associates

This report comprises a total of 126 pages and two full-size map sets. Unauthorized separation or removal of any portion of this report deems it invalid as a whole.

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

CERTIFICATION OF PERFORMANCE

I, Cy Carlberg, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report and have stated my findings accurately. The extent of the evaluation and appraisal is stated in the attached report and the Terms of Assignment.

- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.

- That the analysis, opinions, and conclusions stated herein are my own.

- That my analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.

- That no one provided significant professional assistance to the consultant, except as indicated within the report.

- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

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

Signed:

Date: February 13, 2024

Cy Carlberg
ASCA Registered Consulting Arborist #405
ISA Certified Arborist, WE-0575A
Qualified Tree Risk Assessor
CAUFC Certified Urban Forester #013

ARBORIST DISCLOSURE STATEMENT

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

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

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

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

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

LIST OF CONTIBUTORS AND RESUMES OF KEY STAFF

Ms. Cy Carlberg, Principal
Ms. Christy Cuba, Senior Arborist
Mr. Scott McAllaster, Staff Arborist and AutoCAD Draftsperson
Mr. Daniel Cowell, Staff Arborist, Biologist

CY CARLBERG
CARLBERG ASSOCIATES
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
cy@cycarlberg.com • o: 310.451.4804 • www.cycarlberg.com

Education
B.S., Landscape Architecture, California State Polytechnic University, Pomona, 1985
Graduate, Arboricultural Consulting Academy, American Society of Consulting Arborists, Chicago, Illinois, February 2002
Graduate, Municipal Forestry Institute, Lied, Nebraska, 2012

Experience
Consulting Arborist, Carlberg Associates, 1998-present
Manager of Grounds Services, California Institute of Technology, Pasadena, 1992-1998
Director of Grounds, Scripps College, Claremont, 1988-1992

Certificates
Certified Arborist (#WE-0575A), International Society of Arboriculture, 1990
Registered Consulting Arborist (#405), American Society of Consulting Arborists, 2002
Certified Urban Forester (#013), California Urban Forests Council, 2004
Qualified Tree Risk Assessor, International Society of Arboriculture, 2011

AREAS OF EXPERTISE

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

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

PREVIOUS CONSULTING EXPERIENCE

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

The Huntington Library and Botanical Gardens
The Los Angeles Zoo and Botanical Gardens
The Rose Bowl and Brookside Golf Course, Pasadena
Walt Disney Concert Hall and Gardens
The Art Center College of Design, Pasadena
Pepperdine University
Loyola Marymount University
The Claremont Colleges (Pomona, Scripps, CMC, Harvey Mudd, Claremont Graduate University, Pitzer, Claremont University Center)
Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
Getty Trust – Eames House
Historic Resources Group
Mia Lehrer + Associates
The City of Claremont
The City of Beverly Hills
The City of Pasadena
The City of Los Angeles
The City of Santa Monica
Santa Monica/Malibu Unified School District
San Diego Gas & Electric
Los Angeles Department of Water and Power
Rancho Santa Ana Botanic Garden, Claremont
Latham & Watkins, LLP (attorneys at law)
Architectural Resources Group
AHBE Landscape Architects
Moule and Polyzoides, Architects and Urbanists

AFFILIATIONS

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

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

CHRISTINE CUBA
CARLBERG ASSOCIATES
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
Satellite Office – 80 W. Sierra Madre Blvd., #241 • Sierra Madre • California • 91024
christy@cycarlberg.com • o: 626.428.5072 • www.cycarlberg.com

Education
B.A., Environmental Analysis & Design, Cum Laude, University of California, Irvine, 1993
Graduate, International Society of Arboriculture Certification Study Program, April 1998
Graduate, Consulting Academy, American Society of Consulting Arborists, February 2008

Experience
Senior Arborist/Associate, Carlberg Associates, 2011 – Present
Director of Environmental Services & Senior Arborist, Land Design Consultants, Pasadena, 1994 – 2011
Park Specialist/Naturalist, City of Monrovia, 1988-1996

Certificates
Certified Arborist, WE-1982A, International Society of Arboriculture, 1998
Registered Consulting Arborist, #502, American Society of Consulting Arborists, 2011
Qualified Tree Risk Assessor, International Society of Arboriculture, 2013

AREAS OF EXPERTISE

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

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

PREVIOUS CONSULTING EXPERIENCE

Ms. Cuba has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. She has over 25 years of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena
City of Monrovia
City of Santa Clarita
City of Glendora
Los Angeles County Fire Department
California Institute of Technology
Mia Lehrer + Associates
Pulte/Centex Homes
Newhall Land and Farming
KOVAC Design Studio
EPT Design
Pamela Burton & Company
Chandler School
San Diego Gas & Electric
Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
The New Home Company
City of South Gate
City of Sierra Madre
Belzberg Architects
Occidental College
Rose Bowl Stadium
Las Encinas Hospital/Aurora Health Services
The Claremont Colleges (Pomona College, Claremont University Consortium, Claremont Graduate University)
Gensler Architects
Mesivta of Greater Los Angeles

AFFILIATIONS

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

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

SCOTT MCALLASTER

CARLBERG ASSOCIATES
Satellite Office – 80 W. Sierra Madre Blvd., #241 • Sierra Madre • California • 91024
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
scott@cycarlberg.com • m: 424.285.3334 • www.cycarlberg.com

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

Experience — Project Planner & Senior Arborist, Land Design Consultants, Inc.
Pasadena, 1999 – 2014

Certificates — Certified Arborist, WE-7011A, International Society of Arboriculture, 2004
Qualified Tree Risk Assessor, International Society of Arboriculture, 2015

AREAS OF EXPERTISE

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

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

PREVIOUS CONSULTING EXPERIENCE

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

City of Pasadena
City of Santa Clarita
City of Glendora
Los Angeles County Fire Department
Los Angeles County Sanitation Districts
Newhall County Water District
Pulte/Centex Homes
Newhall Land and Farming
E & S Ring, Inc.
Hollywood Forever Cemetery
Archdiocese of Los Angeles
St. John's Hospital, Santa Monica
Kovac Architects
Tim Barber, Ltd., Architects
Ojai Valley Community Hospital
The Kibo Group
El Monte Garden Senior Center
IMT Capital, LLC
San Diego Gas & Electric
Corky McMillin Companies
City of South Gate
City of Arcadia
D2 Development
Burrtec, Inc.
The Claremont Colleges
The New Home Company
William Carey University
Claremont Golf Course
Universal Hilton
Gensler Architects
Marmol Radziner, Architects
NAC Architecture
Aurora/Signature Health Services
Monte Vista Grove Homes
Highpointe Communities
Claremont University Center

AFFILIATIONS

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

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

DANIEL COWELL

CARLBERG ASSOCIATES
Satellite Office – 80 W. Sierra Madre Blvd., #241 • Sierra Madre • California • 91024
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
daniel@cycarlberg.com • m: (626) 393-1568 • www.cycarlberg.com

Education
B.A., Environmental Studies/Science Whittier College, Whittier, 2014
A.S., Biological and Physical Sciences and Mathematics, Citrus College, 2010
A.A./A.S., Social and Behavioral Sciences, Citrus College, 2010
Courses in Environmental Biology, California State Polytechnic University, Pomona, 2012

Experience
Staff Arborist, Carlberg Associates, 2020 – Present
Over two dozen Environmental, Biological, Nesting Bird, and Restoration Surveys, 2010 – 2020
Biologist, Harmsworth Associates, 2015 – 2017
Biologist, Arroyo Trabuco Golf Club, 2010 – 2015

Certificates
Wildland Resources and Forestry Certificate Program, 2011

AREAS OF EXPERTISE

Mr. Cowell is experienced in the following areas of environmental and arboricultural monitoring, management and preservation:

- Evaluation of trees for preservation and encroachment during construction
- Inventories & reports for native and non-native trees
- Construction monitoring and reporting
- Post-fire inventories and assessments for native and non-native trees
- Environmental consulting, survey, and compliance monitoring & reporting
- Performance of nesting bird surveys
- Native vegetation and wildlife protection, hazardous materials spill prevention, non-native vegetation spread prevention, and fire management practices
- Creation of mitigation strategies for impacts to wetlands and waters
- Inspection of trees and vegetation near power lines to determine species, growth rates, hazards,
- and making pruning and removal decisions.
- Development of environmental education programs and training of volunteers

PREVIOUS CONSULTING EXPERIENCE

Mr. Cowell has performed hundreds of nesting bird surveys and other environmental studies and monitoring for counties, cities, water districts, resource conservation districts, and utility companies, as well as private developers and professional consultants. He has over 13 years of experience in biology and is trained in environmental planning, state and federal regulatory permitting, and habitat mitigation planning and implementation. Representative clients include:

University of California, Irvine
The Irvine Company
The County of Orange
The County of Orange
The Nature Conservancy
City of Santa Clarita
City of Beaumont
City of Chino Hills
City of Twenty-nine Palms
Arroyo Trabuco Golf Club
Newhall County Water District
First Carbon Solutions
Traveland USA
Irvine Ranch Water District
Endemic Environmental Services
San Diego Gas & Electric
City of Moreno Valley
City of Costa Mesa
City of Newport Beach
City of Murietta
City of Garden Grove
Resource Conservation District of the Santa Monica Mountains
Land Design Consultants
Burrtec, Inc.
The Claremont Colleges
Environmental Intelligence

AFFILIATIONS

Mr. Cowell is affiliated with the following national and regional professional organizations:

- Rancho Santa Ana Botanical Gardens, Claremont (volunteer since 2010)
- California Native Plant Society (San Gabriel Mountains and Orange County Chapters)
- Theodore Payne Foundation for California Wildflowers and Native Plants

EXHIBIT E – DEFINITION OF HEALTH AND STRUCTURE GRADES

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

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

Health

A) Outstanding – Exceptional trees of good growth form and vigor for their age class; exhibiting very good to excellent health as evidenced by normal to exceptional shoot growth during current season, good bud development and leaf color, lack of leaf, twig or branch dieback throughout the crown, and the absence of decay, bleeding, or cankers. Common leaf and/or twig pests may be noted at very minor levels.

B) Above average – Good to very good trees that exhibit minor necrotic or physiological symptoms of stress and/or disease; shoot growth is less than reasonably expected, leaf color is less than optimal in some areas, the crown may be thinning, minor levels of leaf, twig, and branch dieback may be present, and minor areas of decay, bleeding, or cankers may be manifesting. Minor amounts of epicormic growth may be present. Minor amounts of fire damage or mechanical damage may be present. Still healthy, but with moderately diminished vigor and vitality. No significant decline noted.

C) Average – Average, moderately good trees whose growth habit and physiological or fire-induced symptoms indicate an equal chance to either decline or continue with good health into the near future. Most of these trees exhibit moderate to significant small deadwood in outer crown areas, decreased shoot growth and diminished leaf color and mass. Some stem and branch dieback are usually present and epicormic growth may be moderate to extensive. Cavities, pockets of decay, relatively significant fire damage, bark exfoliation, or cracks may be present. Moderate to significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it is expected to negatively impact the lifespan of the tree. Tree may be in early decline.

D) Below Average/Poor - trees whose growth habit and physiological or fire-induced symptoms indicate significant, irreversible decline. Most of these trees exhibit significant dieback of wood in the crown, possibly accompanied by significant epicormic sprouting. Shoot growth and leaf color and mass is either significantly diminished or nonexistent throughout the crown. Cavities, pockets of decay, significant fire damage, bark exfoliation, and/or cracks may be present. Significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it has negatively impacted the lifespan of the tree. Tree appears to be in irreversible decline.

F) Dead or in spiral of decline – this tree exhibits very little to no signs of life.

STRUCTURE

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

B) Above average - Trees with good to very good structure for their species. They exhibit trunk and branch arrangement and orientation that result in a relatively sturdy form or architecture that resists

failure under normal circumstances, but may have some mechanical damage, over-pruning, or other minor structural defects. The spacing, orientation, and size of the branches relative to the trunk are still in the normal range for the species, but they exhibit a minor degree of defects. Minor, sub-critical levels of decay or pathological disease may be present, but the degree of damage is not yet structurally significant. Trees that exhibit naturally inherent branching defects, like multiple, narrow points of attachment from one point on the trunk, would generally fall in to this category. A small percentage of the canopy may be shaded or crowded, but not in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree.

C) Average - Trees with moderately good structure for their species, but with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a less than sturdy form or architecture, which reduces their resistance to failure under normal circumstances. Moderate levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of some of the branches relative to the trunk are not in the normal range for the species. Moderate to significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A moderate to significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be moderately elevated.

D) Well Below Average/Poor - Trees poor structure for their species and with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a significantly less than sturdy form or architecture, significantly reducing their resistance to failure under normal circumstances. Significant levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of many of the branches relative to the trunk are not in the normal range for the species. Significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be advanced.

F) Severely Compromised – trees with very poor structure and numerous or severe defects due to growing conditions, historical or recent pruning, mechanical damage, history of limb or trunk failures, advanced decay, disease, or severe fire damage. Risk of full or partial failure in the near future appears to be severe.

EXHIBIT F - GLOSSARY OF ARBORICULTURAL & DENDROLOGICAL TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Calculated Tree Protection Zone: A TPZ that is calculated using the trunk diameter and a multiplication factor based on the species tolerance to construction and age of the tree. It is often plotted on a plan as a circle or other simple geometric shape. It can be used as a guide for establishing the specified TPZ.

Critical Root Zone (CRZ): Area of soil around a tree where the minimum amount of roots considered critical to the health of the tree or structural stability are located. The are no universally accepted methods to calculate the CRZ.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Heart rot: Decay in the center of the tree (heartwood).

***Included bark*:** Areas of bark on adjacent parts of a tree, typically on the inner faces of a narrow fork, which becomes grown over to occupy part of the internal joint. The bark-to-bark contact is weaker than the more usual woody union.

Lateral branch / limb: The next order of branch that rises from the scaffold limbs.

Leader: The topmost vertical shoot of a tree, present if the tree has strong apical dominance, characteristic of young trees and conifers. Trees with a rounded crown have no leader.

Mulch: a material (such as decaying leaves, bark, or compost) spread around or over a plant to enrich or insulate the soil.

***Parasite*:** An organism that exploits another, e.g., for food, to the prejudice of the host. Parasites may kill their hosts, be pathogenic or have little significant effect.

***Pathogen*:** A kind of parasite that causes disease.

Phloem: A transport tissue characterized by sieve tubes and companion cells, found the vascular bundles of higher plants. Functions in the transport of dissolved organic substances by translocation.

Photosynthesis: The chemical process by which chlorophyll-containing plants use light to convert carbon dioxide and water into carbohydrates, releasing oxygen as a by-product.

Pruning: The cutting off or cutting back of shoots or branches from a tree, whether to direct growth (formative pruning), make safe, to remove an obstructing or diseased part, to increase longevity (veteran trees), to maintain productivity (fruit trees) etc.

Root crown /collar / Root flare: The outwardly curving base of a tree where it joins the roots, often distinguishable as individual root buttresses.

Root crown inspection: Extensive examination of the junction of root & stem, including the area immediately below, aimed at determining stability, presence of disease, decay, etc.

***Root plate*:** The area needed by a tree's root system to keep the tree stable; broadly, that part of the root system displaced when a tree is uprooted.

Root zone: The area of ground around the base of a tree that supports root growth; often extends far beyond the dripline of a tree.

***Scaffold branch / limb*:** The first order of limbs or branches that arise from the trunk of a tree.

Soil: A mixture of mineral particles, often of various sizes due to weathering, roots and other living things, soil organic matter and the associated voids (pores) filled with air and/or water.

Soil aeration: The movement of gases in soil, primarily by diffusion through the soil pores. For example, oxygen diffuses from the atmosphere to the vicinity of the plant root while carbon dioxide diffuses in the opposite direction. The rate of diffusion is related to the proportion of the soil volume that contains air

Soil compaction: An increase in bulk density due to the pressure exerted by animals, vehicles, (locally) by root growth *etc*. Pore space is reduced, which may also restrict soil aeration, water infiltration and drainage.

Soil structure: The aggregation of soil particles into clumps (peds) of various shapes and the associated spaces between them, affecting many properties of soil including its porosity to air and water, and its fertility.

Soil texture: The size of the mineral particles in the soil, classified (from fine to coarse) as clay, silt, sand, gravel or stones, or some mixture of these to give a characteristic particle size distribution. Sandy soils give a light texture, clayey soils give a heavy texture.

***Stub*:** That part of a pruned branch protruding beyond the branch collar. It is not good practice to leave stubs since they impede occlusion and are prone to decay.

Suckers: Shoots arising from the roots of a tree, which can arise surprisingly far from the parent.

Target: A target is the subject of injury or damage within range of a tree hazard

***Topping*:** A kind of pruning in which the branches of a tree are all decapitated to reduce the tree to a specific height. An indiscriminate form of pruning not regarded as good practice, to which some trees, such most conifers, are intolerant.

Training: To change the shape of a tree by means other than (formative) pruning, typically by tying young branches into a particular position.

***Transpiration*:** Loss of water vapor from the surface of leaves & other aboveground parts of the plant.

Tree Protection Zone: a defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to specified trees. The arborist determines the specified TPZ by evaluating on-site conditions, orientation of the canopy, and visible roots of the specific tree, and planned construction. (ANSI A300, Part 5, 2023). When no governing jurisdiction definition of a TPZ is provided by Municipal Code or other governing standards, we use the ANSI definition for the Tree Protection Zone and provide our recommendations for a TPZ on a tree-by-tree basis.

***Vigor / vigorous*:** Overall health; the capacity to grow & resist physiological stress.

EXHIBIT G – LIST OF ACRONYMS

ANTH – Anthracnose disease

BT – brown trunk – commonly used to measure palm tree trunk heights instead of diameters; it excludes the palm head, or canopy

CANK – canker – an area of dead tissue; can be caused by sunburn or disease

CLPD – common leaf pests and diseases (usually subcritical and non-lethal to tree)

COD – codominant stems or trunks – similar diameter trunks or stems arising from the same point of origin – can be a defect depending on the angle of attachment

Compass directions – N=north, E=east, S=south, W=west

DBH – Diameter at breast height (4 ft. 6 in. from grade) – a standard forestry term / protocol used for measuring tree trunk diameter

DSH – Diameter Standard Height – same as DBH but politically correct without the reference to breasts

DN – drippy nut (acorn) disease (common and non-lethal bacterial infection of acorns)

DW – dead wood

EG – epicormic growth – usually stress-induced growth that originates from previously dormant buds located on trunks or branches

GR – girdling root – can cause structural instability

HOB – history of breakage – usually refers to branches, not twiggy growth

HR – heart rot – decay of the heartwood

H2O – water or irrigation

IB – included bark – can cause structurally weak attachments

LCR – live crown ratio – a ratio of canopy foliage to bare trunk – informs structural grade, as low LCR can increase likelihood of failures

Lerp psyllid / Tipu psyllid – sap sucking insects

Lg - large

MBA – multiple branch attachments – can be a structural defect

Mech. Dam or MD – mechanical damage

MPE – multiple pruning events – can lead to reduced structural integrity based on secondary growth characteristics

P/D – pest/disease

PP – poor pruning – usually refers to stub cuts, flush cuts, excessive thinning, topping, etc.

Prune/DPR-QA - prune out dead/infested/diseased portion(s) & consult a licensed Department of Pesticide Regulation Qualified Applicator for potential chemical pest/disease treatments

RRD – root rot disease

SB – sycamore borer – a clear-winged moth that lays eggs on the bark of trees (mostly sycamore and oak species) – larvae burrow and feed in bark layer, usually non-damaging to tree

SS – stump sprouts – epicormic growth that arises from cut trunks – can originate from the remaining trunk tissue or the root crown

T – trunk

TG – Twig girdler – a stem girdling insect (this condition may also be noted under the umbrella of 'CLPD'

Topping cuts – refers to the substandard practice of arbitrarily pruning with no regard to lateral branch points; can include excessive and disfiguring pruning

WW – wound wood – callus tissue growing over a wound

Xylella = suspected bacterial infection with Xylella fastidiosa

EXHIBIT H – TREE INVENTORY FIELD DATA

THE FOLLOWING SHEETS ARE 11” X 17”

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
City NP	1	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	2	Texas privet	*Ligustrum texanum*	3.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	3	Texas privet	*Ligustrum texanum*	4.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	4	Texas privet	*Ligustrum texanum*	5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	5	Texas privet	*Ligustrum texanum*	6.8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	6	Texas privet	*Ligustrum texanum*	2.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	7	Texas privet	*Ligustrum texanum*	2.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	8	Texas privet	*Ligustrum texanum*	2		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	9	Texas privet	*Ligustrum texanum*	10			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	10	Texas privet	*Ligustrum texanum*	2.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	11	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	12	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	13	Texas privet	*Ligustrum texanum*	4.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	14	Texas privet	*Ligustrum texanum*	5.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	15	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	16	Texas privet	*Ligustrum texanum*	3		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	17	Texas privet	*Ligustrum texanum*	8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	18	Texas privet	*Ligustrum texanum*	8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	19	Texas privet	*Ligustrum texanum*	2		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	20	Texas privet	*Ligustrum texanum*	8.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	21	Texas privet	*Ligustrum texanum*	5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
City NP	22	Texas privet	*Ligustrum texanum*	3			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	23	Texas privet	*Ligustrum texanum*	5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	24	Texas privet	*Ligustrum texanum*	8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	25	Texas privet	*Ligustrum texanum*	6			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	26	Texas privet	*Ligustrum texanum*	5.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	27	Texas privet	*Ligustrum texanum*	7			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	28	Texas privet	*Ligustrum texanum*	10			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	29	peach	*Prunus persica*	8.2			18	8	6	10	8	A-	B			P	growing into adjacent hedgerow	Remove	New Development	None required
City NP	30	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	31	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	32	Mexican fan palm	*Washingtonia robusta*		50'		55	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	33	Mexican fan palm	*Washingtonia robusta*		60'		65	5	5	5	5	B	B			P	adjacent to sidewalk on PP	Remove	New Development	None required
City NP	34	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	35	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	36	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	37	Mexican fan palm	*Washingtonia robusta*		1'		7	4	0	4	4	A	B			P	volunteer on PP adjacent to sidewalk	Remove	New Development	None required
City NP	38	citrus	*Citrus sp.*		1.5		12	7	7	8	7	A-	A-			P	in raised planter	Remove	New Development	None required
City NP	39	Indian laurel fig	*Ficus microcarpa*	35 at 2 feet			18	9	11	10	12	A	B+			P	in parking lot cutout	Remove	New Development	None required

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
City NP	40	common myrtle	*Myrtus communis*	8			20	10	9	12	7	A	B+			P	pruned for building clearance, tree not tagged	Remove	New Development	None required
City NP	41	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	A	A-			P		Remove	New Development	None required
City NP	42	Mexican fan palm	*Washingtonia robusta*		35'		40	5	5	5	5	A	A-			P		Remove	New Development	None required
City NP	43	Mexican fan palm	*Washingtonia robusta*		40'		45	5	5	5	5	A	A-			P		Remove	New Development	None required
PROW	44	weeping fig	*Ficus benjamina*	~14			28	20	25	15	18	A	B			P	in small cutout, pruned for building clearance, communication wires running through canopy, diameter estimated	Remove	New Development	2:1 (this currently PROW tree will ultimately become an onsite tree. Nevertheless we have listed it to be replaced at a "street tree" replacement ratio subject to Urban Forestry's interpretation.
PROW	45	Torrey pine	*Pinus torreyana*	5.8			16	8	6	3	4	A	B+			P	between parking lot and LA river fence	Preserve with no impacts		N/A
PROW	46	Torrey pine	*Pinus torreyana*	7.2			18	8	7	8	10	A	B+			P	between parking lot and LA river fence	Preserve with no impacts		N/A
PROW	47	Torrey pine	*Pinus torreyana*	7			18	11	9	8	8	A	B+			P	between parking lot and LA river fence	Preserve with no impacts		N/A

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(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
PROW	48	Torrey pine	*Pinus torreyana*	7.6			24	11	12	7	10	A	B+			P		Preserve with no impacts		N/A
PROW	49	Torrey pine	*Pinus torreyana*	11			26	12	10	12	10	A	B+			P		Preserve with no impacts		N/A
PROW	50	Canary Island pine	*Pinus canariensis*	10.5			22	11	8	9	9	A	B+			P		Preserve with no impacts		N/A
CITY NP	51	pecan	*Carya illinoinensis*	7.7			20	12	10	12	10	A	B			P	overhangs to S by 7 feet	Preserve/ Encroach		N/A
CITY NP	52	Shamel ash	*Fraxinus uhdei*	1, 1.5			12	8	6	6	8	A	A			N	overhangs to S by 6 feet	Remove	New Development	None required
CITY P	53	Southern California black walnut	*Juglans californica*	9.1, 12.1, 3, 3, 4			24	15	12	12	18	A-	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A
CITY NP	54	pecan	*Carya illinoinensis*	6.4			22	8	12	9	10	A	A-			P	overhangs to S by 3 feet	Preserve/ Encroach		N/A
CITY P	55	coast live oak	*Quercus agrifolia*	7.6			20	11	10	10	8	B+	B			P	county ordinance size within year	Preserve/ Encroach		N/A
CITY NP	56	Aleppo pine	*Pinus halepensis*	20.5			55	0	16	18	16	A	B-			P	overhangs to S by 14 feet, heavy lean S	Preserve/ Encroach	New Development	N/A
CITY NP	57	Shamel ash	*Fraxinus uhdei*	2.3, 1.8, 2.1, 2.4, 2.3, 1.6			15	10	9	8	10	A	A-			N	overhangs to S by 6	Remove	New Development	N/A
CITY NP	58	Aleppo pine	*Pinus halepensis*	26.8			40	16	22	21	6	A	C			P	overhangs to S by 15 feet, large unbalanced and curved trunk	Remove	New Development	N/A

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City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
OS	59	coast live oak	*Quercus agrifolia*	7.7, 9, 4.8			20	13	13	12	13	A	B			P		Preserve/ Encroach		N/A
OS	60	coast live oak	*Quercus agrifolia*	5.8, 5.8, 4, 3.6, 2.7, 3			20	13	11	14	13	B	B			P		Preserve/ Encroach		N/A
CITY NP	61	Aleppo pine	*Pinus halepensis*	29			44	20	23	21	23	A	B			P	overhangs to S by 20 feet	Remove	New Development	None required
CITY P	62	Southern California black walnut	*Juglans californica*	6.2, 6.5, 5.3			16	14	14	9	2	A-	B-			P	overhangs to S by 3 feet, some broken limbs	Preserve/ Encroach		N/A
OS	63	coast live oak	*Quercus agrifolia*	10.8			28	16	14	0	14	B	B			P		Preserve/ Encroach		N/A
OS	64	coast live oak	*Quercus agrifolia*	18.2			35	17	16	23	20	B	B-			P	overhangs to S by 10 feet, on PL, city or county?	Preserve/ Encroach		N/A
CITY P	65	coast live oak	*Quercus agrifolia*	13.3			32	15	14	19	8	B	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A
OS	66	coast live oak	*Quercus agrifolia*	6.5			18	0	10	14	10	C	C			P	overhangs to S by 8 feet, decay	Preserve/ Encroach		N/A
OS	67	coast live oak	*Quercus agrifolia*	8.7			20	2	9	14	10	B	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A
OS	68	coast live oak	*Quercus agrifolia*	8.1			18	0	8	9	9	B-	B-			P	overhangs to S by 3 feet	Preserve/ Encroach		N/A
City NP	69	Chinese elm	*Ulmus parvifolia*	4.1, 3.7, 2.5, 4.8			15	0	10	18	10	A	B			P	overhangs to S by 16 feet	Remove	New Development	1:1

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City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
OS	70	Shamel ash	*Fraxinus uhdei*	15.9, 13.5, 2.5, 2			40	17	14	14	15	B	B			N	overhangs to S by 2 feet	Preserve/ Encroach		N/A
OS	71	coast live oak	*Quercus agrifolia*	6.7, 9			20	18	12	5	6	B	B-			P		Preserve/ Encroach		N/A
City NP	72	Aleppo pine	*Pinus halepensis*	31			40	21	20	11	20	A-	B			P	overhangs to S by 10 feet	Remove	New Development	None required
OS	73	coast live oak	*Quercus agrifolia*	8.3, 13.3, 2.5			30	16	14	18	10	B	B-			P	overhangs to S by 11 feet	Preserve/ Encroach		N/A
CITY P	74	coast live oak	*Quercus agrifolia*	26.5			42	25	28	44	20	A-	B			P	overhangs to S by 40 feet	Preserve/ Encroach		N/A
OS	75	coast live oak	*Quercus agrifolia*	10.5			25	14	24	10	0	A-	B-			P	overhangs to S by 2 feet	Preserve/ Encroach		N/A

No Tree no. 76

OS	77	coast live oak	*Quercus agrifolia*	9.5			28	13	8	8	8	B	B			P	overhangs to S by 4 feet	Preserve/ Encroach		N/A
OS	78	coast live oak	*Quercus agrifolia*	9.1			26	22	16	9	12	A	B			P		Preserve/ Encroach		N/A
OS	79	coast live oak	*Quercus agrifolia*	13.3			30	20	15	0	14	A	B			P		Preserve/ Encroach		N/A
OS	80	coast live oak	*Quercus agrifolia*	13			32	0	18	20	16	A-	B-			P	overhangs to S by 16 feet	Preserve/ Encroach		N/A
OS	81	coast live oak	*Quercus agrifolia*	6.7			18	10	15	5	12	A	B			P		Preserve/ Encroach		N/A
OS	82	coast live oak	*Quercus agrifolia*	5.3, 6, 32.2, 16.6			40	33	33	20	27	A	B+			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	83	coast live oak	*Quercus agrifolia*	20.1			38	27	25	13	26	A-	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A

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City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
OS	84	coast live oak	*Quercus agrifolia*	21.8			32	25	19	20	20	A	B			P	overhangs to S by 15	Preserve/ Encroach		N/A
OS	85	coast live oak	*Quercus agrifolia*	18.9, 4			30	29	20	20	14	A-	B			P	overhangs to S by 15	Preserve/ Encroach		N/A
OS	86	coast live oak	*Quercus agrifolia*	8.1, 7.6, 2.5, 2			20	13	15	20	0	B	B-			P	overhangs to S by 15	Preserve/ Encroach		N/A
OS	87	coast live oak	*Quercus agrifolia*	9.5, 5.8, 10, 11.5			18	25	14	8	17	B-	B-			P		Preserve/ Encroach		N/A
OS	88	coast live oak	*Quercus agrifolia*	24.4			35	28	28	20	27	A	B+			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	89	coast live oak	*Quercus agrifolia*	13, 7.6			24	26	18	20	2	A-	B			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	90	coast live oak	*Quercus agrifolia*	12.2, 15.4, 2.4			28	30	26	20	10	A	B			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	91	Indian laurel fig	*Ficus microcarpa*	2, 3.8, 3.9, 3.5, 3.6			18	9	10	6	6	A	B+			P	overhangs to S by 1 foot	Preserve/ Encroach		N/A
OS	92	coast live oak	*Quercus agrifolia*	18.3			40	23	16	20	20	A	B			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A

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OS	93	coast live oak	*Quercus agrifolia*	24.4			35	22	22	15	24	A	B			P	overhangs to S by 10 feet	Preserve/ Encroach		N/A
OS	94	mulberry	*Morus alba*	11.1, 14			26	14	14	15	14	C-	C-			P	overhangs to W by 10 feet, in decline	Preserve/ Encroach	With coordination with the tree owner, the applicant intends to preserve this tree if possible. It will be replaced if it becomes unstable or does not survive the construction process.	N/A
OS	95	coast live oak	*Quercus agrifolia*	~22			28	8	30	18	20	A-	B			P	overhangs to W by 14 feet	Preserve/ Encroach		N/A
City NP	96	Aleppo pine	*Pinus halepensis*	31.5			40	20	24	10	20	A	B			P	Substandard pruning	Remove	New Development	None required
City NP	97	coast live oak	*Quercus agrifolia*	3.6			10	13	6	5	12	A	B			N	tree base is one foot north of tree 54's base	Preserve/ Encroach		N/A
OS	98	coast live oak	*Quercus agrifolia*	6.7			18	10	10	13	8	A	B			N		Preserve/ Encroach		N/A
OS	99	Southern California black walnut	*Juglans californica*	1.1, .7			10	4	5	4	5	B	B			N	Volunteer sprout; deciduous	Preserve/ Encroach		N/A
OS	100	coast live oak	*Quercus agrifolia*	3.8, 6.5			20	14	13	11	12	A	B			N		Preserve/ Encroach		N/A
OS	101	coast live oak	*Quercus agrifolia*	6.5			25	11	4	13	12	A	B			N		Preserve/ Encroach		N/A
OS	102	coast live oak	*Quercus agrifolia*	2.8			10	13	4	6	8	B	B			N	Shaded out	Preserve/ Encroach		N/A
City NP	103	coast live oak	*Quercus agrifolia*	.8, 1, .3, .3			6	3	2	2	4	B	B			P	diameters at 1.5 feet	Preserve/ Encroach		N/A

No Tree nos. 104-110

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City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
OS	111	coast live oak	*Quercus agrifolia*	4.1			16	16	5	6	6	B	B			N		Preserve/ Encroach		N/A
No Tree Nos. 112-113																				
City NP	114	coast live oak	*Quercus agrifolia*	1.2, .7, .4, .6, .5			10	7	7	6	6	A	B			N		Remove	New Development	None required
City NP	115	coast live oak	*Quercus agrifolia*	.7, 1.2			10	9	7	2	0	A	B			N	shaded out	Remove	New Development	None required
City NP	116	coast live oak	*Quercus agrifolia*	1.3, .7, .8			10	7	6	6	5	B	B			N		Remove	New Development	None required

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

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

11611-11695 Ventura Blvd. and 4000-4028 Colfax Ave. Project Tree Report—Tree Photographs (Exhibit I)

49 Pages

Unless otherwise noted in the caption, trees are non-protected.

Protected Trees and Street Trees (or other public rights-of-way trees) are noted.

Tree OS# = Offsite tree, Tree ST# = street tree or right-of-way tree.

Trees 1-28 (L-R) - *Ligustrum texanum* facing north

Tree 29—*Prunus persica* facing north

Trees 30—*Washingtonia robusta* facing west

Tree 31-32—*Washingtonia robusta* facing east

Trees 33-34—*Washingtonia robusta* facing west

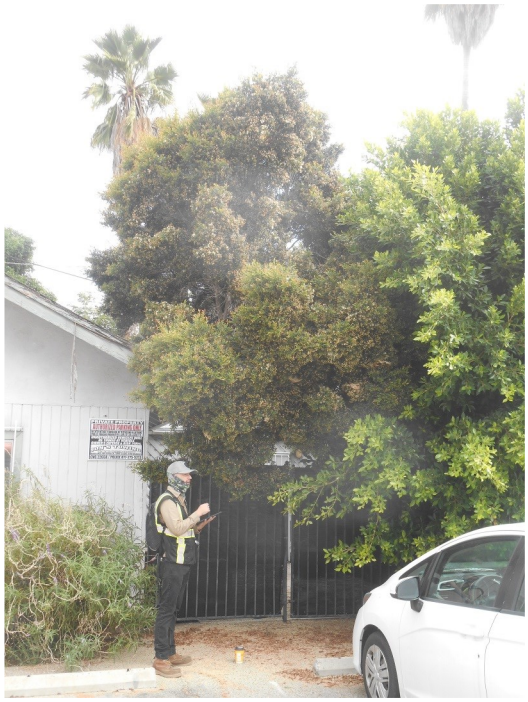
Tree 35—*Washingtonia robusta* facing north

Trees 36—*Washingtonia robusta* facing east

Tree 37—*Washingtonia robusta* facing north

Tree 38—*Citrus sp.* facing east

Tree 39—*Ficus microcarpa* facing north



Trees 40—*Myrtus communis* facing north

Tree 41—*Washingtonia robusta* facing north

Trees 42-43 (R-L) - *Washingtonia robusta* facing north

Tree 44—*Ficus benjamina* facing north

Trees 45—*Pinus torreyana* facing north

Tree 46—*Pinus torreyana* facing north

Tree 47—*Pinus torreyana* facing north

Trees 48-50 (L-R) - *Pinus torreyana, Pinus canariensis* facing north

Trees 51—*Carya illinoinensis* facing south

Tree 52—*Fraxinus uhdei* facing south

- Tree 53 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

Tree 54—*Carya illinoinensis* facing east

Tree 56—*Pinus halepensis* facing east

Tree 57—*Fraxinus uhdei* facing south

Tree 58—*Pinus halepensis* facing west

- Tree 55 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS59 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing east

- Tree OS60 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing east

Tree 61—*Pinus halepensis*
facing south

- Tree 62 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

- Tree OS63 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS64 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing east

- Tree 65 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS66 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS67 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS68 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

Tree 69—*Ulmus parvifolia* facing south

Tree OS70—*Fraxinus uhdei* facing south

Tree 72—*Pinus halepensis* facing south

- Tree OS71 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS73 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree 74 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS75 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS77 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

- Tree OS78 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

- Tree OS79 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

- Tree OS80 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS81 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS82 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS83 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS84 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS85 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS86 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS87 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS88 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS89 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS90 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

Tree OS91—*Ficus microcarpa* facing south

Trees OS94—*Morus alba* facing south

Tree 96—*Pinus halepensis* facing north

- Tree OS92 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS93 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS95 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

Tree 97—*Quercus agrifolia* facing east

Tree OS102—*Quercus agrifolia* facing east

Tree 103—*Quercus agrifolia* facing east

- Tree OS98 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS99 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

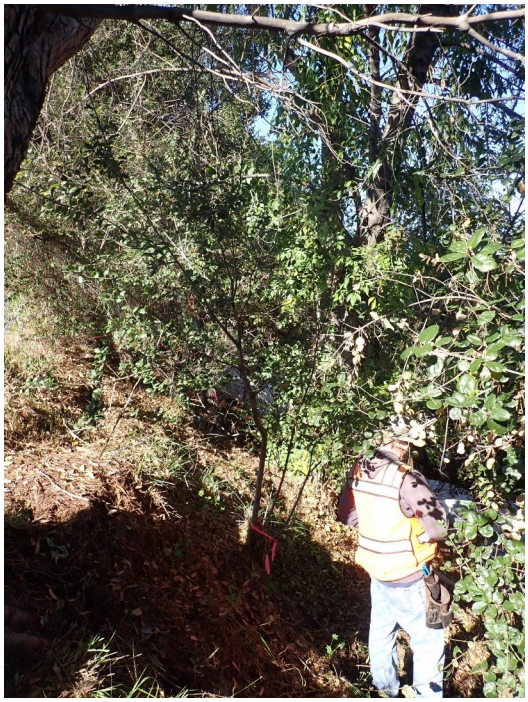
- Tree OS100 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

- Tree OS101 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS111 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

Tree 114—*Quercus agrifolia* facing east

Tree 115—*Quercus agrifolia* facing south



Tree 116—*Quercus agrifolia* facing east

EXHIBIT J – BIBLIOGRAPHY OF GENERAL REFERENCES USED TO PREPARE THE DOCUMENT

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APPENDIX A – DCI ENGINEERS ANALYSIS OF CMU RETAINING WALL

December 28, 2023

SRM Development
111 N Post St
#200
Spokane, WA 99201

Re: SRM Studio City – Colfax & Ventura – Existing CMU Retaining Wall

To whom it may concern

In response to concerns about an existing CMU retaining wall located at the project site on Colfax and Ventura in Studio City California (Permit #B22LA25569) DCI Engineers observed the condition of the wall and evaluated the wall stability. In this report you will find our conclusions and recommendations on the future stability of the retaining wall.

The existing site retaining wall consists of 8in CMU blocks, is approximately 16ft tall, and is retaining approximately 8ft of soil. Site "potholing" was performed to nail down the size of the footing and we found that the footing extends approximately 2ft from inside face of the wall and is 12in-18in thick.

We performed an analysis on the existing wall with the conditions described above and with recommendations for the soil condition from the geotechnical report for this project and found that the wall is not stable under current code requirements. Please see attached appendix 1. The stability factor of safety for both overturning and sliding are both under 0.4 and the code requires them to 1.5 or higher. Therefore, this retaining wall is at a high risk of collapse. Additionally, soil was observed to be eroding away from the outside face of the footing and in some cases has left the bottom of the footing exposed and not in contact with the bottom of the footing. The exposed footings have not been considered in the analysis results provided and will only add to the concerns about the wall stability.

Image 1. Exposed Footing

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Due to the poor soil conditions, erosion, and the undersized footing, the wall is at high risk of collapse. DCI recommends the wall and footing be removed to avoid a collapse of the wall.

Sincerely,
DCI Engineers

TJ Bolser, PE
Senior Project Manager

Craig Crowley, PE, SE
Principal, COO

DCI ENGINEERS

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Appendix 1

Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall

Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Code Reference:

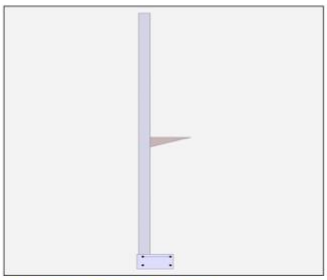
Calculations per IBC 2015 1807.3, CBC 2016, ASCE 7-10

Criteria

Retained Height	=	8.00 ft
Wall height above soil	=	8.50 ft
Slope Behind Wall	=	0.00
Height of Soil over Toe	=	0.00 in
Water table above bottom of footing	=	0.0 ft

Soil Data

Allow Soil Bearing	=	1,500.0 psf
Equivalent Fluid Pressure Method		
Active Heel Pressure	=	45.0 psf/ft
	=	
Passive Pressure	=	300.0 psf/ft
Soil Density, Heel	=	110.00 pcf
Soil Density, Toe	=	110.00 pcf
Footing||Soil Friction	=	0.400
Soil height to ignore for passive pressure	=	12.00 in



Surcharge Loads

Surcharge Over Heel	=	100.0 psf
NOT Used To Resist Sliding & Overturning		
Surcharge Over Toe	=	0.0
Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	0.0 lbs
Axial Live Load	=	0.0 lbs
Axial Load Eccentricity	=	0.0 in

Earth Pressure Seismic Load

Method : Uniform

Multiplier Used	=	0.023
(Multiplier used on soil density)		

Stem Weight Seismic Load

Lateral Load Applied to Stem

Lateral Load	=	0.0 #/ft
...Height to Top	=	0.00 ft
...Height to Bottom	=	0.00 ft
Load Type	=	Wind (W) (Service Level)
Wind on Exposed Stem (Strength Level)	=	25.0 psf

Uniform Seismic Force	=	0.207
Total Seismic Force	=	1.863

F_p / W_p Weight Multiplier = 0.200 g

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs
Footing Width	=	0.00 ft
Eccentricity	=	0.00 in
Wall to Ftg CL Dist	=	0.00 ft
Footing Type		Spread Footing
Base Above/Below Soil at Back of Wall	=	0.0 ft
Poisson's Ratio	=	0.300

Added seismic base force 0.0 lbs

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Cantilevered Retaining Wall

Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Design Summary

Wall Stability Ratios

Overturning	=	0.39	UNSTABLE!
Sliding	=	0.37	UNSTABLE!
Global Stability	=	1.08	
Total Bearing Load	=	1,488 lbs	
...resultant ecc.	=	67.48 in	
Soil Pressure @ Toe	=	0 psf	OK
Soil Pressure @ Heel	=	0 psf	OK
Allowable	=	1,500 psf	
Soil Pressure Less Than Allowable			
ACI Factored @ Toe	=	0 psf	
ACI Factored @ Heel	=	0 psf	
Footing Shear @ Toe	=	0.2 psi	OK
Footing Shear @ Heel	=	25.8 psi	OK
Allowable	=	82.2 psi	

Sliding Calcs

Lateral Sliding Force	=	2,319.5 lbs	
less 100% Passive Force	-	0.0 lbs	
less 100% Friction Force	-	866.1 lbs	
Added Force Req'd	=	1,453.4 lbs	NG
....for 1.5 Stability	=	2,613.1 lbs	NG

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing

Load Factors

Building Code	
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.600
Seismic, E	1.000

Stem Construction

		Bottom		
		Ratio > 1.0		
Design Height Above Ftg	ft =	0.00		
Wall Material Above "Ht"	=	Masonry		
Design Method	=	ASD	SD	SD
Thickness	=	8.00		
Rebar Size	=	# 8		
Rebar Spacing	=	24.00		
Rebar Placed at	=	Center		
Design Data				
fb/FB + fa/Fa	=	**3.572**		
Total Force @ Section				
Service Level	lbs =	1,896.4		
Strength Level	lbs =			
Moment....Actual				
Service Level	ft-# =	6,717.6		
Strength Level	ft-# =			
Moment.....Allowable	=	1,880.5		
Shear.....Actual				
Service Level	psi =	20.7		
Strength Level	psi =			
Shear.....Allowable	psi =	43.6		
Anet (Masonry)	in2 =	91.50		
Wall Weight	psf =	0.0		
Rebar Depth 'd'	in =	3.81		

Masonry Data

f'm	psi =	1,500
Fs	psi =	20,000
Solid Grouting	=	Yes
Modular Ratio 'n'	=	21.48
Equiv. Solid Thick.	in =	7.63
Masonry Block Type	=	
Masonry Design Method	=	ASD

Concrete Data

f'c	psi =
Fy	psi =

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Cantilevered Retaining Wall

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LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Footing Data

Toe Width	=	0.10 ft
Heel Width	=	2.00
Total Footing Width	=	2.10
Footing Thickness	=	12.00 in
Key Width	=	0.00 in
Key Depth	=	0.00 in
Key Distance from Toe	=	0.00 ft

f'c = 3,000 psi Fy = 60,000 psi
Footing Concrete Density = 150.00 pcf
Min. As % = 0.0018
Cover @ Top 2.00 @ Btm.= 3.00 in

Footing Design Results

		Toe	Heel	
Factored Pressure	=	0	0 psf	
Mu' : Upward	=	0	0 ft-#	
Mu' : Downward	=	4	2,995 ft-#	
Mu: Design	=	-4 OK	2,995 ft-#	OK
phiMn	=	27,464	11,003 ft-#	
Actual 1-Way Shear	=	0.18	25.83 psi	
Allow 1-Way Shear	=	82.16	82.16 psi	

Toe Reinforcing = # 8 @ 12.00 in
Heel Reinforcing = # 5 @ 14.35 in
Key Reinforcing = None Spec'd
Footing Torsion, Tu = 0.00 ft-lbs
Footing Allow. Torsion, phi Tu = 0.00 ft-lbs

If torsion exceeds allowable, provide supplemental design for footing torsion.

Other Acceptable Sizes & Spacings

Toe: #4@ 9.25 in, #5@ 14.35 in, #6@ 20.37 in, #7@ 27.77 in, #8@ 36.57 in, #9@ 46.29 in, #10@ 58.79 in

Heel: #4@ 9.25 in, #5@ 14.35 in, #6@ 20.37 in, #7@ 27.77 in, #8@ 36.57 in, #9@ 46.29 in, #10@ 58.79 in

Key: No key defined

Min footing T&S reinf Area 0.54 in2
Min footing T&S reinf Area per foot 0.26 in2 /ft

If one layer of horizontal bars:	If two layers of horizontal bars:
#4@ 9.26 in	#4@ 18.52 in
#5@ 14.35 in	#5@ 28.70 in
#6@ 20.37 in	#6@ 40.74 in

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Project ID:
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Cantilevered Retaining Wall

Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING

DESCRIPTION: North Existing Retaining Wall

Summary of Overturning & Resisting Forces & Moments

Item		.....OVERTURNING..... Force lbs	Distance ft	Moment ft-#		.....RESISTING..... Force lbs	Distance ft	Moment ft-#
HL Act Pres (ab water tbl)		1,822.5	3.00	5,467.5	Soil Over HL (ab. water tbl)	1,173.3	1.43	1,681.8
HL Act Pres (be water tbl)					Soil Over HL (bel. water tbl)		1.43	1,681.8
Hydrostatic Force					Water Table			
Buoyant Force	=				Sloped Soil Over Heel	=		
Surcharge over Heel	=	368.2	4.50	1,656.8	Surcharge Over Heel	=		
Surcharge Over Toe	=				Adjacent Footing Load	=		
Adjacent Footing Load	=				Axial Dead Load on Stem	=		
Added Lateral Load	=				* Axial Live Load on Stem	=		
Load @ Stem Above Soil	=	127.5	13.25	1,689.4	Soil Over Toe	=		
Seismic Earth Load	=	1.3	4.50	5.9	Surcharge Over Toe	=		
Seismic Stem Self Wt	=				Stem Weight(s)	=		
					Earth @ Stem Transitions	=		
Total	=	2,319.5	**O.T.M.** =	8,819.6	Footing Weight	=	315.0	1.05	330.8
					Key Weight	=		
					Vert. Component	=	676.9	2.10	1,421.5
					Total =		2,165.3 lbs	**R.M.=**	3,434.1

Resisting/Overturning Ratio = **0.39**
Vertical Loads used for Soil Pressure = 1,488.3 lbs

* Axial live load NOT included in total displayed, or used for overturning resistance, but is included for soil pressure calculation.

If seismic is included, the OTM and sliding ratios may be 1.1 per section 1807.2.3 of IBC.

Vertical component of active lateral soil pressure IS considered in the calculation of Sliding Resistance.

Vertical component of active lateral soil pressure IS considered in the calculation of Overturning Resistance.

Tilt

Horizontal Deflection at Top of Wall due to settlement of soil

(Deflection due to wall bending not considered)

Soil Spring Reaction Modulus	250.0	pci
Horizontal Defl @ Top of Wall (approximate only)	0.000	in

The above calculation is not valid if the heel soil bearing pressure exceeds that of the toe, because the wall would then tend to rotate into the retained soil.

Project Title:
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Project ID:
Project Descr:

Cantilevered Retaining Wall Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Rebar Lap & Embedment Lengths Information

Stem Design Segment: Bottom
Stem Design Height: 0.00 ft above top of footing
Calculated Rebar Stress, fs = 63004.53 psi

Lap Splice length for #8 bar specified in this stem design segment (25.4.2.3a) =	72.00 in
Development length for #8 bar specified in this stem design segment =	189.01 in
Hooked embedment length into footing for #8 bar specified in this stem design segment =	10.22 in
As Provided =	0.3950 in2/ft
As Required =	1.3252 in2/ft

Project Title:
Engineer:
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Project Descr:

Cantilevered Retaining Wall Project File: Studio City.ec6

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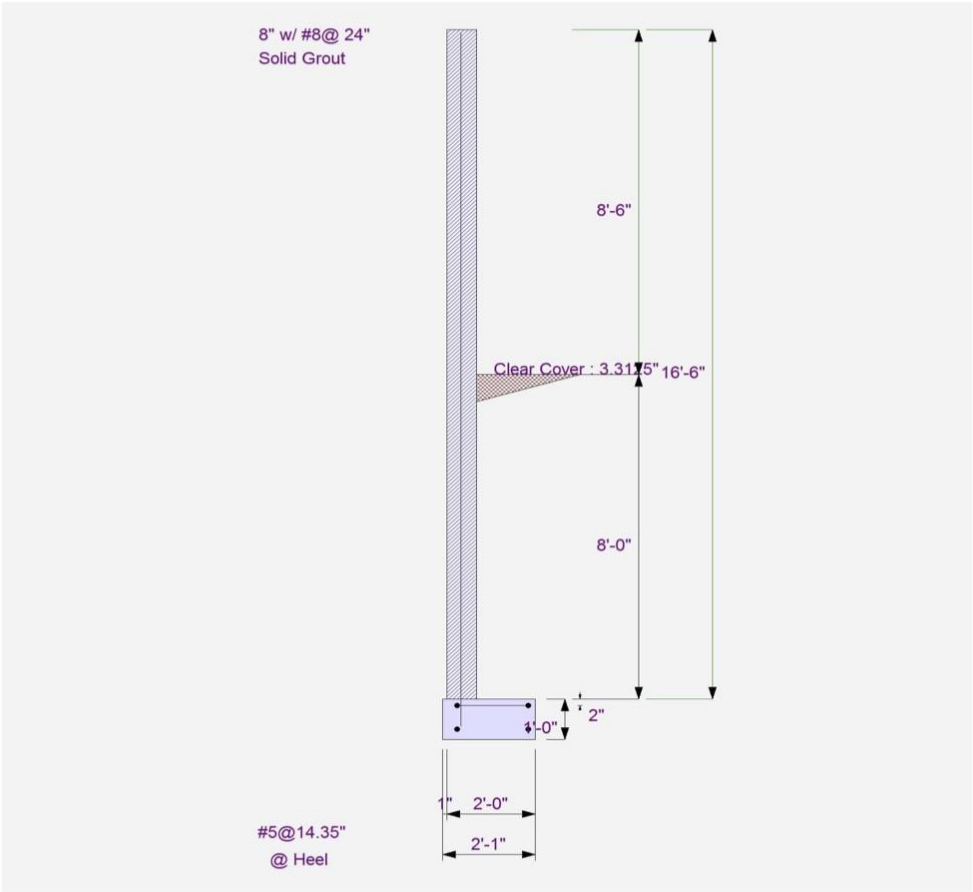

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Cantilevered Retaining Wall Project File: Studio City.ec6

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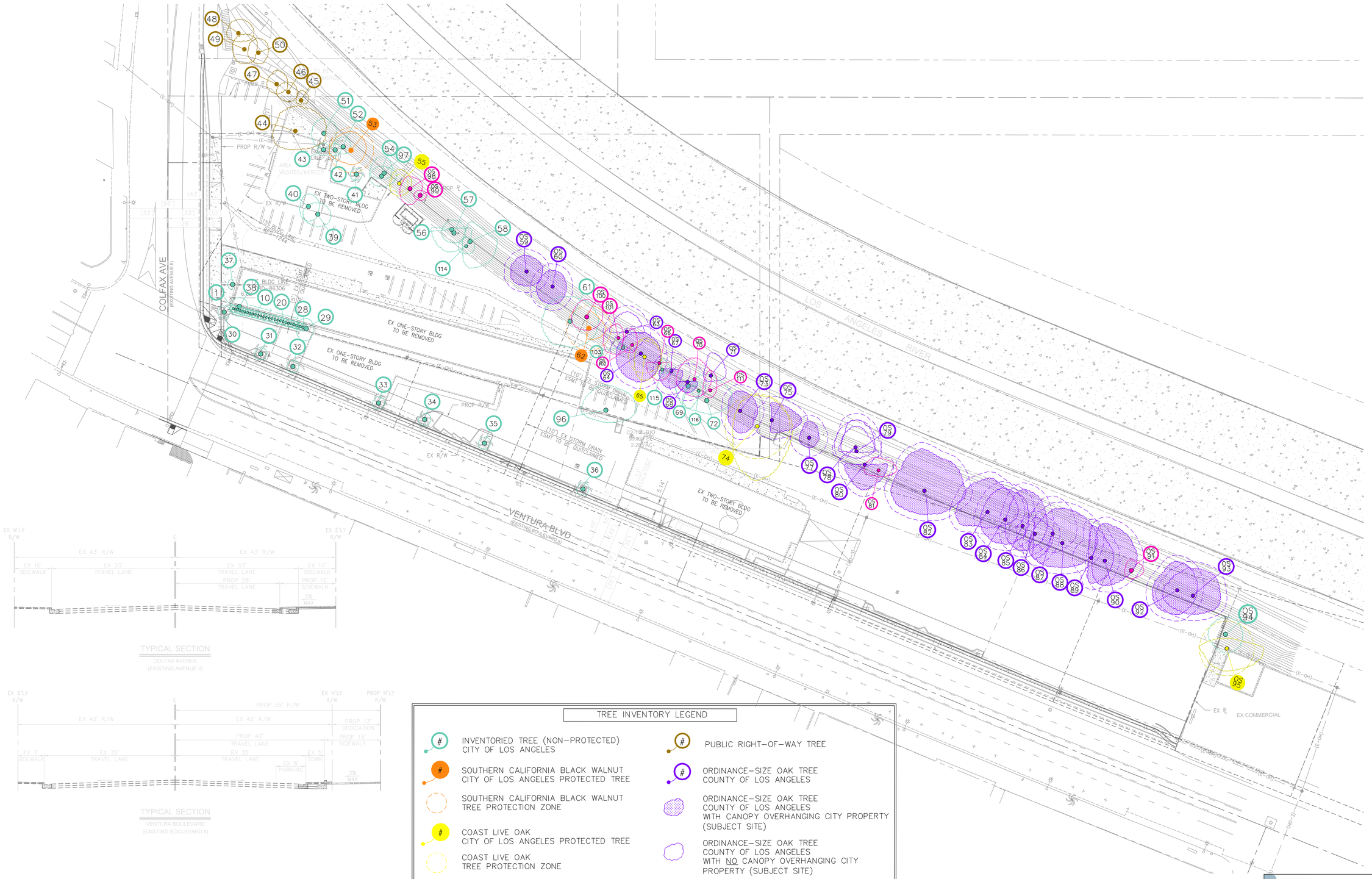

TYPICAL SECTION
COLFAX AVENUE
(EXISTING AVENUE II)

TYPICAL SECTION
VENTURA BOULEVARD
(EXISTING BOULEVARD II)

TREE INVENTORY LEGEND

- # — INVENTORIED TREE (NON–PROTECTED) CITY OF LOS ANGELES
- # — SOUTHERN CALIFORNIA BLACK WALNUT CITY OF LOS ANGELES PROTECTED TREE
- SOUTHERN CALIFORNIA BLACK WALNUT TREE PROTECTION ZONE
- # — COAST LIVE OAK CITY OF LOS ANGELES PROTECTED TREE
- COAST LIVE OAK TREE PROTECTION ZONE
- # — NON–PROTECTED OAK OR NON–PROTECTED SPECIES WITH CANOPY OVERHANGING CITY PROPERTY (SUBJECT SITE) COUNTY OF LOS ANGELES
- # — PUBLIC RIGHT–OF–WAY TREE
- # — ORDINANCE–SIZE OAK TREE COUNTY OF LOS ANGELES
- ORDINANCE–SIZE OAK TREE COUNTY OF LOS ANGELES WITH CANOPY OVERHANGING CITY PROPERTY (SUBJECT SITE)
- ORDINANCE–SIZE OAK TREE COUNTY OF LOS ANGELES WITH NO CANOPY OVERHANGING CITY PROPERTY (SUBJECT SITE)

NOTES: – INVENTORIED TREES PLOTTED OUTSIDE PROPERTY BOUNDARIES ARE DESIGNATED "OS" FOR OFF–SITE.
– CANOPY MEASUREMENTS ARE NOT SURVEYED AND ARE APPROXIMATE ONLY.
– TREE LOCATIONS ARE APPROXIMATE AND ARE NOT PROFESSIONALLY SURVEYED
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– TREES #76, 104–110 AND 112–113 ARE EXCLUDED FROM THIS EXHIBIT AND ARE NOT INCLUDED IN THE ASSOCIATED TREE REPORT.

DATE PREPARED: 02/13/24
PREPARED BY: S. McALLASTER
ISA CERTIFIED ARBORIST
REVIEWED BY: CY CARLBERG, RCA #405

LEGEND

- EXISTING SIGN
- EXISTING STREET LIGHT
- EXISTING STREET LIGHT PULLBOX
- EXISTING TREE/BRUSH
- EXISTING POWER POLE
- CENTERLINE
- EXISTING R/W OR ℄
- PROPOSED R/W OR ℄
- EXISTING LOT LINE
- PROPOSED LOT LINE
- LIMITS OF VTTM

ABBREVIATIONS

ASPH	ASPHALT CONCRETE
AVE	AVENUE
BLDG	BUILDING
BLVD	BOULEVARD
℄	CENTERLINE
Δ	DELTA
ESMT	EASEMENT
EX	EXISTING
L	LENGTH
NO.	NUMBER
PL	PLACE
PROP	PROPOSED
℞	PROPERTY LINE
R	RADIUS
R/W	RIGHT OF WAY
ST	STREET
VTTM	VESTING TENTATIVE TRACT MAP

NO.	DATE	REVISIONS	APP'D.	DATE

PREPARED BY:
FUSCOE ENGINEERING
FULL CIRCLE THINKING
15535 Sand Canyon Ave Suite 190 Irvine, California 92618
949.474.1960 fuscoe.com
DEBRA SCHALES RCE 43108/28/2023 Date

Carlberg Associates Horticulturists and Registered Consulting Arborists

TREE LOCATION EXHIBIT
STUDIO CITY ELDERCARE
11611 - 11695 VENTURA BLVD. & 4000 - 4028 COLFAX AVE.
LOS ANGELES, CA 91604

PREPARED FOR: SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200, SPOKANE, WA 99201

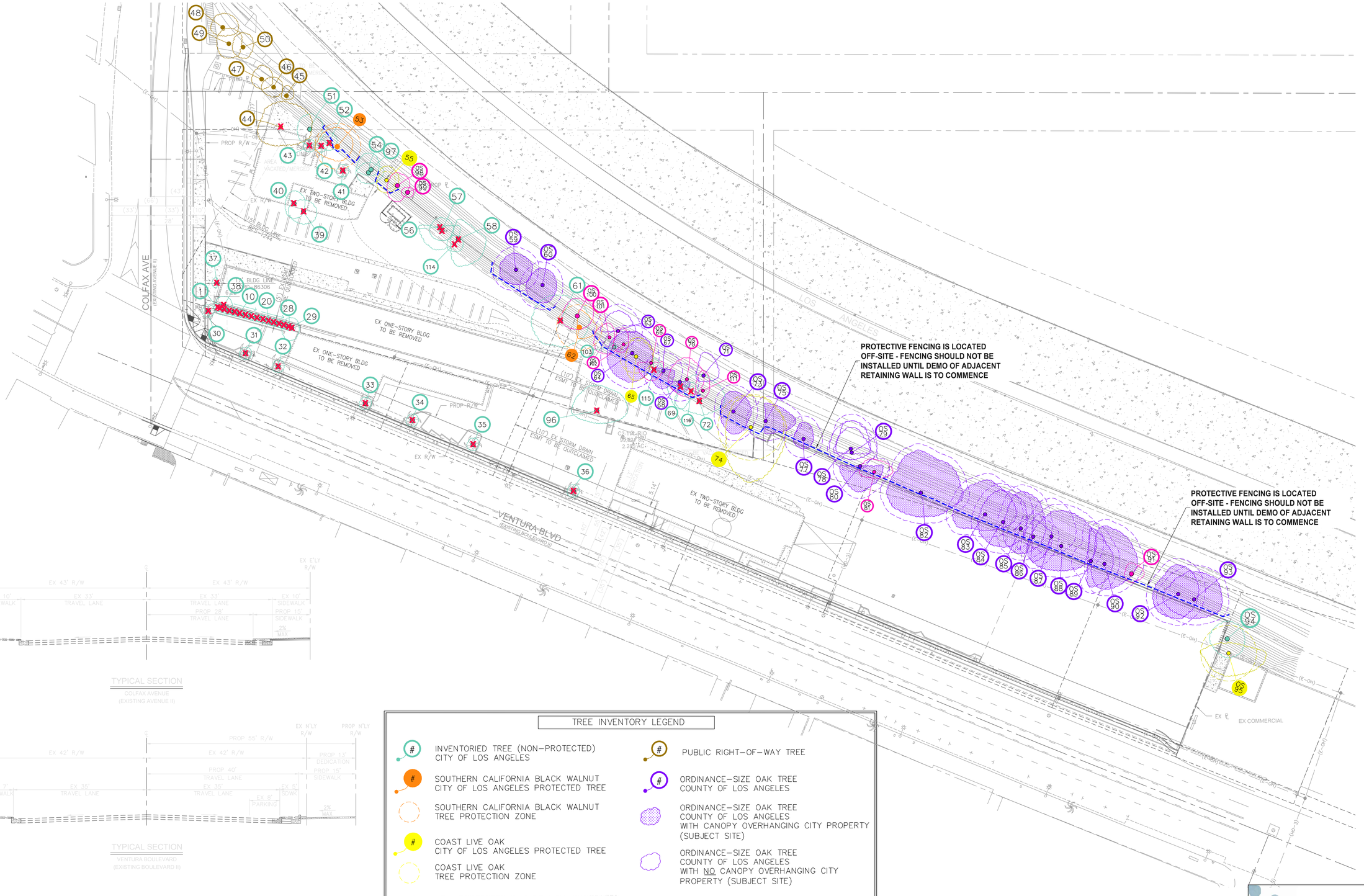
www.cycarlberg.com Date: 02.13.24 By: S. McAllaster

VESTING TENTATIVE TRACT MAP
VESTING TENTATIVE TRACT MAP & TYPICAL STREET SECTIONS
VTTM NO. 83460

FOR MERGER & SUBDIVISION PURPOSES
4000-4028 COLFAX AVENUE, STUDIO CITY, CA 91604

DRAWN:	CC
DESIGN:	DVS
CHECKED:	DVS
SCALE:	AS SHOWN
JOB NO.:	1198-009
DATE:	09/25/2023
SHEET	2 OF 9

75% CD SUBMITTAL PLAN SET: A 09/25/2023



TYPICAL SECTION
COLFAX AVENUE
(EXISTING AVENUE II)

TYPICAL SECTION
VENTURA BOULEVARD
(EXISTING BOULEVARD II)

TREE INVENTORY LEGEND

- # — INVENTORIED TREE (NON-PROTECTED) CITY OF LOS ANGELES
- # — SOUTHERN CALIFORNIA BLACK WALNUT CITY OF LOS ANGELES PROTECTED TREE
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- COAST LIVE OAK TREE PROTECTION ZONE
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- ORDINANCE-SIZE OAK TREE COUNTY OF LOS ANGELES WITH CANOPY OVERHANGING CITY PROPERTY (SUBJECT SITE)
- ORDINANCE-SIZE OAK TREE COUNTY OF LOS ANGELES WITH NO CANOPY OVERHANGING CITY PROPERTY (SUBJECT SITE)
- PRELIMINARY TREE PROTECTION FENCING
- X — TREE TO BE REMOVED

NOTES:
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DATE PREPARED: 02/13/24
PREPARED BY: S. McALLASTER
ISA CERTIFIED ARBORIST
REVIEWED BY: CY CARLBERG, RCA #405

LEGEND

- EXISTING SIGN
- EXISTING STREET LIGHT
- EXISTING STREET LIGHT PULLBOX
- EXISTING TREE/BRUSH
- EXISTING POWER POLE
- CENTERLINE
- EXISTING R/W OR ℄
- PROPOSED R/W OR ℄
- EXISTING LOT LINE
- PROPOSED LOT LINE
- LIMITS OF VTTM

ABBREVIATIONS

ASPH	ASPHALT CONCRETE
AVE	AVENUE
BLDG	BUILDING
BLVD	BOULEVARD
℄	CENTERLINE
Δ	DELTA
ESMT	EASEMENT
EX	EXISTING
L	LENGTH
NO.	NUMBER
PL	PLACE
PROP	PROPOSED
ℙ	PROPERTY LINE
R	RADIUS
R/W	RIGHT OF WAY
ST	STREET
VTTM	VESTING TENTATIVE TRACT MAP

NO.	DATE	REVISIONS	APP'D.	DATE

PREPARED BY:
FUSCOE ENGINEERING
FULL CIRCLE THINKING
15535 Sand Canyon Ave Suite 100 Irvine, California 92618
949.474.1960 fuscoe.com
DEBRA SCHALES RCE 43101 Date 08/28/2023

Carlberg Associates Horticulturists and Registered Consulting Arborists

TREE IMPACT EXHIBIT
STUDIO CITY ELDERCARE
11611 - 11695 VENTURA BLVD. & 4000 - 4028 COLFAX AVE.
LOS ANGELES, CA 91604

PREPARED FOR: SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200, SPOKANE, WA 99201

www.cycarlberg.com
Date: 02.13.24 By: S. McAllaster

SCALE: 1" = 30'

VESTING TENTATIVE TRACT MAP
VESTING TENTATIVE TRACT MAP & TYPICAL STREET SECTIONS
VTTM NO. 83460
FOR MERGER & SUBDIVISION PURPOSES
4000-4028 COLFAX AVENUE, STUDIO CITY, CA 91604

DRAWN:	CG
DESIGN:	DVS
CHECKED:	DVS
SCALE:	AS SHOWN
JOB NO.:	1198-009
DATE:	09/25/2023
SHEET	2 OF 9

75% CD SUBMITTAL | PLAN SET: A | 09/25/2023

LEGEND

- EXISTING CATCH BASIN
- EXISTING FIRE HYDRANT
- EXISTING SEWER/STORMDRAIN MANHOLE
- EXISTING TELEPHONE MANHOLE
- EXISTING SIGN
- EXISTING STREET LIGHT
- EXISTING STREET LIGHT PULLBOX
- EXISTING WATER METER
- EXISTING TREE/BRUSH
- EXISTING POWER POLE
- PROPOSED MWS
- PROPOSED STORM DRAIN J.S./MH
- PROPOSED SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED TREE
- (000.00) EXISTING ELEVATION
- 000.00 PROPOSED ELEVATION
- CENTERLINE
- EXISTING R/W OR ℄
- PROPOSED R/W OR ℄
- EXISTING LOT LINE
- PROPOSED LOT LINE
- MATCHLINE
- SS EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- W EXISTING WATER LINE
- E EXISTING ELECTRIC LINE
- G EXISTING GAS LINE
- T EXISTING TELEPHONE LINE
- 8"SS PROPOSED SEWER LINE
- PROPOSED STORM DRAIN LINE
- W PROPOSED WATER LINE

ABBREVIATIONS

ASPH	ASPHALT CONCRETE
AVE	AVENUE
BLDG	BUILDING
BLVD	BOULEVARD
BW	BACK OF WALK
℄	CENTERLINE
ESMT	EASEMENT
EX	EXISTING
FF	FINISHED FLOOR
FL	FLOW LINE
FS	FINISHED SURFACE
GB	GRADE BREAK
HP	LOW POINT
INV	INVERT
J.S.	JUNCTION STRUCTURE
LP	LOW POINT
MWS	MODULAR WETLAND SYSTEM
NO.	NUMBER
NE/O	NORTHEAST OF
PP	POWER POLE
PROP	PROPOSED
℄	PROPERTY LINE
RCB	REINFORCED CONCRETE BOX
R/W	RIGHT OF WAY
SW/O	SOUTHWEST OF
SD	STORM DRAIN
SS	SANITARY SEWER
ST	STREET
STLT	STREET LIGHT
TC	TOP OF CURB
TMH	TOP OF MANHOLE
TCF	TOP OF CHAINLINK FENCE
TR	TOP OF RAILINGS
TYP	TYPICAL
VTTM	VESTING TENTATIVE TRACT MAP
W/	WITH

TREE INVENTORY LEGEND

- # INVENTORIED TREE (NON-PROTECTED) CITY OF LOS ANGELES
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DATE PREPARED: 02/13/24
PREPARED BY: S. McALLASTER
ISA CERTIFIED ARBORIST
REVIEWED BY: CY CARLBERG, RCA #405

SCALE: 1" = 20'

Carlberg Associates
Horticulturists and Registered Consulting Arborists

TREE IMPACT EXHIBIT
STUDIO CITY ELDERCARE
11611 - 11695 VENTURA BLVD. & 4000 - 4028 COLFAX AVE.
LOS ANGELES, CA 91604

PREPARED FOR: SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200, SPOKANE, WA 99201

www.cycarlberg.com Date: 02.13.24 By: S. McAllaster

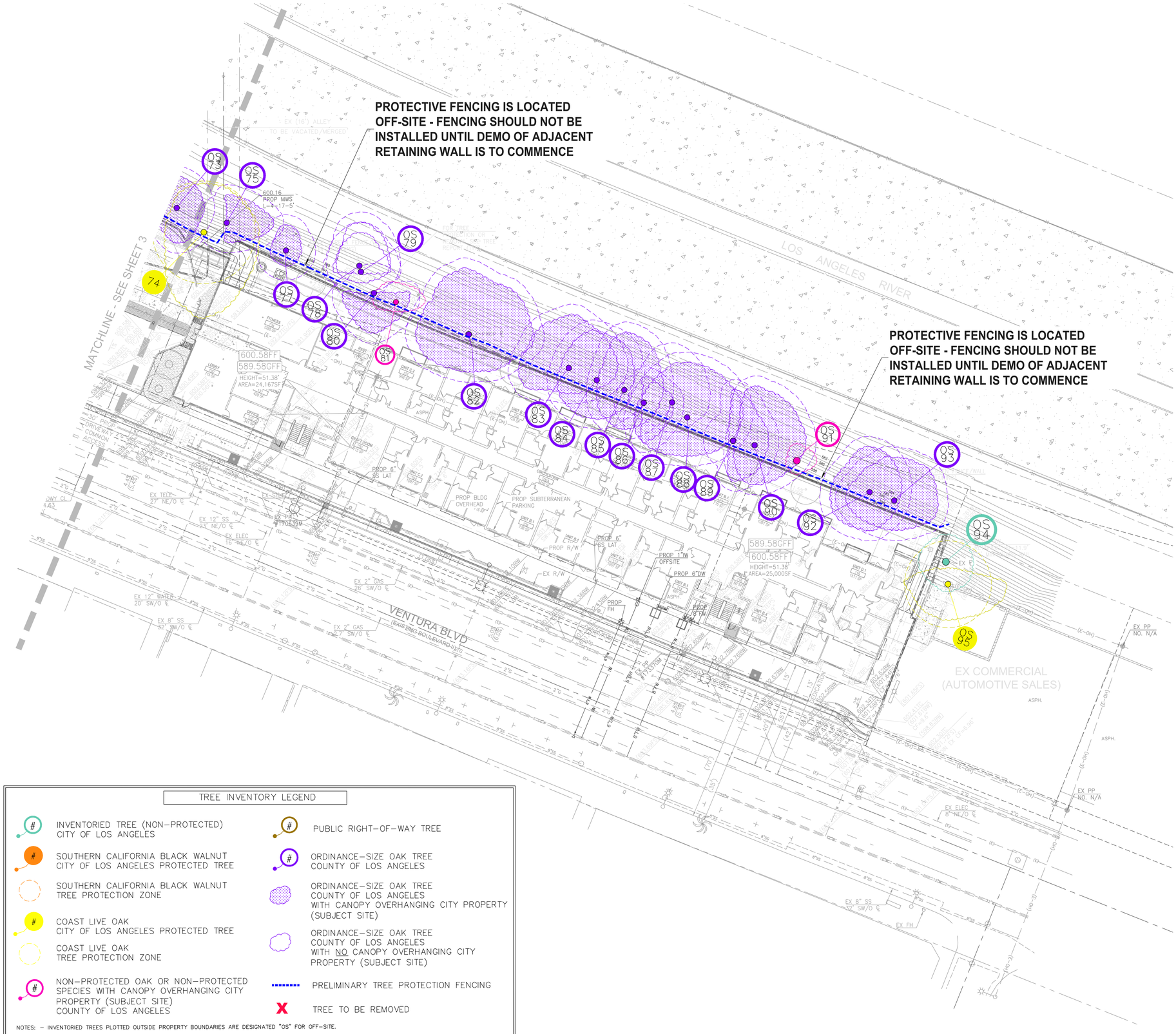
NO.	DATE	REVISIONS	APP'D.	DATE

PREPARED BY:
FUSCOE ENGINEERING
FULL CIRCLE THINKING
15535 Sand Canyon Ave 949.474.1960
Suite 190
Irvine, California 92618 fuscoe.com
DEBRA SCHALES RCE 43108 Date 08/28/2023

VESTING TENTATIVE TRACT MAP
CONCEPTUAL GRADING & UTILITY PLAN
VTTM NO. 83460
FOR MERGER & SUBDIVISION PURPOSES
4000-4028 COLFAX AVENUE, STUDIO CITY, CA 91604

DRAWN:	CC
DESIGN:	DVS
CHECKED:	DVS
SCALE:	AS SHOWN
JOB NO.:	11196-009
DATE:	09/25/2023
SHEET	3 OF 9

75% CD SUBMITTAL | PLAN SET: A | 09/25/2023



LEGEND

- EXISTING CATCH BASIN
- EXISTING FIRE HYDRANT
- EXISTING SEWER/STORMDRAIN MANHOLE
- EXISTING TELEPHONE MANHOLE
- EXISTING SIGN
- EXISTING STREET LIGHT
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W/	WITH

TREE INVENTORY LEGEND

- # INVENTORIED TREE (NON-PROTECTED) CITY OF LOS ANGELES
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DATE PREPARED: 02/13/24
PREPARED BY: S. McALLASTER
ISA CERTIFIED ARBORIST
REVIEWED BY: CY CARLBERG, RCA #405

SCALE: 1" = 20'

Carlberg ASSOCIATES Horticulturists and Registered Consulting ARBORISTS

www.cycarlberg.com

TREE IMPACT EXHIBIT
STUDIO CITY ELDERCARE
11611 - 11695 VENTURA BLVD. & 4000 - 4028 COLFAX AVE.
LOS ANGELES, CA 91604

PREPARED FOR: SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200, SPOKANE, WA 99201

Date: 02.13.24 By: S. McAllaster

NO.	DATE	REVISIONS	APP'D.	DATE

PREPARED BY:
FUSCOE ENGINEERING
FULL CIRCLE THINKING
15535 Sand Canyon Ave 949.474.1960
Suite 190
Irvine, California 92618 fuscoe.com
DEBRA SCHALES RCE 4310 Date 08/28/2023

VESTING TENTATIVE TRACT MAP
CONCEPTUAL GRADING & UTILITY PLAN
VTTM NO. 83460
FOR MERGER & SUBDIVISION PURPOSES
4000-4028 COLFAX AVENUE, STUDIO CITY, CA 91604

DRAWN:	CC
DESIGN:	DVS
CHECKED:	DVS
SCALE:	AS SHOWN
JOB NO.:	11198-009
DATE:	09/25/2023
SHEET	4 OF 9

75% CD SUBMITTAL | PLAN SET: A | 09/25/2023

TREE INVENTORY DATA TABLE

City Protected/ City Non-Protected/ Offsite/PROW	Tree #	Common Name	Botanical Name	Diameter at 4.5 feet (DBH) (in inches)	Brown Trunk if palm (in feet)	Height (in feet)	Canopy Spread N (in feet)	Canopy Spread E (in feet)	Canopy Spread S (in feet)	Canopy Spread W (in feet)	Health	Structure	Planted (P) or Naturally Occurring (N)	Preserve/ Remove
City NP	1	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Remove
City NP	2	Texas privet	*Ligustrum texanum*	3.5		15	3	3	3	3	A	B	P	Remove
City NP	3	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B	P	Remove
City NP	4	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Remove
City NP	5	Texas privet	*Ligustrum texanum*	6.8		15	3	3	3	3	A	B	P	Remove
City NP	6	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Remove
City NP	7	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Remove
City NP	8	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B	P	Remove
City NP	9	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B	P	Remove
City NP	10	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Remove
City NP	11	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Remove
City NP	12	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Remove
City NP	13	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B	P	Remove
City NP	14	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B	P	Remove
City NP	15	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Remove
City NP	16	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B	P	Remove
City NP	17	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Remove
City NP	18	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Remove
City NP	19	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B	P	Remove
City NP	20	Texas privet	*Ligustrum texanum*	8.5		15	3	3	3	3	A	B	P	Remove
City NP	21	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Remove
City NP	22	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B	P	Remove
City NP	23	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Remove
City NP	24	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Remove
City NP	25	Texas privet	*Ligustrum texanum*	6		15	3	3	3	3	A	B	P	Remove
City NP	26	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B	P	Remove
City NP	27	Texas privet	*Ligustrum texanum*	7		15	3	3	3	3	A	B	P	Remove
City NP	28	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B	P	Remove
City NP	29	peach	*Prunus persica*	8.2		18	8	6	10	8	A-	B	P	Remove
City NP	30	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Remove
City NP	31	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Remove
City NP	32	Mexican fan palm	*Washingtonia robusta*		50'	55	5	5	5	5	B	B	P	Remove
City NP	33	Mexican fan palm	*Washingtonia robusta*		60'	65	5	5	5	5	B	B	P	Remove
City NP	34	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Remove
City NP	35	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Remove
City NP	36	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Remove
City NP	37	Mexican fan palm	*Washingtonia robusta*		1'	7	4	0	4	4	A	B	P	Remove
City NP	38	citrus	*Citrus sp.*		1.5	12	7	7	8	7	A-	A-	P	Remove
City NP	39	Indian laurel fig	*Ficus microcarpa*	35 at 2'		18	9	11	10	12	A	B+	P	Remove
City NP	40	common myrtle	*Myrtus communis*	8		20	10	9	12	7	A	B+	P	Remove
City NP	41	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	A	A-	P	Remove
City NP	42	Mexican fan palm	*Washingtonia robusta*		35'	40	5	5	5	5	A	A-	P	Remove
City NP	43	Mexican fan palm	*Washingtonia robusta*		40'	45	5	5	5	5	A	A-	P	Remove
PROW	44	weeping fig	*Ficus benjamina*	~14		28	20	25	15	18	A	B	P	Remove
PROW	45	Torrey pine	*Pinus torreyana*	5.8		16	8	6	3	4	A	B+	P	Preserve
PROW	46	Torrey pine	*Pinus torreyana*	7.2		18	8	7	8	10	A	B+	P	Preserve
PROW	47	Torrey pine	*Pinus torreyana*	7		18	11	9	8	8	A	B+	P	Preserve
PROW	48	Torrey pine	*Pinus torreyana*	7.6		24	11	12	7	10	A	B+	P	Preserve
PROW	49	Torrey pine	*Pinus torreyana*	11		26	12	10	12	10	A	B+	P	Preserve
PROW	50	Canary island pine	*Pinus canariensis*	10.5		22	11	8	9	9	A	B+	P	Preserve
City NP	51	pecan	*Carya illinoinensis*	7.7		20	12	10	12	10	A	B	P	Preserve
City NP	52	Shamel ash	*Fraxinus uhdei*	1, 1.5		12	8	6	6	8	A	A	N	Remove
City P	53	Southern California black walnut	*Juglans californica*	9.1, 12.1, 3, 3, 4		24	15	12	12	18	A-	B	P	Preserve
City NP	54	pecan	*Carya illinoinensis*	6.4		22	8	12	9	10	A	A-	P	Preserve
City P	55	coast live oak	*Quercus agrifolia*	7.6		20	11	10	10	8	B+	B	P	Preserve
City NP	56	Aleppo pine	*Pinus halepensis*	20.5		55	0	16	18	16	A	B-	P	Remove
City NP	57	Shamel ash	*Fraxinus uhdei*	2.3, 1.8, 2.1, 2.4, 2.3, 1.6		15	10	9	8	10	A	A-	N	Remove
City NP	58	Aleppo pine	*Pinus halepensis*	26.8		40	16	22	21	6	A	C	P	Remove
OS	59	coast live oak	*Quercus agrifolia*	7.7, 9, 4.8		20	13	13	12	13	A	B	P	Preserve
OS	60	coast live oak	*Quercus agrifolia*	5.8, 5.8, 4, 3.6, 2.7, 3		20	13	11	14	13	B	B	P	Preserve
City NP	61	Aleppo pine	*Pinus halepensis*	29		44	20	23	21	23	A	B	P	Remove
City P	62	Southern California black walnut	*Juglans californica*	6.2, 6.5, 5.3		16	14	14	9	2	A-	B-	P	Preserve
OS	63	coast live oak	*Quercus agrifolia*	10.8		28	16	14	0	14	B	B	P	Preserve
OS	64	coast live oak	*Quercus agrifolia*	18.2		35	17	16	23	20	B	B-	P	Preserve
City P	65	coast live oak	*Quercus agrifolia*	13.3		32	15	14	19	8	B	B	P	Preserve
OS	66	coast live oak	*Quercus agrifolia*	6.5		18	0	10	14	10	C	C	P	Preserve
OS	67	coast live oak	*Quercus agrifolia*	8.7		20	2	9	14	10	B	B	P	Preserve
OS	68	coast live oak	*Quercus agrifolia*	8.1		18	0	8	9	9	B-	B-	P	Preserve
City NP	69	Chinese elm	*Ulmus parvifolia*	4.1, 3.7, 2.5, 4.8		15	0	10	18	10	A	B	P	Remove
OS	70	shamel ash	*Fraxinus uhdei*	15.9, 13.5, 2.5, 2		40	17	14	14	15	B	B	P	Preserve
OS	71	coast live oak	*Quercus agrifolia*	6.7, 9		20	18	12	5	6	B	B-	P	Preserve
City NP	72	Aleppo pine	*Pinus halepensis*	31		40	21	20	11	20	A-	B	P	Remove
OS	73	coast live oak	*Quercus agrifolia*	8.3, 13.3, 2.5		30	16	14	18	10	B	B-	P	Preserve
City P	74	coast live oak	*Quercus agrifolia*	26.5		42	25	28	44	20	A-	B	P	Preserve
OS	75	coast live oak	*Quercus agrifolia*	10.5		25	14	24	10	0	A-	B-	P	Preserve
No Tree No. 76														
OS	77	coast live oak	*Quercus agrifolia*	9.5		28	13	8	8	8	B	B	P	Preserve
OS	78	coast live oak	*Quercus agrifolia*	9.1		26	22	16	9	12	A	B	P	Preserve
OS	79	coast live oak	*Quercus agrifolia*	13.3		30	20	15	0	14	A	B	P	Preserve
OS	80	coast live oak	*Quercus agrifolia*	13		32	0	18	20	16	A-	B-	P	Preserve
OS	81	coast live oak	*Quercus agrifolia*	6.7		18	10	15	5	12	A	B	P	Preserve
OS	82	coast live oak	*Quercus agrifolia*	5.3, 6, 32.2, 16.6		40	33	33	20	27	A	B+	P	Preserve
OS	83	coast live oak	*Quercus agrifolia*	20.1		38	27	25	13	26	A-	B	P	Preserve
OS	84	coast live oak	*Quercus agrifolia*	21.8		32	25	19	20	20	A	B	P	Preserve
OS	85	coast live oak	*Quercus agrifolia*	18.9, 4		30	29	20	20	14	A-	B	P	Preserve
OS	86	coast live oak	*Quercus agrifolia*	8.1, 7.6, 2.5, 2		20	13	15	20	0	B	B-	P	Preserve
OS	87	coast live oak	*Quercus agrifolia*	9.5, 5.8, 10, 11.5		18	25	14	8	17	B-	B-	P	Preserve
OS	88	coast live oak	*Quercus agrifolia*	24.4		35	28	28	20	27	A	B+	P	Preserve
OS	89	coast live oak	*Quercus agrifolia*	13, 7.6		24	26	18	20	2	A-	B	P	Preserve
OS	90	coast live oak	*Quercus agrifolia*	12.2, 15.4, 2.4		28	30	26	20	10	A	B	P	Preserve
OS	91	Indian laurel fig	*Ficus microcarpa*	2, 3.8, 3.9, 3.5, 3.6		18	9	10	6	6	A	B+	P	Preserve
OS	92	coast live oak	*Quercus agrifolia*	18.3		40	23	16	20	20	A	B	P	Preserve
OS	93	coast live oak	*Quercus agrifolia*	24.4		35	22	22	15	24	A	B	P	Preserve
OS	94	mulberry	*Morus alba*	11.1, 14		26	14	14	15	14	C-	C-	P	Preserve
OS	95	coast live oak	*Quercus agrifolia*	~22		28	8	30	18	20	A-	B	P	Preserve
City NP	96	Aleppo pine	*Pinus halepensis*	31.5		40	20	24	10	20	A	B	P	Remove
City NP	97	coast live oak	*Quercus agrifolia*	3.6		10	13	6	5	12	A	B	N	Preserve
OS	98	coast live oak	*Quercus agrifolia*	6.7		18	10	10	13	8	A	B	N	Preserve
OS	99	Southern California black walnut	*Juglans californica*	1.1, .7		10	4	5	4	5	B-	B	N	Preserve
OS	100	coast live oak	*Quercus agrifolia*	3.8, 6.5		20	14	13	11	12	A	B	N	Preserve
OS	101	coast live oak	*Quercus agrifolia*	6.5		25	11	4	13	12	A	B	N	Preserve
OS	102	coast live oak	*Quercus agrifolia*	2.8		10	13	4	6	8	B	B	N	Preserve
City NP	103	coast live oak	*Quercus agrifolia*	.8, 1, .3, .3		6	3	2	2	4	B	B	N	Preserve
No Tree Nos. 104-110														
OS	111	coast live oak	*Quercus agrifolia*	4.1		16	16	5	6	6	B	B	N	Preserve
No Tree Nos. 112-113														
City NP	114	coast live oak	*Quercus agrifolia*	1.2, .7, .4, .6, .5		10	7	7	6	6	A	B	N	Remove
City NP	115	coast live oak	*Quercus agrifolia*	.7, 1.2		10	9	7	2	0	A	B	N	Remove
City NP	116	coast live oak	*Quercus agrifolia*	1.3, .7, .8		10	7	6	6	5	B	B	N	Remove

City of Los Angeles Tree Protection Notes:

Root Protection Zone

Tree roots are generally located in the top 12 - 36 inches of soil and can extend to a distance exceeding the trees height and/or width. The larger, structural roots located 3-5 feet from the trunk are often relatively inactive, and if cut, can become infected with root disease that may cause a column of decay or sapwood death in the trunk and root collar. Dieback related to cambium death will reach the lateral branches and top of the tree with time. The smaller feeder/absorptive roots of the tree can sustain damage during construction from lack of water, soil compaction or physical damage resulting from cutting. The following guidelines are designed to minimize damage to the root system of protected trees. The following establish a "Root Protection Zone" to safeguard the health of protected trees and other trees to remain.

1. Some encroachments may be unavoidable. The Project Arborist shall monitor all work that must be performed in the Root Protection Zone.
2. Protective chain-link fencing, at least five feet in height, with an access gate of minimal width should be installed at the Root Protection Zone of protected trees (or as drawn on the Tree Protection Plan) and approved in place by the Project Arborist and city staff prior to the commencement of any demolition, grubbing, grading or construction. This pertains to both public (parkway trees, etc.) and private trees.
3. When chain link fencing cannot be placed to the limits of the Root Protection Zone, the Project Arborist may require that orange snow fencing be placed at the limits of the Root Protection Zone as a temporary protection measure until the encroachment work will be performed. This will be determined at a pre-demo/pre-construction job site meeting with the contractor and/or applicant.
4. The tree protection zone should be irrigated sufficiently with clean potable water to keep the tree in good health and vigor before, during, and after construction. This may mean deeply soaking the ground periodically. Installation of layers of sand bags or other material to create a watering well, or berm, may be necessary. The Project Arborist will recommend this activity, if necessary.
5. No construction staging or disposal of construction materials or byproducts including but not limited to paint, plaster, or chemical solutions is allowed in the Root Protection Zone.
6. The Root Protection Zone should not be subjected to flooding incidental to the construction work.
7. All work conducted in the ground within the Root Protection Zone of any protected tree should be accomplished with hand tools, unless an air-spade is utilized. Trenches in the Root Protection Zone should be tunneled, or completed with an air-spade to avoid damage to small feeder roots within the root protection zone. Information regarding air-spades is available from the project arborist.
8. Where structural footings are required and major roots (over 3" in diameter) will be impacted, the engineer of record should submit acceptable footing design alternatives and/or location alternatives to city staff before proceeding with further plan review.
9. Where more than 50% of the root zone is impacted or roots greater than 3 inches in diameter are to be removed within four feet of the trunk, the engineer of record should submit acceptable design alternatives to staff for review.
10. Any required trenching should be routed in such a manner as to minimize root damage. Radial trenching (radial to the tree trunk) is preferred as it is less harmful than tangential trenching. Construction activity should be diverted from the Root Protection Zone. Cutting of roots should be avoided (i.e. place pipes and cables below uncut roots). Wherever possible and in accordance with applicable code requirements, the same trench should be used for multiple utilities.
11. "Natural" or pre-construction grade should be maintained in the Root Protection Zone. At no time during or after construction should soil be in contact with the trunk of the tree above the basal flair.
12. In areas where the grade around the protected tree will be lowered, some root cutting may be unavoidable. Cuts should be clean and made at right angles to the roots. When practical, cut roots back to a branching lateral root. The Project Arborist shall monitor all root pruning.
13. When removing existing pavement in the Root Protection Zone, avoid the use of heavy equipment, which will compact and damage the root system. The Project Arborist shall monitor all demolition activities in the Root Protection Zones.
14. If the Project Arborist requires mulch in the Root Protection Zone, the mulch materials and location will be shown on the plan.
15. Larger projects may require construction staging plans to indicate where materials will be stored and how the equipment will move in and around the property to minimize damage to the Root Protection Zone and tree canopies. Those plans will be prepared by the project engineer.
16. Root damage and soil compaction may be mitigated in some cases by using plywood, mulch, or mulch and plywood in the Root Protection Zone. Where applicable, this will be illustrated on the Tree Protection Plan.
17. Weather proof, minimum 8 x 10 inches, signage shall be applied to the fencing on all sides that states:

Tree Protection Fencing
Do Not Remove Without Authorization From
The City of Los Angeles
Questions - call Project Arborist: Carlberg Associates

Christy Cuba (626) 428-5072 or Cy Carlberg (310) 451-4804

Pruning

1. Pruning shall be monitored by the Project Arborist at intervals and durations as they see fit to maintain tree integrity.
2. Pruning of all trees should be in accordance with industry standards (International Society of Arboriculture or ANZI 133.1).
3. Pruning of oaks should be limited to the removal of dead wood and the correction of potentially hazardous conditions, as evaluated by the Project Arborist. Excessive pruning is harmful to oaks and many other trees. Removal or reduction of major structural limbs should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i. e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.
4. Pruning of trees other than oaks should be limited to the removal or reduction of major structural limbs and should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i. e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.
5. Landmark Trees must be pruned by or under the direction of a qualified arborist.

D. Inspections

1. Inspection of Protective Fencing: The Project Arborist shall inspect the tree protection fencing prior to demolition, grubbing, grading, or construction. City staff may also inspect fencing to verify placement and approval of materials prior to the commencement of demolition, grading, or construction.
2. Pre-construction meeting. City staff may require an on-site pre-construction meeting with the contractor and or applicant to discuss tree protection with the site supervisor, grading equipment contractors, and demolition crew. The Project Arborist shall be present at that meeting.
3. Inspection of rough grading. City staff my require inspection to ensure protected trees will not be injured by compaction, cut or fill, drainage and trenching activities.
4. Special Activity in the Tree Protection Zone: The Project Arborist shall provide direct on-site supervision of work in the tree protection zone, as they deem appropriate.
5. Periodic Inspections: City staff may require inspections verifying adherence to tree protection measures during the on-going construction process. Allow a minimum of 48 hours for scheduling inspections.
6. The Project Arborist shall report discrepancies or deficiencies in Tree Protection to the site superintendent for corrective action. If corrective actions are not taken in a reasonable time frame, the Project Arborist may notify City staff for enforcement action.

E. Definitions

1. Basal flair or root crown means the tree trunk where it emerges from the root system and flairs out to create the base of the tree.
2. Canopy means the area of a tree that consists primarily of branches and leaves.
3. Dripline means the outermost area of the tree canopy (leafy area of tree).
4. Certified Arborist means an individual who has demonstrated knowledge and competency through obtainment of the current International Society of Arboriculture arborist certification.
5. Root Protection Zone means the area within a distance from the tree trunk that equates to 12 times the Diameter at Standard Height (DSH): e.g., 20" DSH x 12 = 240 inches (20 feet).

Public Trees-Maintained by the City of Los Angeles

Trees that are located in the parkway between the curb face and the property line, and therefore are public trees. To have any work done on these trees, including installation of Tree Protection Fencing, contact Urban Forestry at (213) 847-3077.

SRM STUDIO CITY
VESTING TENTATIVE TRACT MAP #83460

75% CD SUBMITTAL | PLAN SET: A | 09/25/2023

Carlberg Associates Horticulturists and Registered Consulting ARBORISTS

TREE IMPACT EXHIBIT
STUDIO CITY ELDERCARE
11611 - 11695 VENTURA BLVD. & 4000 - 4028 COLFAX AVE.
LOS ANGELES, CA 91604

PREPARED FOR: SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200, SPOKANE, WA 99201

www.cycarlberg.com Date: 02.13.24 By: S. McAllaster

NO.	DATE	REVISIONS	APP'D.	DATE

PREPARED BY:
FUSCOE ENGINEERING
FULL CIRCLE THINKING
15535 Sand Canyon Ave Suite 100 Irvine, California 92618 949.474.1960 fuscoe.com
DEBRA SCHALES RCE 43108 08/28/2023 Date

REGISTERED PROFESSIONAL ENGINEER DEBRA VALLE SCHALES EXP. 03/31/24 CIVIL STATE OF CALIFORNIA

VESTING TENTATIVE TRACT MAP
CONCEPTUAL GRADING & UTILITY PLAN
VTTM NO. 83460
FOR MERGER & SUBDIVISION PURPOSES
4000-4028 COLFAX AVENUE, STUDIO CITY, CA 91604

DRAWN:	CC
DESIGN:	DVS
CHECKED:	DVS
SCALE:	AS SHOWN
JOB NO.:	1198-009
DATE:	09/25/2023
SHEET	4 OF 9

APPENDIX B – BIOLOGICAL RESOURCES REVIEW

GLENN LUKOS ASSOCIATES

Regulatory Services

May 13, 2024

Andy Loos
MG at Studio City, LLC
111 N. Post Street, Suite 200
Spokane, WA 99201

SUBJECT: Results of a Biological and Regulatory Review for the Approximately 3.62-Acre Project Site Located at 11611 – 11695 Ventura Boulevard and 4010 – 4028 Colfax Avenue, Studio City, Los Angeles County, California

Dear Mr. Loos:

Glenn Lukos Associates, Inc. (GLA) performed a biological and regulatory review of the approximately 3.62-acre Project site referenced above. The Project may qualify for a Class 32 Categorical Exemption for infill development located in an urban area. To qualify, a project must meet all of the following criteria[1]:

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

The purpose of this review is to evaluate site conditions to determine whether the Project meets the following exemption criteria: ***"The project site has no value as habitat for endangered, rare, or threatened species."*** The biological evaluation included a site visit by GLA biologist Jillian Stephens on August 12, 2021, and a desktop review of existing information. This letter report provides the results of the biological and regulatory review.

[1] California Environmental Quality Act (CEQA) Guidelines, Section 15332.

1.0 PROJECT SITE LOCATION AND PROJECT DESCRIPTION

1.1 Project Site Location

For this report, the term *Project site* encompasses all portions of the proposed Project, which includes the onsite development footprint and offsite infrastructure improvement areas, and totals 3.62 acres of land in Studio City, Los Angeles County, California [Exhibit 1 – Regional Map]. The Project site is located at latitude 34.141211 and longitude -118.386508 (approximate center reading) within an unsectioned portion of Township 2 North and Range 16 West of the U.S. Geological Survey (USGS) Van Nuys, California 7.5′ topographic quadrangle map [Exhibit 2 – Vicinity Map]. The Project site is bounded by Ventura Boulevard to the south, Colfax Avenue to the west, the Los Angeles River to the north, and commercial lots to the east. An aerial map depicting the Project boundary is included as Exhibit 3. This report also includes an evaluation of an offsite slope on Los Angeles County property that is located immediately adjacent to the northern Project site boundary. The offsite slope is not part of the Project site; however, trees on the offsite slope that overhang the Project site will be encroached upon by Project construction activities.

The Project site has been developed since prior to the 1950s, as is evident on historic aerials. Land use within the Project site consists of commercial businesses and associated parking areas. The lot at the eastern Project boundary is currently a paved, vacant lot. The majority of the buildings within the Project site are single-story, and the site is surrounded entirely by residential and commercial land uses.

1.2 Project Description

The Project consists of the demolition of the existing commercial buildings and the construction of an Eldercare Facility to provide senior housing, amenities, and services. The Eldercare Facility will include two buildings: a five-story building with Assisted Living Care Housing dwelling units on the western half of the site and a three-story building with Senior Independent Housing dwelling units on the eastern half of the site. The two buildings will share one subterranean level of parking. A publicly accessible pocket park will be located on the northwestern portion of the site.

The Project includes demolition of an existing retaining block wall along the northeastern property line that abuts the offsite slope. The existing retaining block wall is failing and must be removed. The wall will be removed from top to bottom in sections as this approach will ensure stability and allows for preservation of a greater number of trees on the offsite slope. The work will be performed from the Project site with no need for construction or demolition activities on or from County property, although access from the County property may be necessary for monitoring and assessment of the existing trees and observation of demolition work to ensure preservation of the trees. The wall demolition will be completed by trackhoe, pulling the wall from the top in sections onto the Project site. Any demolition work that needs to be performed

under a tree canopy will be performed by protecting the tree canopy with flagging and removing sections of the wall by saw cutting the wall and utilizing smaller equipment (bobcat) so as not to affect the tree canopy. Wall footings will be removed by an excavator. Due to the shallow depth of the footings (as determined by previous borings), it is not anticipated that any tree root systems will be encountered. Should tree roots be encountered during wall removal, the contractor will use hand tools to remove the footings adjacent to the roots.

The Project also includes offsite improvements such as the construction of new curbs and gutters, improved and/or widened existing sidewalks, cold planing asphalt concrete pavement, and the installation of Americans with Disabilities Act (ADA)-compliant curb ramps along Ventura Boulevard and Colfax Avenue. Additionally, the existing onsite 36-inch storm drain to Ventura Boulevard, Colfax Avenue, and north of the Project site will be rerouted, which will require trenching.

2.0 METHODOLOGY

GLA performed the biological and regulatory analysis by reviewing existing information for the Project site via an initial desktop review of Project information and relevant databases in February 2021; this desktop review informed the site visit conducted on August 12, 2021. Updated desktop reviews were conducted in 2023 and 2024. The database review included the California Natural Diversity Database (CNDDB) for the Van Nuys, California quadrangle map[2] (and surrounding quadrangles), the California Native Plant Society (CNPS) on-line inventory[3], and soil maps. GLA also reviewed data presented in the report prepared by Carlberg Associates titled "City of Los Angeles Protected Tree Report 11611-11695 Ventura Blvd and 4000-4028 Colfax Ave. Los Angeles, California 91604" and dated February 13, 2024 [Protected Tree Report – Appendix A].

During the site visit, GLA assessed the Project site to identify native habitats that could support endangered, rare, or threatened species and determine the potential for such species to occur. Site reconnaissance was conducted in such a manner as to allow inspection of the entire site by direct observation, including the use of binoculars.

In accordance with the criteria set forth in Class 32 Categorical Exemption, sensitive biological resources considered for this analysis include endangered, rare, or threatened species (including California Species of Special Concern [SSC]). The regulatory review consisted of an assessment of the site for areas meeting the definition for waters of the United States (including wetlands) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) and the Regional Water Quality Control Board (Regional Board), and waters of the State (including riparian vegetation) subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) and the Regional Board under the Porter-Cologne Water Quality Control Act (Porter-Cologne).

[2] California Department of Fish and Wildlife. April 2024. Natural Diversity Database: RareFind 5.
[3] California Native Plant Society. 2024. On-Line CNPS Rare Plant Inventory.

3.0 RESULTS

3.1 Existing Conditions

The Project site consists of approximately 3.62 acres of developed land situated in a heavily urbanized setting. The site is largely unvegetated, aside from manicured Mexican fan palms (*Washingtonia robusta*) located along the frontage of Ventura Boulevard and sporadic weeds consisting of non-native grasses and prickly lettuce (*Lactuca serriola*) within the vacant lot at the eastern Project boundary. The segment of the Los Angeles River north of the Project boundary is entirely unvegetated, as it was improved as a concrete-lined channel in 1938.

The northern Project boundary abuts an offsite slope that descends toward the Los Angeles River and is vegetated with ornamental non-native and native tree species. This offsite area is located outside of the Project boundary; however, canopies of the adjacent trees overhang the Project site. Species present on the adjacent slope include Aleppo pine (*Pinus halepensis*), Torrey pine (*Pinus torreyana*), coast live oak (*Quercus agrifolia*), Southern California black walnut (*Juglans californica*), Chinese elm (*Ulmus parvifolia*), and evergreen ash (*Fraxinus uhdei*). As noted in the Protected Tree Report, none of the trees rooted outside of the Project site would be removed for the Project; however, construction activities may encroach on the branches and root zones of some of the offsite trees; therefore, these offsite trees were considered in this analysis.

The entirety of the Project site exhibits disturbance consistent with long-term commercial land use; therefore, vegetation mapping was not performed as the Project site does not support native vegetation communities [Exhibit 3]. No wildlife species were detected during the site visit; however, only those that are well suited for an urban environment and common to the region are expected to utilize the Project site, such as western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), red-tailed hawk (*Buteo jamaicensis*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), California towhee (*Melozone crissalis*), rock pigeon (*Columba livia*), racoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*). Topography onsite is generally flat. Site photographs are provided as Exhibit 4.

3.2 Endangered, Rare, or Threatened Species

CEQA Guidelines § 15380(b-d)[4] defines endangered, rare, or threatened species as follows:

> (b) A species of animal or plant is:
>
> > (1) "Endangered" when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or

[4] *2024 California Environmental Quality Act (CEQA) Statute and Guidelines*. Association of Environmental Professionals (AEP), January 1, 2024.

(2) "Rare" when either:
(A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or
(B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act.

(c) A species of animal or plant shall be presumed to be endangered, rare or threatened, as it is listed in:

(1) Sections 670.2 or 670.5, Title 14, California Code of Regulations; or
(2) Title 50, Code of Federal Regulations Section 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.

(d) A species not included in any listing identified in subdivision (c) shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subdivision (b).

3.2.1 Endangered, Rare, or Threatened Plants

No endangered, rare, or threatened plant species were observed during the site visit. The Project site is fully developed and does not contain soils or native plant communities that could support endangered, rare, or threatened plant species. In addition, the offsite slope abutting the northern Project boundary has been subject to substantial ongoing anthropogenic disturbance for the past approximately seven decades. As such, the Project site does not exhibit potential to support endangered, rare, or threatened plant species.

Table 3-1 provides a summary of all plant species considered for this analysis. Species were considered based on a number of factors, including: (1) species identified by the April 2024 CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site; and (2) species identified in the April 2024 CNPS Online Inventory as occurring (either currently or historically) on or in the vicinity of the Project site.

Table 3-1. Plant Species Evaluated for the Biological Study

Species Name	Status	Habitat Requirements	Occurrence
Beach spectaclepod *Dithyrea maritima*	Federal: None State: ST CNPS: Rank 1B.1	Coastal dunes, coastal scrub (sandy).	No suitable habitat. Does not occur.
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	Federal: None State: None CNPS: Rank 1B.1	Coastal bluff scrub, chaparral, coastal sage scrub, valley and foothill grassland. Rocky soils, often of clay or serpentinite.	No suitable habitat. Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
Braunton's milk-vetch *Astragalus brauntonii*	Federal: FE State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually carbonate soils. Recent burn or disturbed areas.	No suitable habitat. Does not occur.
California Orcutt grass *Orcuttia californica*	Federal: FE State: SE CNPS: Rank 1B.1	Vernal pools	No suitable habitat. Does not occur.
California satintail *Imperata brevifolia*	Federal: None State: None CNPS: Rank 2B.1	Chaparral, coastal scrub, meadows and seeps (often alkali), Mojavean desert scrub, riparian scrub.	No suitable habitat. Does not occur.
Coastal dunes milk-vetch *Astragalus tener* var. *titi*	Federal: FE State: SE CNPS: Rank 1B.1	Often in vernally mesic areas within coastal bluff scrub (sandy), coastal dunes, and coastal prairie (mesic).	No suitable habitat. Does not occur.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	No suitable habitat. Does not occur.
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	No suitable habitat. Does not occur.
Davidson's bush-mallow *Malacothamnus davidsonii*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, cismontane woodland, coastal sage scrub, riparian woodland.	No suitable habitat. Does not occur.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CNPS: Rank 1B.2	Alkaline soils in coastal sage scrub, coastal bluff scrub.	No suitable habitat. Does not occur.
Gambel's water cress *Nasturtium gambelii*	Federal: FE State: ST CNPS: Rank 1B.1	Marshes and swamps (freshwater or brackish).	No suitable habitat. Does not occur.
Greata's aster *Symphyotrichum greatae*	Federal: None State: None CNPS: Rank 1B.3	Mesic soils in broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland.	No suitable habitat. Does not occur.
Lewis' evening-primrose *Camissoniopsis lewisii*	Federal: None State: None CNPS: Rank 3	Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland.	No suitable habitat. Does not occur.
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	Federal: None State: None CNPS: Rank 1A	Marshes and swamps (coastal salt and freshwater).	No habitat. Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
Lucky morning-glory *Calystegia felix*	Federal: None State: None CNPS: Rank 1B.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	No suitable habitat. Does not occur.
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	No suitable habitat. Does not occur.
Marsh sandwort *Arenaria paludicola*	Federal: FE State: SE CNPS: Rank 1B.1	Bogs and fens, freshwater marshes and swamps.	No suitable habitat. Does not occur.
Mesa horkelia *Horkelia cuneata* var. *puberula*	Federal: None State: None CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	No suitable habitat. Does not occur.
Mud nama *Nama stenocarpum*	Federal: None State: None CNPS: Rank 2B.2	Marshes and swamps	No suitable habitat. Does not occur.
Nevin's barberry *Berberis nevinii*	Federal: FE State: SE CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	No suitable habitat. Does not occur.
Nuttall's scrub oak *Quercus dumosa*	Federal: None State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, and coastal sage scrub. Occurring on sandy, clay loam soils.	No suitable habitat. Does not occur.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1	Chenopod scrub, playas, vernal pools.	No suitable habitat. Does not occur.
Payne's bush lupine *Lupinus paynei*	Federal: None State: None CNPS: Rank 1B.1	Coastal scrub, riparian scrub, valley and foothill grassland	No suitable habitat. Does not occur.
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CNPS: Rank 1B.2	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	No suitable habitat. Does not occur.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	No suitable habitat. Does not occur.
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	No suitable habitat. Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	No suitable habitat. Does not occur.
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	Federal: None State: SE CNPS: Rank 1B.1	Coastal sage scrub, occurring on sandy soils.	No suitable habitat. Does not occur.
San Gabriel Mountains dudleya *Dudleya densiflora*	Federal: None State: None CNPS: Rank 1B.1	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland.	No suitable habitat. Does not occur.
Sanford's arrowhead *Sagittaria sanfordii*	Federal: None State: None CNPS: Rank 1B.2	Marshes and swamps (shallow freshwater).	No suitable habitat. Does not occur.
Santa Monica dudleya *Dudleya cymosa ssp. ovatifolia*	Federal: FT State: None CNPS: Rank 1B.1	Chaparral, coastal sage scrub. Occurring on volcanic soils.	No suitable habitat. Does not occur.
Santa Susana tarplant *Deinandra minthornii*	Federal: None State: Rare CNPS: Rank 1B.2	Chaparral and coastal sage scrub. Occurring on rocky soils.	No suitable habitat. Does not occur.
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	Federal: None State: None CNPS: Rank 1B.2	Chaparral and coastal sage scrub.	No suitable habitat. Does not occur.
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: Rank 1B.1	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	No suitable habitat. Does not occur.
Sonoran maiden fern *Pelazoneuron puberulum var. sonorense*	Federal: None State: None CNPS: Rank 2B.2	Meadows and seeps (seeps and streams).	No suitable habitat. Does not occur.
South coast saltscale *Atriplex pacifica*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	No suitable habitat. Does not occur.
Southern tarplant *Centromadia parryi* ssp. *australis*	Federal: None State: None CNPS: Rank 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	No suitable habitat. Does not occur.
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	Federal: FE State: SE CNPS: Rank 1B.1	Coastal dunes, coastal scrub, marshes and swamps (edges, coastal salt or brackish).	No suitable habitat. Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
Western bristly scaleseed *Spermolepis lateriflora*	Federal: None State: None CNPS: Rank 2A	Sonoran desert scrub.	No suitable habitat. Does not occur.
White rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CNPS: Rank 2B.2	Sandy or gravelly soils in alluvial scrub within chaparral, cismontane woodland, coastal scrub, and riparian woodland.	No suitable habitat. Does not occur.
White-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	Federal: None State: None CNPS: Rank 1B.3	Chaparral and cismontane woodland.	No suitable habitat. Does not occur.

Federal
FE – Federally Endangered
FT – Federally Threatened

State
SE – State Endangered
ST – State Threatened

CRPR
1B – Plants rare, threatened, or endangered in California and elsewhere.
2A - Plants rare, threatened, or endangered in California, but more common elsewhere.
2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
3 – Plants about which more information is needed.
4 – Plants of limited distribution (a watch list).

Threat Code Extension
.1 – Seriously endangered in California (over 80% occurrences threatened)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Occurrence
- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Confirmed absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur based on suitable habitat, however its presence/absence has not been confirmed.
- Confirmed present – The species was detected onsite incidentally or through focused surveys

The California black walnut is listed on the California Rare Plant Rank (CRPR) as a List 4 taxon; however, this species is not considered endangered, rare, or threatened, and is therefore not listed above in Table 3-1. Nonetheless, as noted in the Protected Tree Report, one Southern California black walnut tree located within the offsite slope and two Southern California black walnut trees that occur onsite will be protected in place by the Project.

3.2.2 Endangered, Rare, or Threatened Animals

No endangered, rare, or threatened animal species were observed onsite during the visit. In addition, as noted above, the Project site is entirely developed and situated in a heavily urbanized setting subject to routine disturbance; therefore, the site does not provide habitat for endangered, rare, or threatened animal species. Some examples of these disturbances that deter animals include continual human occupation, vehicular traffic, artificial lighting, vegetation maintenance, domesticated pets, and pest management.

Table 3-2 provides a summary of all animal species considered for this analysis. Species were considered based on a number of factors, including: 1) species identified in the April 2024 CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site;[5] and 2) any other endangered, rare, or threatened species that are known to occur within the vicinity of the Project site.

Table 3-2. Animal Species Evaluated for the Biological Study

Species	Status	Habitat Requirements	Occurrence
INVERTEBRATES			
American bumble bee *Bombus pensylvanicus*	Federal: None State: None	Farmlands and open fields.	No suitable habitat. Does not occur.
Crotch's bumble bee *Bombus crotchii*	Federal: None State: CE	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	No suitable habitat. Does not occur.
Monarch – California overwintering population *Danaus plexippus plexippus* pop. 1	Federal: Candidate State: None	Overwintering California population along the Pacific Coast, roosting in eucalyptus, Monterey pines and Monterey cypress trees.	The Project site is outside of the overwintering range for this species. Does not occur in an overwintering role.
FISH			
Arroyo chub *Gila orcutti*	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	No suitable habitat. Does not occur.

[5] Please note that the Trask shoulderband snail (*Helminthoglypta traskii*) was not identified in the 2024 CNDDB as occurring on or in the vicinity of the Project site.

Species	Status	Habitat Requirements	Occurrence
Santa Ana speckled dace *Rhinichthys osculus* ssp. *8*	Federal: None State: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	No suitable habitat. Does not occur.
Santa Ana sucker *Catostomus santaanae*	Federal: FT State: SSC	Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.	No suitable habitat. Does not occur.
Southern steelhead - southern California DPS *Oncorhynchus mykiss irideus* pop. 10	Federal: FE State: SE	Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Santa Maria river south to southern extent of range (San Mateo Creek in San Diego county).	No suitable habitat. Does not occur.
AMPHIBIANS			
Arroyo toad *Anaxyrus californicus*	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt. Adjacent banks with sandy or gravely terraces and very little herbaceous cover for adult and juvenile foraging areas, within a moderate riparian canopy of cottonwood, willow, or oak.	No suitable habitat. Does not occur.
Coast Range newt *Taricha torosa*	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	No suitable habitat. Does not occur.
Southern mountain yellow-legged frog *Rana muscosa*	Federal: FE State: SE	Streams and small pools in ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.	No suitable habitat. Does not occur.

Species	Status	Habitat Requirements	Occurrence
Western spadefoot *Spea hammondii*	Federal: FPT State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	No suitable habitat. Does not occur.
REPTILES			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	No suitable habitat. Does not occur.
Coast horned lizard *Phrynosoma blainvillii*	Federal: FSC State: SSC	Occurs in sandy soils in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	No suitable habitat. Does not occur.
Coastal whiptail *Aspidoscelis tigris stejnegeri (multiscutatus)*	Federal: None State: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	No suitable habitat. Does not occur.
California legless lizard *Anniella* spp.	Federal: None State: SSC	Common in the Coast Ranges from the vicinity of Antioch, Contra Costa Co. south to the Mexican border. Range includes the floor of the San Joaquin Valley from San Joaquin Co. south, the west slope of the southern Sierra, the Tehachapi Mountains west of the desert, and the mountains of southern California. Common in several habitats but especially in coastal dune, valley-foothill, chaparral, and coastal scrub types.	No suitable habitat. Does not occur.
Two-striped gartersnake *Thamnophis hammondii*	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	No suitable habitat. Does not occur.
Western pond turtle *Emys marmorata*	Federal: FPT State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	No suitable habitat. Does not occur.

Species	Status	Habitat Requirements	Occurrence
BIRDS			
Bank swallow (nesting) *Riparia riparia*	Federal: None State: ST	Low areas along rivers, streams, ocean coasts or reservoirs. Often use human-made sites.	No suitable habitat. Does not occur.
Burrowing owl *Athene cunicularia*	Federal: None State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	No suitable habitat. Does not occur.
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	No suitable habitat. Does not occur.
Least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	No suitable habitat. Does not occur.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	No suitable habitat. Does not occur.
Swainson's hawk (nesting) *Buteo swainsoni*	Federal: None State: ST	Summer in wide open spaces of the American West. Nest in grasslands but can use sage flats and agricultural lands. Nests are placed in lone trees.	No suitable habitat. Does not occur.
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: ST, SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	No suitable habitat. Does not occur.
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE	Dense, wide riparian woodlands with well-developed understories.	No suitable habitat. Does not occur.
Yellow rail *Coturnicops noveboracensis*	Federal: None State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	No suitable habitat. Does not occur.

Species	Status	Habitat Requirements	Occurrence
MAMMALS			
American badger *Taxidea taxus*	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	No suitable habitat. Does not occur.
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: SSC WBWG: MH	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavities.	No suitable habitat. Does not occur.
California leaf-nosed bat *Macrotus californicus*	Federal: None State: SSC WBWG: H	Roosts in caves, mines, and buildings.	No suitable habitat. Does not occur.
Hoary bat *Lasiurus cinereus*	Federal: None State: None WBWG: M	Coniferous forests, woodlands.	No suitable habitat. Does not occur.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	No suitable habitat. Does not occur.
Pallid bat *Antrozous pallidus*	Federal: None State: SSC WBWG: H	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	No suitable habitat. Does not occur.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	No suitable habitat. Does not occur.
Silver-haired bat *Lasionycteris noctivagans*	Federal: None State: None WBWG: M	Temperate, northern hardwoods with ponds or streams nearby. Roost in hollow snags and bird nests.	No suitable habitat. Does not occur.
South coast marsh vole *Microtus californicus stephensi*	Federal: None State: SSC	Tidal marshes in Los Angeles, Orange and southern Ventura Counties.	No suitable habitat. Does not occur.
Southern grasshopper mouse *Onychomys torridus ramona*	Federal: None State: SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	No suitable habitat. Does not occur.
Townsend's big-eared bat *Corynorhinus townsendii*	Federal: None State: SSC WBWG: H	Coniferous forests and woodlands, deciduous riparian woodland, semi-desert and montane shrublands.	No suitable habitat. Does not occur.

Species	Status	Habitat Requirements	Occurrence
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC WBWG: H	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	No suitable habitat. Does not occur.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	No suitable habitat. Does not occur.

Federal
FE – Federally Endangered
FT – Federally Threatened
FPT – Federally Proposed Threatened

State
SE – State Endangered
ST – State Threatened
CE – Candidate Endangered
SSC – California Species of Concern

Western Bat Working Group (WBWG)
H – High Priority
LM – Low-Medium Priority
M – Medium Priority
MH – Medium-High Priority

Occurrence
- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Confirmed absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur based on suitable habitat, however its presence/absence has not been confirmed.
- Confirmed present – The species was detected onsite incidentally or through focused surveys

3.3 Special-Status Habitats

The CNDDB identifies the following special-status habitats as occurring within the Van Nuys and surrounding quadrangles: California Walnut Woodland, Riversidean Alluvial Fan Sage Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Mixed Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Valley Oak Woodland.

As noted above, the offsite slope located immediately north of the Project boundary contains native and ornamental trees with canopies that overhang the Project site. The Protected Tree Report states that the majority of the offsite trees in this area appear to have been planted, indicating that they do not constitute a remnant woodland. It is also important to note that the adjacent offsite slope exhibits heavy anthropogenic disturbance and experiences routine maintenance in accordance with County of Los Angeles brush removal requirements for fire protection/public safety. Therefore, the offsite slope does not currently support any special-status woodland or forest habitats including those listed above, nor does it support or have potential to support endangered, rare, or threatened plant or animal species that would rely on woodland or forest habitats for their ecology and survival. The Project site itself is entirely developed and does not contain any special-status habitats.

3.4 Protected Trees

The Project site is located within the City of Los Angeles (City) limits and is subject to the requirements set forth by the City's Tree Protection Ordinance No. 186873 (Ordinance). County-owned oak trees that overhang the Project site may be protected by the Los Angeles County (County) Oak Tree Ordinance. In accordance with guidelines set forth by the City's Tree Ordinance as well as requirements of the County Oak Tree Ordinance (for County-owned trees), a tree inventory survey was performed and a Protected Tree Report was prepared for the Project site by Carlberg Associates.

According to the Protected Tree Report, all onsite (5) and offsite (31) Ordinance-Protected trees will be preserved. The Protected Tree Report notes that Project construction will result in encroachment on the root zone and pruning of the canopy of some of the offsite trees; however, through engineering and design modifications, project design features will be implemented [refer to Appendix A – Protected Tree Report for a complete list] to avoid and minimize the encroachment and ensure that no protected trees are removed.

3.5 Jurisdictional Waters

The Project site does not contain any aquatic features, including streams or wetlands, that would be subject to regulation under the Corps, Regional Board, or CDFW.

4.0 CONCLUSIONS

As discussed above, the Project site consists of developed land and does not contain habitat, or potential value as habitat, for endangered, rare, or threatened plant or animal species.

If you have any questions about this letter report, please contact Amy Walters or Erin Trung or at awalters@wetlandpermitting.com or etrung@wetlandpermitting.com.

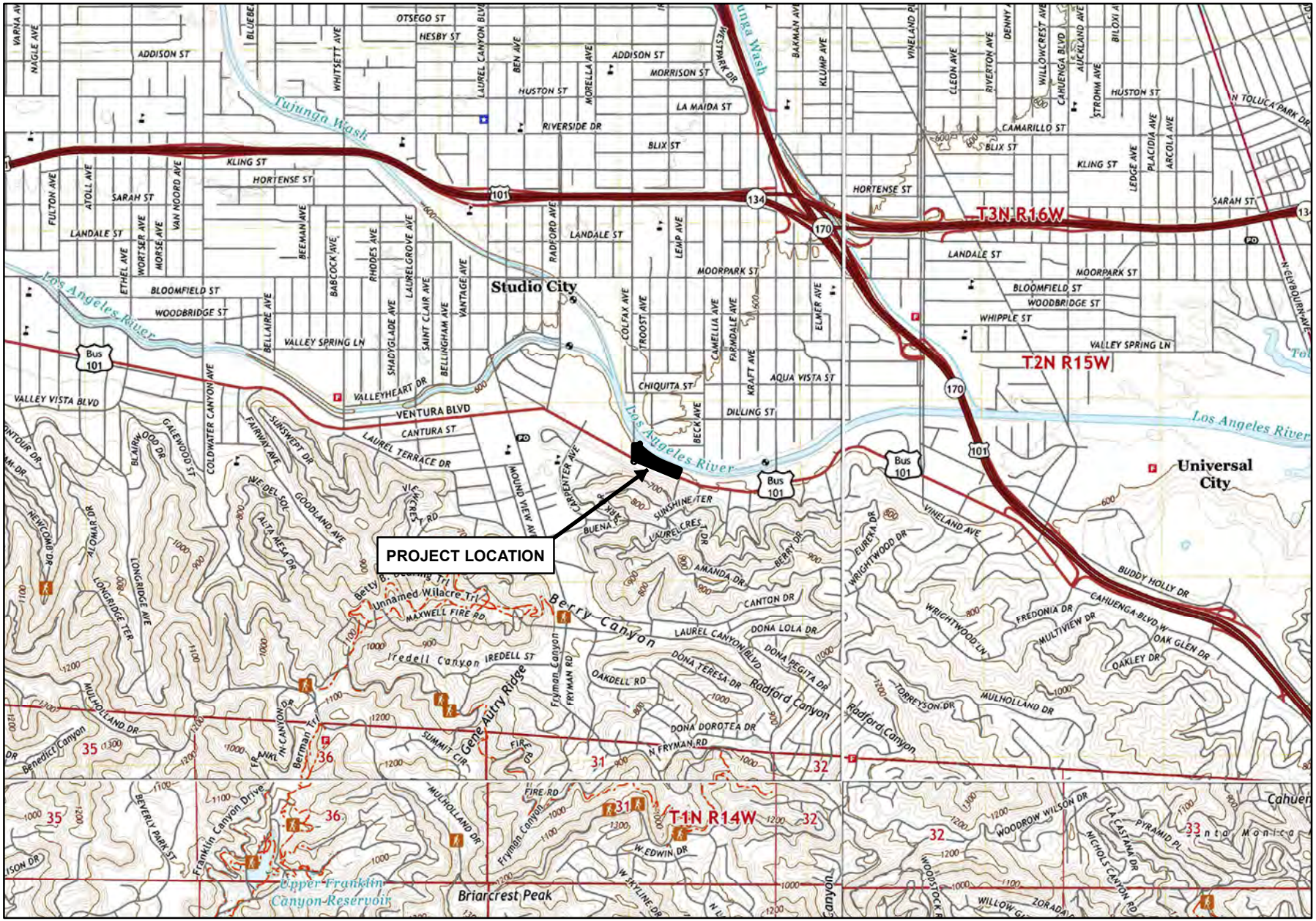
Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Amy Walters
Regulatory Specialist

Erin Trung
Senior Biologist

p:1542-1c.Biological Review



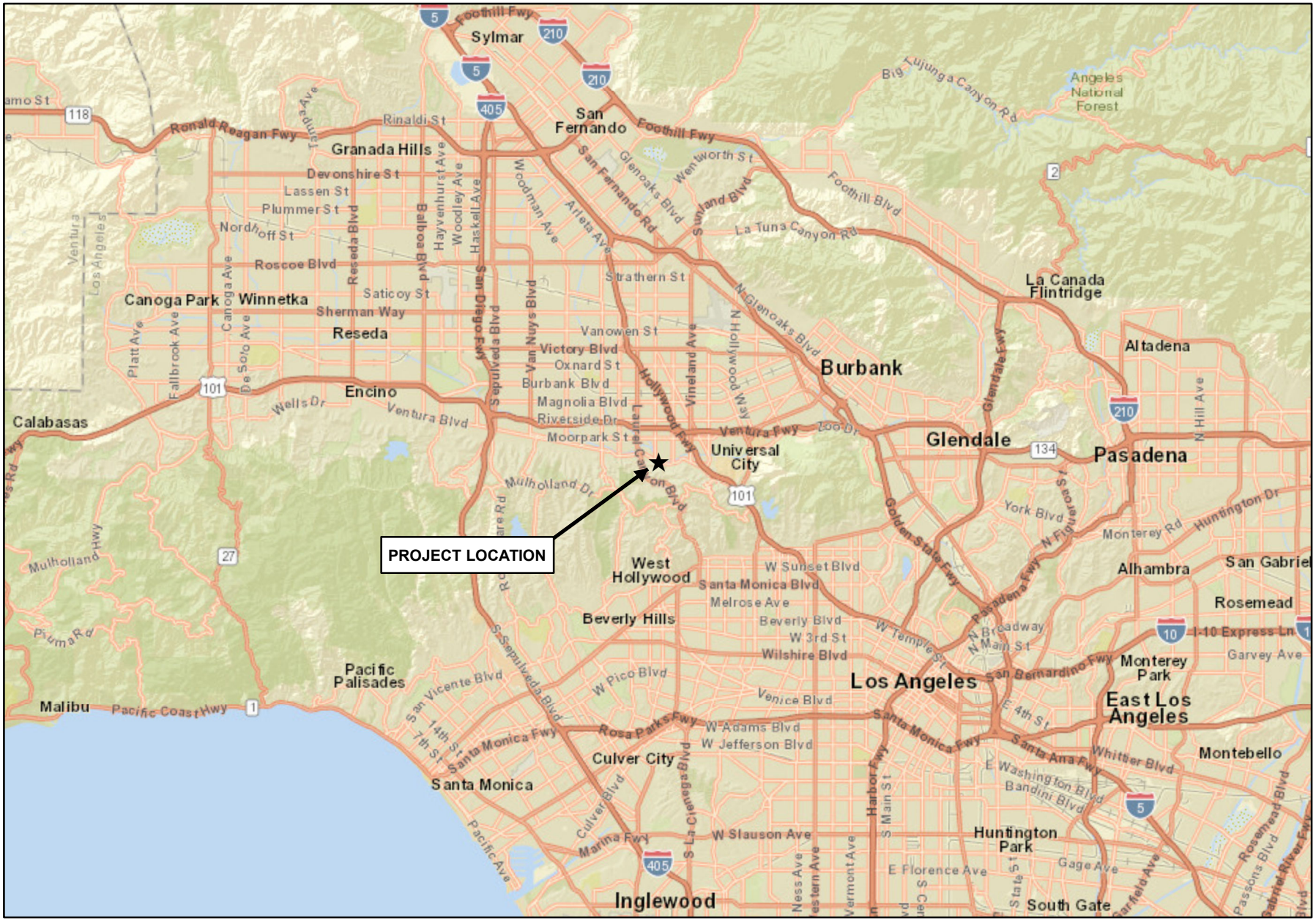
Adapted from USGS Van Nuys, CA quadrangle

11611 – 11695 VENTURA BOULEVARD & 4010 – 4028 COLFAX AVENUE PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2



11611 – 11695 VENTURA BOULEVARD & 4010 – 4028 COLFAX AVENUE PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Project Site - 3.62 ac.

N

0 40 80 160

Feet

1 inch = 80 feet

Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: North American 1983
Map Prepared by: K. Kartunen, GLA
Date Prepared: April 18, 2024

11611 – 11695 VENTURA BOULEVARD & 4010 – 4028 COLFAX AVENUE PROJECT

Aerial Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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Photograph 1: Northwest-facing view of the western side of the Project site, Note the fence along the right side of the photograph, demarcating the northern Project boundary. An Aleppo pine that overhangs the Project site s visible in the adjacent offsite area.

Photograph 2: Southeast-facing view of the eastern side of the Project site. Note the presence of sporadic weeds throughout the vacant lot.

GLENN LUKOS ASSOCIATES

11611 – 11695 VENTURA BOULEVARD & 4010 – 4028 COLFAX AVENUE PROJECT

Site Photographs

Photograph 3: Representative photograph of the offsite slope abutting the northern Project boundary. Note the sparse canopy cover and maintained understory.

Photograph 4: Additional representative photograph of the offsite slope abutting the northern Project boundary. Note the presence of coast live oak trees and Aleppo pines. The paved Los Angeles River is visible in the background.

Carlberg ASSOCIATES

Horticulturists and
Registered Consulting
ARBORISTS

CITY OF LOS ANGELES PROTECTED TREE REPORT
11611-11695 VENTURAL BLVD. AND 4000-4028 COLFAX AVE. LOS ANGELES, CALIFORNIA 91604

SUBMITTED TO:

JAMES D. RIVARD
MANAGING PARTNER, REAL ESTATE
SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200
SPOKANE, WA 99201
CC: JESSICA PAKDAMAN
ROSENHEIM & ASSOCIATES, INC.

PREPARED BY:

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

CHRISTY CUBA
ASCA REGISTERED CONSULTING ARBORIST #502
ISA CERTIFIED ARBORIST #WE 1982A
ISA QUALIFIED TREE RISK ASSESSOR

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

DANIEL COWELL
STAFF ARBORIST, BIOLOGIST

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

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

www.cycarlberg.com

FEBRUARY 13, 2024

CITY OF LOS ANGELES PROTECTED TREE REPORT – COLFAX & VENTURA

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Carlberg ASSOCIATES
Horticulturists and
Registered Consulting
ARBORISTS

February 13, 2024

James D. Rivard
Managing Partner, Real Estate
SRM Development, LLC
111 N. Post, Suite 200
Spokane, WA 99201
Cc: Jessica Pakdaman, Rosenheim & Associates, Inc.

Re: Colfax & Ventura, 11611-11695 Ventura Blvd. and 4000-4028 Colfax Ave., Los Angeles, CA 91604

Dear Mr. Rivard,

This Protected Tree Report is submitted in response to your request for arboricultural consulting services for the proposed eldercare facility to be located at 11611-11695 Ventura Boulevard and 4000-4028 Colfax Avenue in Los Angeles, California ("subject property"). This is a redevelopment project.

EXECUTIVE SUMMARY

MG at Studio City, LLC (c/o SRM Development, LLC) is proposing the development of Colfax & Ventura, an eldercare facility comprising a five-story building with 140 licensed assisted living care dwelling units and associated common areas, amenities, and services. Also proposed is a three-story senior independent housing building with 59 unlicensed independent living dwelling units and associated common areas and amenities. The development includes a publicly accessible, privately-owned and maintained local-serving pocket park. Both buildings will share one level of subterranean parking. The existing commercial and industrial structures are proposed to be demolished.

A wrought iron fence and retaining wall separates the subject property from the Los Angeles River channel embankment (Los Angeles County property) immediately to the north. This property is part of the Los Angeles River Watershed and is maintained by the County of Los Angeles Department of Public Works. Some City trees exist on the north side of the fence and retaining wall along the top of the channel embankment where the property line veers downslope. North of the property line and along the embankment, there are numerous Los Angeles County protected oak trees.

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

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

www.cycarlberg.com

The subject property is within City of Los Angeles limits and is subject to the requirements set forth by the City of Los Angeles's Tree Protection Ordinance No. 186,873 (Ordinance). County-owned oak trees overhanging the subject property may be protected by the Los Angeles County Oak Tree Ordinance. We applied the size thresholds, definitions, and report requirements of the County Ordinance to these trees.

Carlberg arborists conducted the tree inventory on September 3 and December 28, 2023. We assessed a total of 106 trees:

- 63 private property trees (5 are protected).
- 36 off-site Los Angeles County Flood Control property trees (including 32 coast live oaks and 1 Southern California black walnut).
- Seven (7) public right-of-way (PROW) trees.

One (1) PROW tree and 54 private, non-protected trees are proposed for removal. No private property City Ordinance-protected trees or offsite trees are proposed to be removed. Five City Ordinance-protected trees and 32 County of Los Angeles oak trees are proposed to remain with varying degrees of encroachment.

Recommendations for tree protection and construction monitoring contained within this report and shown on the Tree Impact and Protection Plan are excerpted from the following arboricultural industry standards, best practices, and applicable Ordinances and tree reporting requirements:

- *ANSI A300 - 2023, Tree Care Standards for trees, shrubs, palms and other woody landscape plants.* Manchester, NH: Tree Care Industry Association, 2023.
- *Los Angeles County Oak Tree Ordinance,* Section 22.56.2050: Oak Tree Permit Regulations.
- *Management of Trees and Shrubs During Site Development and Construction, 3rd Ed. Best Management Practices.* Companion publication to the ANSI A300 Part 5: Tree Shrub, and Other Woody Plant Maintenance—Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction). Atlanta, Georgia: International Society of Arboriculture, 2023.
- *City of Los Angeles Standard Tree Removal Application Checklist*
- *City of Los Angeles Tree Protection Ordinance No. 186,873*

ASSIGNMENT AND PURPOSE OF THE TREE REPORT

Carlberg Associates (Carlberg) was retained to conduct a tree inventory and prepare a Protected Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance No. 186,873 and Planning Department's Tree Report Template (CP-4068, July 13, 2023). We applied the requirements of the Los Angeles County Oak Tree Ordinance to the county-owned oak trees.

This Tree Report will be used during the entitlement and environmental approval process to aid decision-makers and the public in understanding the existing tree resources present on and immediately adjacent to the project site, and the potential impacts of the project on those tree resources.

Governing Documents:

City of Los Angeles's Tree Protection Ordinance No. 186,873 (Ordinance)
Protected trees and shrubs as set forth in the Ordinance comprise the following species that measure four inches or greater in additive trunk diameter (measured at 4.5 feet above natural grade):

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

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

Los Angeles City Planning CP-4068 [07.07.2022] Tree Report Template (Template)
The Template (dated July 13, 2023) requires the collection and reporting on additional data beyond that required by the Ordinance, both on- and offsite. Some key requirements of the Template include inventory and assessment of all onsite trees regardless of species or size, inventory of offsite trees whose protected zones may be impacted by the project, inventory of all adjacent street trees, photographs of each tree, mapping of all trees' locations and their canopies (driplines) plus protected zones, and the tree expert's opinion as to whether the tree occurs naturally or was planted.

Los Angeles County Oak Tree Ordinance (Chapter 22.56, Part 16, Oak Tree Permits)
Protected trees as set forth in the Ordinance are any tree in the oak genus which is
(a) 25 inches or more in circumference (eight inches in diameter) as measured four and one-half feet above mean natural grade; in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) as measured four and one half feet above mean natural grade, on any lot or parcel of land within the unincorporated area of Los Angeles County, or
(b) any tree that has been provided as a replacement tree, pursuant to Section 22.56.2180, on any lot or parcel of land within the unincorporated area of Los Angeles County.

Note: The Template sets forth two definitions of a tree protection zone: "a distance from the tree trunk that equates to 12 x the trunk diameter at standard or breast height" (p. 5) and "The Tree Protection Zone usually measures 15 feet beyond the dripline" (p. 12).

The Los Angeles County Oak Tree Ordinance defines the tree protection zone as 5 feet from the dripline of a tree or a minimum of 15 feet from the trunk of an unbalanced or young tree, whichever is greater. We applied the County Ordinance definition of a tree protection zone to the County trees.

PROJECT OVERVIEW

Project Location

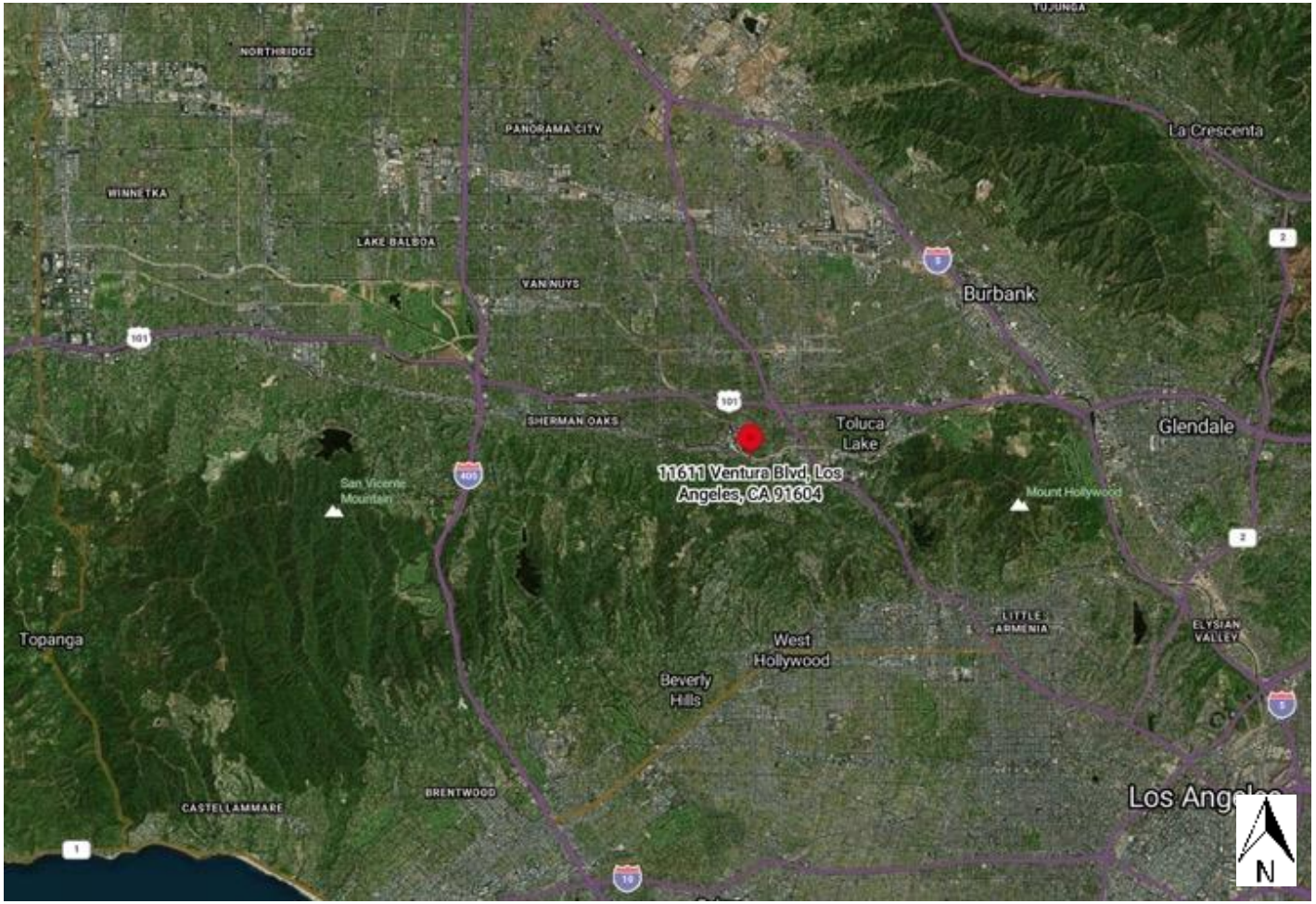
The proposed Project is located at the northeast corner of Ventura Boulevard and Colfax Avenue, in the Studio City neighborhood of the City of Los Angeles. **Table 1** provides basic information for the Project.

TABLE 1 – PROJECT INFORMATION

Project Name	Colfax & Ventura
Project Address	11611-11695 Ventura Blvd. and 4000-4028 Colfax Ave., Los Angeles, CA 91604
Project APN	2368-007-001, 2368-007-030, 2368-007-029, 2368-007-028, 2368-007-002
Project Site Area	2.408 acres (104,885 SF)
Project Timeline (approximate)	Remaining entitlement process: 4-11 months Building permitting process: 8-15 months Construction process: Anticipated completion +/- 22 months after permit received
Entitlement Case No.	ZA-2021-9477-ELD-CUB-SPP-DD-SPR, VTT-83460
Environmental Case No.	ENV-2021-9478-EAF
Owner / Applicant	MG at Studio City, LLC (c/o SRM Development, LLC)
Owner Representative	James D. Rivard, Ryan B. Leong Managing Partner, Real Estate SRM Development, LLC 111 N. Post, Suite 200 Spokane, WA 99201 Cc: Jessica Pakdaman, Rosenheim & Associates, Inc.

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

EXHIBIT A – PROJECT LOCATION MAP

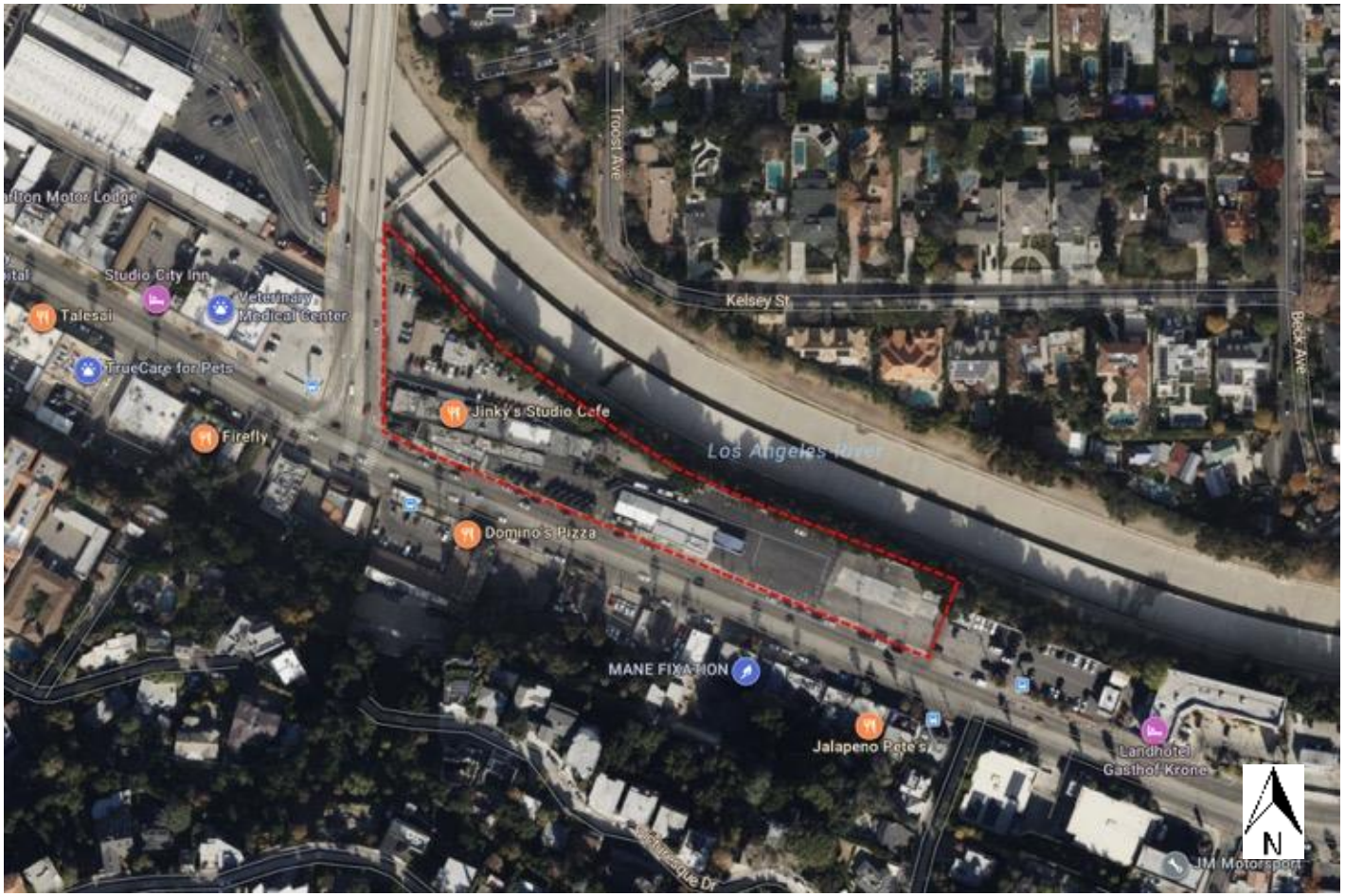


11611-11695 Ventura Blvd. and 4000-4028 Colfax Avenue, Los Angeles, CA 91604

Source – Bing Maps

No Scale

EXHIBIT B – AERIAL IMAGE OF THE PROJECT SITE



11611-11695 Ventura Blvd. and 4000-4028 Colfax Avenue, Los Angeles, CA 91604

Source – Bing Maps

No Scale

Project Description

MG at Studio City, LLC (c/o SRM Development, LLC) is proposing the development of Colfax & Ventura, an eldercare facility comprising a five-story building with 140 licensed assisted living care dwelling units and associated common areas, amenities, and services. Also proposed is a three-story senior independent housing building with 59 unlicensed independent living dwelling units and associated common areas and amenities. The development includes a publicly accessible, privately-owned and maintained local-serving pocket park. Both buildings will share one level of subterranean parking. The new building square footage (floor area) for the eldercare facility will total approximately 204,280 square feet. The existing commercial structures with a total of approximately 22,488 square feet of floor area are proposed to be demolished.

An approximately 390-foot long retaining wall separating the subject property from the adjacent Los Angeles River (County) property has been found to be at high risk of collapse. This wall, spanning from approximately the middle to the east end of the site, is proposed to be removed. As discussed in the structural engineer's report (DCI Engineers, see Appendix A), the existing retaining wall does not meet stability requirements under the existing code. Soil has eroded away from the outside face of the footing. In some cases, erosion has left the bottom of the footing exposed and not in contact with the substrate. Due to the poor soil conditions, erosion, and the undersized footing, it is the opinion of the structural engineer that the wall is at high risk of overturning and sliding. DCI Engineers recommends the wall and footing be removed to avoid collapse of the wall.

In order to preserve a number of County oak trees, this wall will not be rebuilt. The project has been designed in that area with a lower finish grade that will generally match the adjacent elevations. This will eliminate the need to install a new retaining wall and associated footing.

Oak trees that occur on that river channel embankment north of the subject property line are within the jurisdiction of the Los Angeles County Stormwater Maintenance Division - Department of Public Works. Those oak trees may be protected by the Los Angeles County Oak Tree Ordinance (Section 22.56.2050: Oak Tree Permit Regulations, Los Angeles County Date of Adoption: September 13, 1988). We applied the size thresholds and report requirements of that Ordinance to those trees.

TREE ASSESSMENT METHODOLOGY AND DATA PRESENTATION

Project Trees

Carlberg arborists and field technicians conducted the tree inventory on September 3 and December 28, 2023. Weather conditions were mostly sunny throughout the duration of the inventory. The tree inventory was conducted on foot. We walked the entire project site to inventory and assess all onsite trees and all offsite (County) trees whose canopies or protected zones[1] extended into the project site.

The trees were identified, their health and structural condition evaluated[2], trunk diameters measured, heights and canopy spreads approximated, and trunk locations plotted on the topographic survey map provided to us by the project team.

[1] 'Protected zone' in this case refers to the definition in the Los Angeles County Oak Tree Ordinance: 5 feet from the dripline of a tree or 15 feet from the trunk of an unbalanced or young tree, whichever is greater. (Section 22.56.2050: Oak Tree Permit Regulations, 1988).

[2] Each tree is assigned two letter grades, one for overall health and one for structure. Definitions for the letter grades are included in the appendices of this report.

More specifically, the inventory included the following assessment factors for protected and non-protected, onsite, immediately offsite, and street / PROW trees:

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

Field data was collected on tablets, tree trunk locations were generally mapped on a 50-scale, 36” x 48” topographic sheet map, and photographs were taken with digital cameras. Tree identification numbers, trunk locations, and tree canopies with protection zones are graphically represented on the Tree Location Exhibit prepared by Carlberg in AutoCAD.

The Tree Photograph Exhibit provides captioned photographs of the trees and provides an idea of site context, tree densities, conformation, and vigor.

OBSERVATIONS

Project Trees

The subject property is generally flat land comprising commercial buildings and asphalt hardscape. Most trees are located adjacent to the property line separating the County Flood Control and City properties. As the enclosed graphics illustrate, a number of private property, City-protected trees are located on the channel embankment, between the fence line situated at the top of the slope and the northern property boundary, which veers downslope at the west end of the property. On the northeast side of the site, the northern property line and the top of the embankment, where the fence and wall are located, converge. Since this can be confusing, we color-coded City and County trees in the exhibits.

We inventoried and assessed 106 trees of 16 different species on and immediately adjacent to the 2.408-acre property; 36 are off-site trees with canopies that overhang the subject property.

- City of Los Angeles Private Property Non-protected Trees (City NP): 58
- City of Los Angeles Private Property Protected Trees (City P): 5
- City of Los Angeles Public Rights-of-Way (PROW) Trees: 7
- City of Los Angeles Street (Parkway) Trees: 0

- County of Los Angeles Flood Control Property Trees whose Canopies Overhang the Project Site (offsite, OS) trees: 36
    - Of these, 32 are coast live oaks and one is a Southern California black walnut.

Table 2 summarizes the 16 types of trees found, their onsite, offsite, or public right-of-way status, and how many of each type are included in the inventory. For the purposes of this report, public right-of-way trees are defined as intentionally planted or volunteer trees located in public right-of-way areas that are not clearly defined parkways between roads and sidewalks or in specific street-tree designated cutouts in a sidewalk. Street trees are defined as intentionally planted or voluntary trees located in clearly defined parkways between streets and sidewalks or in specific street-tree designated cutouts in a sidewalk.

TABLE 2 – SUMMARY OF INVENTORIED PROJECT SITE, PROW, AND OFFSITE TREES WHOSE CANOPIES OVERHANG THE SITE

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE	TOTAL NO. PROW	TOTAL NO. TREE SPECIES
Aleppo pine	*Pinus halepensis*	5			5
Canary Island pine	*Pinus canariensis*			1	1
Chinese elm	*Ulmus parvifolia*	1			1
citrus	*Citrus sp.*	1			1
coast live oak	*Quercus agrifolia*	8	32		40
common myrtle	*Myrtus communis*	1			1
Indian laurel fig	*Ficus microcarpa*	1	1		2
Mexican fan palm	*Washingtonia robusta*	11			11
mulberry	*Morus alba*		1		1
peach	*Prunus persica*	1			1
pecan	*Carya illinoinensis*	2			2
Shamel ash	*Fraxinus uhdei*	2	1		3
Southern California black walnut	*Juglans californica*	2	1		3
Texas privet	*Ligustrum texanum*	28			28
Torrey pine	*Pinus torreyana*			5	5
weeping fig	*Ficus benjamina*			1	1
		63	**36**	**7**	**106**

Tables 3-5 on the following pages are summaries of protected trees, offsite trees, and private property trees. **Exhibit C** – **Reduced Copy of the Tree Location Exhibit** on page 18 provides an illustrative presentation of the existing trees. A full-size, 30" x 42", 1":30'-scale, color copy of the Tree Location Exhibit is submitted separately in PDF format.

More detailed information for each tree may be found in **Exhibit H - Tree Inventory Field Data.** Captioned photographs of each tree, or groups of trees where appropriate, are located in **Exhibit I - Tree Photograph Exhibit**. Both of those exhibits are enclosed near the end of this report.

TABLE 3 – ONSITE PROTECTED TREES
(ALL TO BE PRESERVED)

ON-SITE	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
City P	53	Southern California black walnut	*Juglans californica*	9.1, 12.1, 3, 3, 4	24	15	12	12	18	A-	B
City P	55	coast live oak	*Quercus agrifolia*	7.4	20	11	10	10	8	B+	B
City P	62	Southern California black walnut	*Juglans californica*	6.2, 6.5, 5.3	16	14	14	9	2	A-	B-
City P	65	coast live oak	*Quercus agrifolia*	13.3	32	15	14	19	8	B	B
City P	74	coast live oak	*Quercus agrifolia*	26.5	42	25	28	44	20	A-	B

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

TABLE 4 – OFFSITE TREES
WHOSE PROTECTED ZONES OVERHANG THE PROJECT SITE (ALL TO BE PRESERVED)

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
OS	59	coast live oak	*Quercus agrifolia*	7.7, 9, 4.8	20	13	13	12	13	A	B
OS	60	coast live oak	*Quercus agrifolia*	5.8, 5.8, 4, 3.6, 2.7, 3	20	13	11	14	13	B	B
OS	63	coast live oak	*Quercus agrifolia*	10.8	28	16	14	0	14	B	B
OS	64	coast live oak	*Quercus agrifolia*	18.2	35	17	16	23	20	B	B-
OS	66	coast live oak	*Quercus agrifolia*	6.5	18	0	10	14	10	C	C
OS	67	coast live oak	*Quercus agrifolia*	8.7	20	2	9	14	10	B	B
OS	68	coast live oak	*Quercus agrifolia*	8.1	18	0	8	9	9	B-	B-
OS	70	Shamel ash	*Fraxinus uhdei*	15.9, 13.5, 2.5, 2	40	17	14	14	15	B	B
OS	71	coast live oak	*Quercus agrifolia*	6.7, 9	20	18	12	5	6	B	B-
OS	73	coast live oak	*Quercus agrifolia*	8.3, 13.3, 2.5	30	16	14	18	10	B	B-
OS	75	coast live oak	*Quercus agrifolia*	10.5	25	14	24	10	0	A-	B-
OS	77	coast live oak	*Quercus agrifolia*	9.5	28	13	8	8	8	B	B
OS	78	coast live oak	*Quercus agrifolia*	9.1	26	22	16	9	12	A	B

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
OS	79	coast live oak	*Quercus agrifolia*	13.3	30	20	15	0	14	A	B
OS	80	coast live oak	*Quercus agrifolia*	13	32	0	18	20	16	A-	B-
OS	81	coast live oak	*Quercus agrifolia*	6.7	18	10	15	5	12	A	B
OS	82	coast live oak	*Quercus agrifolia*	5.3, 6, 32.2, 16.6	40	33	33	20	27	A	B+
OS	83	coast live oak	*Quercus agrifolia*	20.1	38	27	25	13	26	A-	B
OS	84	coast live oak	*Quercus agrifolia*	21.8	32	25	19	20	20	A	B
OS	85	coast live oak	*Quercus agrifolia*	18.9, 4	30	29	20	20	14	A-	B
OS	86	coast live oak	*Quercus agrifolia*	8.1, 7.6, 2.5, 2	20	13	15	20	0	B	B-
OS	87	coast live oak	*Quercus agrifolia*	9.5, 5.8, 10, 11.5	18	25	14	8	17	B-	B-
OS	88	coast live oak	*Quercus agrifolia*	24.4	35	28	28	20	27	A	B+
OS	89	coast live oak	*Quercus agrifolia*	13, 7.6	24	26	18	20	2	A-	B
OS	90	coast live oak	*Quercus agrifolia*	12.2, 15.4, 2.4	28	30	26	20	10	A	B
OS	91	Indian laurel fig	*Ficus microcarpa*	2, 3.8, 3.9, 3.5, 3.6	18	9	10	6	6	A	B+
OS	92	coast live oak	*Quercus agrifolia*	18.3	40	23	16	20	20	A	B

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
OS	93	coast live oak	*Quercus agrifolia*	24.4	35	22	22	15	24	A	B
OS	94	mulberry	*Morus alba*	11.1, 14	26	14	14	15	14	C-	C-
OS	95	coast live oak	*Quercus agrifolia*	~22	28	8	30	18	20	A-	B
OS	98	coast live oak	*Quercus agrifolia*	6.7	18	10	10	13	8	A	B
OS	99	Southern California black walnut	*Juglans californica*	1.1, .7	10	4	5	4	5	B	B
OS	100	coast live oak	*Quercus agrifolia*	3.8, 6.5	20	14	13	11	12	A	B
OS	101	coast live oak	*Quercus agrifolia*	6.5	25	11	4	13	12	A	B
OS	102	coast live oak	*Quercus agrifolia*	2.8	10	13	4	6	8	B	B
OS	111	coast live oak	*Quercus agrifolia*	4.1	16	16	5	6	6	B	B

TABLE 5 – SUMMARY OF ONSITE, NON-PROTECTED TREES

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	BT (brown trunk for palms)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
1	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
2	Texas privet	*Ligustrum texanum*	3.5		15	3	3	3	3	A	B
3	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B
4	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B
5	Texas privet	*Ligustrum texanum*	6.8		15	3	3	3	3	A	B
6	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B
7	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B
8	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B
9	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B
10	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B
11	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
12	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
13	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B
14	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B
15	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B
16	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B
17	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B
18	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B
19	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B
20	Texas privet	*Ligustrum texanum*	8.5		15	3	3	3	3	A	B
21	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B
22	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B
23	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B
24	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	BT (brown trunk for palms)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
25	Texas privet	*Ligustrum texanum*	6		15	3	3	3	3	A	B
26	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B
27	Texas privet	*Ligustrum texanum*	7		15	3	3	3	3	A	B
28	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B
29	peach	*Prunus persica*	8.2		18	8	6	10	8	A-	B
30	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
31	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
32	Mexican fan palm	*Washingtonia robusta*		50'	55	5	5	5	5	B	B
33	Mexican fan palm	*Washingtonia robusta*		60'	65	5	5	5	5	B	B
34	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
35	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
36	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B
37	Mexican fan palm	*Washingtonia robusta*		1'	7	4	0	4	4	A	B
38	citrus	*Citrus sp.*	1.5		12	7	7	8	7	A-	A-
39	Indian laurel fig	*Ficus microcarpa*	35 at 2 feet		18	9	11	10	12	A	B+
40	common myrtle	*Myrtus communis*	8		20	10	9	12	7	A	B+
41	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	A	A-
42	Mexican fan palm	*Washingtonia robusta*		35'	40	5	5	5	5	A	A-
43	Mexican fan palm	*Washingtonia robusta*		40'	45	5	5	5	5	A	A-
44	weeping fig	*Ficus benjamina*	~14		28	20	25	15	18	A	B
45	Torrey pine	*Pinus torreyana*	5.8		16	8	6	3	4	A	B+
46	Torrey pine	*Pinus torreyana*	7.2		18	8	7	8	10	A	B+
47	Torrey pine	*Pinus torreyana*	7		18	11	9	8	8	A	B+
48	Torrey pine	*Pinus torreyana*	7.6		24	11	12	7	10	A	B+
49	Torrey pine	*Pinus torreyana*	11		26	12	10	12	10	A	B+
50	Canary Island pine	*Pinus canariensis*	10.5		22	11	8	9	9	A	B+

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	BT (brown trunk for palms)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
51	pecan	*Carya illinoinensis*	7.7		20	12	10	12	10	A	B
52	Shamel ash	*Fraxinus uhdei*	1, 1.5		12	8	6	6	8	A	A
54	pecan	*Carya illinoinensis*	6.4		22	8	12	9	10	A	A-
56	Aleppo pine	*Pinus halepensis*	20.5		55	0	16	18	16	A	B-
57	Shamel ash	*Fraxinus uhdei*	2.3, 1.8, 2.1, 2.4, 2.3, 1.6		15	10	9	8	10	A	A-
58	Aleppo pine	*Pinus halepensis*	26.8		40	16	22	21	6	A	C
61	Aleppo pine	*Pinus halepensis*	29		44	20	23	21	23	A	B
69	Chinese elm	*Ulmus parvifolia*	4.1, 3.7, 2.5, 4.8		15	0	10	18	10	A	B
72	Aleppo pine	*Pinus halepensis*	31		40	21	20	11	20	A-	B
96	Aleppo pine	*Pinus halepensis*	31.5		40	20	24	10	20	A	B
97	coast live oak	*Quercus agrifolia*	3.6		10	13	6	5	12	A	B
103	coast live oak	*Quercus agrifolia*	.8, 1, .3, .3		6	3	2	2	4	B	B
114	coast live oak	*Quercus agrifolia*	1.2, .7, .4, .6, .5		10	7	7	6	6	A	B
115	coast live oak	*Quercus agrifolia*	.7, 1.2		10	9	7	2	0	A	B
116	coast live oak	*Quercus agrifolia*	1.3, .7, .8		10	7	6	6	5	B	B

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

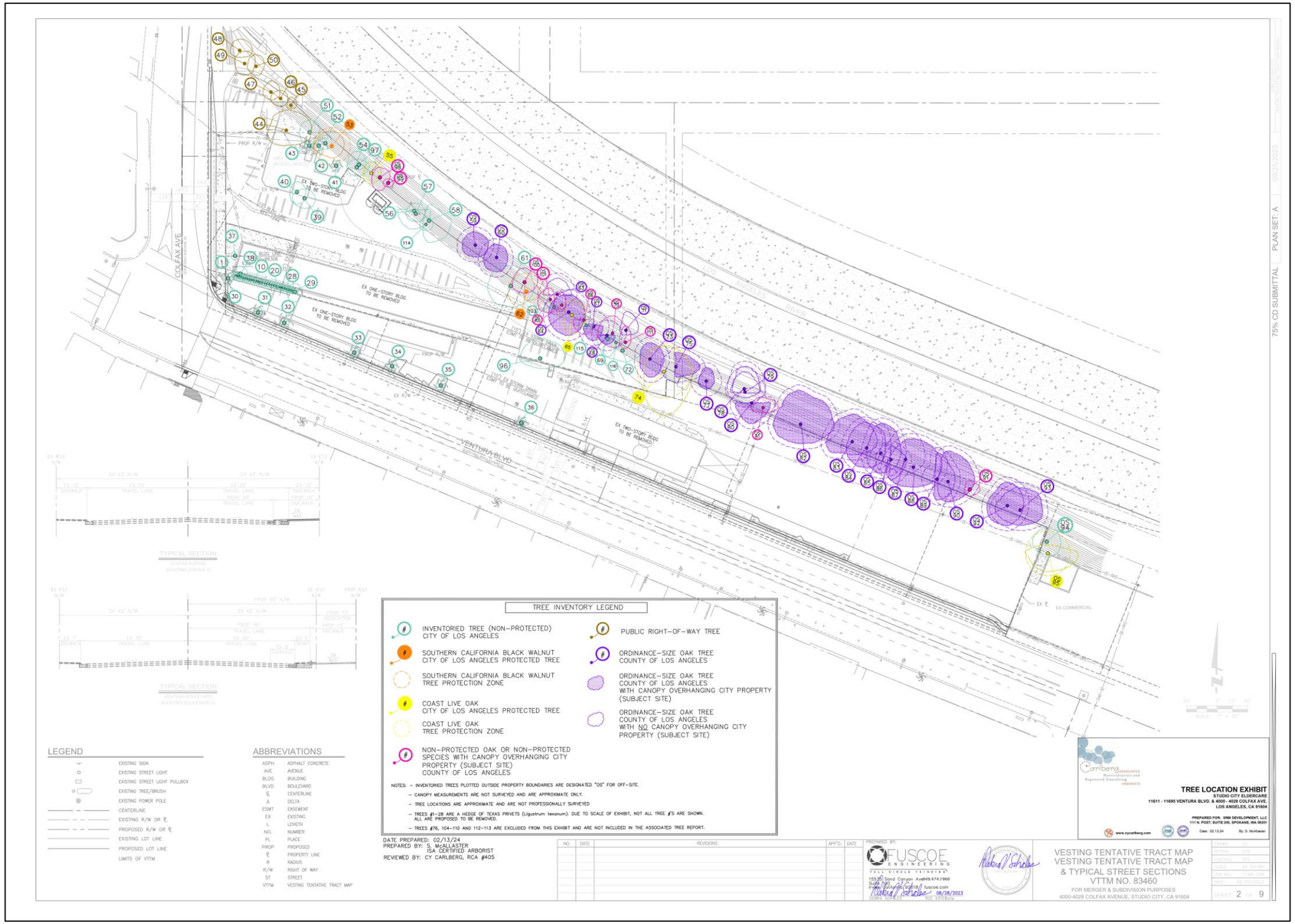
Tree nos. 44-50 are currently in the PROW. No. 44 is proposed to be removed (and replaced according to City street tree replacement ratios), 45 will be preserved become an onsite (private property) tree, and 46-50 will be preserved and remain PROW trees.

Tree No. 51 straddles the City/PROW property line and for purposes of this report is considered a City tree.

In our opinion, two southern California black walnuts (tree nos. 53 and 62), two pecan trees (nos. 51 and 54), one Chinese elm (no. 69), and three shamel ash (nos. 52, 57, and OS70) grew as volunteers[3]. The remaining private property trees appear to have been intentionally planted into the landscape.

[3] A plant that grows on its own from a random seed rather than being deliberately planted.

EXHIBIT D – REDUCED COPY OF THE TREE LOCATION EXHIBIT
(Not to Scale)



DISCUSSION OF PROJECT IMPACTS

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

- EXCAVATION/TRENCHING - ROOT SEVERANCE
- SOIL COMPACTION
- CHANGES IN GRADE
- ALTERATION OF THE WATER TABLE/SITE DRAINAGE
- CANOPY AND ROOT PRUNING

Excavation/Trenching—Root Severance

Trenching can include excavation for irrigation, utility, or drainage lines. Trenching and excavation can also be required for foundations of structures and free-standing walls. Trenching and excavation removes soil and tree roots. When performed in the critical root zone (which is in some calculations, approximately 5x to 6x the trunk diameter of any tree[4]), or within the dripline (outer edge of the natural canopy), there is the potential to remove large areas of root mass, and to shatter and tear roots that will remain connected to the tree(s). Torn and shattered roots cannot callous over or generate new roots in the manner of cleanly-cut roots. Torn and shattered roots are potentially unstable, are entry points for disease and decay organisms, and eventually die. Significant root loss and/or severance can be critical to the health and structure of trees to remain in a landscape.

Cutting roots closer than six times the DBH on one side of the tree can cause sustained and chronic water stress symptoms in some species, which can lead to other tree health problems, such as increased susceptibility to pests, diseases, drought, or other environmental pressures. When cuts are made closer to the trunk, stability and health may be compromised and should therefore be avoided. Immediate tree stability has been found to be compromised on some species when cuts are made at a distance from the trunk that is within three times the DBH. For most species, when roots are cut at a distance from the trunk that is closer than one to one-and-a-half times the DBH, immediate stability will be reduced, and long-term health and survival will be impacted.[5]

Soil Compaction

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

Changes in Grade

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

[4] Management of Trees and Shrubs During Site Development and Construction – Best Management Practices. (Atlanta Georgia: International Society of Arboriculture, 2023), p. 45.

Alteration of the Water Table/Site Drainage

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

Structures such as footings, basements, subterranean buildings, and retaining walls may intercept impermeable layers in the soil on which water perches. If adequate drainage is not provided, the water table uphill may gradually rise and interfere with tree roots. This type of damage usually takes a period of time to be recognized and diagnosed.[5]

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

Canopy and Root Pruning

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

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

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

Trees to be preserved or removed, along with the proposed location of recommended protective fencing, are illustrated on the reduced and full-sized copies of the Tree Location Exhibit and Impact Plan. Full-size, 30" x 42", 1":20'-scale, color copies of the Tree Location Exhibit and Impact Plan are submitted separately in PDF format.

[5] Nelda Matheny and James R. Clark, Trees and Development: A Technical Guide to Preservation of Trees During Land Development, (Champaign, Illinois: International Society of Arboriculture, 1998), pp. 88-89.

Tables 6-10 on the following pages provide details of the trees proposed for preservation and removal and summarize the construction impacts. As summarized in the tables:

- **54 non-protected, onsite trees will be removed**
- **4 non-protected, onsite trees will be preserved**
- **0 offsite trees will be removed**
- **36 offsite trees will be preserved**
- **0 Ordinance-protected, onsite trees will be removed**
- **5 Ordinance-protected, onsite trees will be preserved**
- **1 Public Right-of-Way tree will be removed**
- **6 Public Right-of-Way trees will be preserved**

AVOIDANCE AND MINIMIZATION MEASURES

Tree Retention/Preservation Efforts for Private Property and Off-Site (Los Angeles County Flood Control) trees:

- The Applicant is seeking a deviation from the River Improvement Overlay (RIO) District Ordinance requirement to provide new ADA access and an access gate to the LA River to the north. Satisfying the RIO District requirement would require construction of a concrete ADA access ramp in the existing landscape slope. Due to the significant difference in grade between the project site and the river trail, the ADA access ramp would include four switchbacks and new retaining walls. Grading the ramp and retaining walls would require removal of mature Protected Trees on the adjoining slope (Los Angeles County Flood Control property). To avoid tree removals on the slope, and since there is an existing access ramp to the LA River located on Colfax Avenue just northwest of the project site, the Applicant instead proposes to construct a publicly accessible, but privately-owned and maintained, local-serving pocket park at the northwest corner of the project site. California native trees are proposed to be planted in the pocket park.

- The grading plan was revised to lower the grade on the east side of the project site by approximately 10 feet to avoid the need to construct a new retaining wall to replace the existing failing retaining wall. A new retaining wall would have required shoring and the removal of approximately 15 Los Angeles County protected oak trees.

- The retaining wall originally proposed along the northwestern property boundary was moved farther to the south, and the location of the drive aisle near the northwest portion of the project site was adjusted to provide additional distance between the drive aisle and the Southern California black walnut near that location.

- The revised grading plan adjusted grades and eliminated the proposed retaining walls along the north property line to preserve two onsite walnuts and three coast live oaks. A raised curb with safety guardrails replaced the previously proposed retaining walls.

- Additional revisions to the grading plan were made to provide more space between the center drive aisle along the northern portion of the project and a large, adjacent coast live oak tree. This necessitated revisions to the design and location of the Modular Wetland System (necessary to comply with City of Los Angeles Sanitation Low Impact Development requirements).

- An east-west running retaining wall at the midpoint of project site was eliminated and replaced with a 2:1 slope to provide additional distance from two large coast live oaks.

- The northern façade of the Independent Living building on the east end of the project site was modified by pulling several sections of the building to the south, away from the existing branches of the protected trees on the County property. This reduced the unit count and floor area and impacted the design of the subterranean parking level below.

- To reduce impacts to County oaks, the Independent Living Building trash room was moved from Level L1 to Level P1 to eliminate an exterior walkway at the northwest corner of that building. This change also impacted the subterranean parking level below, resulting in the loss of parking stalls.

- The landscape plan was revised to include new landscaping in the City's public right-of-way area to remain between the proposed pocket park and the existing access to the LA River. This area will include installations of Southern California black walnuts (a concept which is subject to approval by the City of Los Angeles Bureau of Engineering, Department of Public Works).

- Carlberg recommended potholing to determine if roots from the County trees on the north side of the retaining wall had migrated under the footing of the retaining wall and into the subject property. There is an approximately 8-10 feet grade difference between the top of the slope where these trees' trunks are located near the wall interface and the hardscape elevations present on the current project site. A company was retained to perform this work and to determine the condition of the wall footing. The results of the potholing revealed roots less than one inch in diameter in the various potholes dug along the length of the wall.

TABLE 6 – CONSTRUCTION IMPACTS TO ONSITE PROTECTED TREES (ALL PROPOSED TO BE PRESERVED)

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
53	Southern California black walnut	*Juglans californica*	9.1, 12.1, 3, 3, 4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the Critical Root Zone (CRZ). Above-ground clearance pruning will be necessary to draw the canopy back approximately 8 feet.
55	coast live oak	*Quercus agrifolia*	7.4	Root impacts: Excavation is proposed on the south side of the tree approximately 6 feet from the trunk and into the CRZ. Above-ground clearance pruning will be necessary to draw the canopy back approximately 2 feet.
62	Southern California black walnut	*Juglans californica*	6.2, 6.5, 5.3	Root impacts: Excavation is proposed on the south side of the tree approximately 4.5 feet from the trunk and into the CRZ. Above-ground clearance pruning will be necessary to draw the canopy back approximately 3 feet.
65	coast live oak	*Quercus agrifolia*	13.3	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. Above-ground clearance pruning will be necessary to draw the canopy back approximately 8 feet.
74	coast live oak	*Quercus agrifolia*	26.5	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. Canopy pruning will be extensive on the side of the subject property (canopy extends ~37' south into the subject property). Approx. 15 feet of canopy will be required to be pruned for building clearance.

TABLE 7 – CONSTRUCTION IMPACTS TO OFFSITE PROTECTED TREES (ALL PROPOSED TO BE PRESERVED)

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
OS	59	coast live oak	*Quercus agrifolia*	7.7, 9, 4.8	No impacts into the TPZ are foreseen.
OS	60	coast live oak	*Quercus agrifolia*	5.8, 5.8, 4, 3.6, 2.7, 3	No impacts into the TPZ are foreseen.
OS	63	coast live oak	*Quercus agrifolia*	10.8	No impacts into the TPZ are foreseen.
OS	64	coast live oak	*Quercus agrifolia*	18.2	Root impacts: Excavation is proposed on the south side of the tree approximately 9 feet from the trunk and into the CRZ. 13 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	66	coast live oak	*Quercus agrifolia*	6.5	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. 3 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	67	coast live oak	*Quercus agrifolia*	8.7	Root impacts: Excavation is proposed on the south side of the tree approximately 9 feet from the trunk and into the CRZ. 4 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	68	coast live oak	*Quercus agrifolia*	8.1	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. 1 foot of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	71	coast live oak	*Quercus agrifolia*	6.7, 9	No impacts into the TPZ are foreseen.
OS	73	coast live oak	*Quercus agrifolia*	8.3, 13.3, 2.5	Root impacts: Excavation is proposed on the south side of the tree approximately 8 feet from the trunk and into the CRZ. 9 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	75	coast live oak	*Quercus agrifolia*	10.5	Root impacts: Excavation is proposed on the south side of the tree approximately 8 feet from the trunk and into the CRZ. 4 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
OS	77	coast live oak	*Quercus agrifolia*	9.5	Root impacts: Excavation is proposed on the south side of the tree approximately 4 feet from the trunk and into the CRZ. 3 feet of the canopy overhangs the development area. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	78	coast live oak	*Quercus agrifolia*	9.1	No impacts into the TPZ are foreseen.
OS	79	coast live oak	*Quercus agrifolia*	13.3	No impacts into the TPZ are foreseen.
OS	80	coast live oak	*Quercus agrifolia*	13	Root impacts: Excavation is proposed on the south side of the tree approximately 3 feet from the trunk and into the CRZ. 17 feet of the canopy overhangs subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	81	coast live oak	*Quercus agrifolia*	6.7	Root impacts: Excavation is proposed on the south side of the tree approximately 3 feet from the trunk. 4 feet of the canopy overhangs subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	82	coast live oak	*Quercus agrifolia*	5.3, 6, 32.2, 16.6	Root impacts: Excavation is proposed on the south side of the tree approximately 2 feet from the trunk and into the CRZ. 18 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	83	coast live oak	*Quercus agrifolia*	20.1	Root impacts: Excavation is proposed on the south side of the tree approximately 6 feet from the trunk and into the CRZ. 10 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	84	coast live oak	*Quercus agrifolia*	21.8	Root impacts: Excavation is proposed on the south side of the tree approximately 6 feet from the trunk and into the CRZ. 14 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	85	coast live oak	*Quercus agrifolia*	18.9, 4	Root impacts: Excavation is proposed on the south side of the tree approximately 7 feet from the trunk and into the CRZ. 12 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	86	coast live oak	*Quercus agrifolia*	8.1, 7.6, 2.5, 2	Root impacts: Excavation is proposed on the south side of the tree approximately 4 feet from the trunk and into the CRZ. 14 feet of the canopy overhangs the subject property.

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
					If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	87	coast live oak	*Quercus agrifolia*	9.5, 5.8, 10, 11.5	Root impacts: Excavation is proposed on the south side of the tree approximately 9 feet from the trunk and into the CRZ. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	88	coast live oak	*Quercus agrifolia*	24.4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. 16 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	89	coast live oak	*Quercus agrifolia*	13, 7.6	Root impacts: Excavation is proposed on the south side of the tree approximately 3 feet from the trunk and into the CRZ. 15 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	90	coast live oak	*Quercus agrifolia*	12.2, 15.4, 2.4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. 14 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	92	coast live oak	*Quercus agrifolia*	18.3	Root impacts: Excavation is proposed on the south side of the tree approximately 4 feet from the trunk and into the CRZ. 15 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	93	coast live oak	*Quercus agrifolia*	24.4	Root impacts: Excavation is proposed on the south side of the tree approximately 5 feet from the trunk and into the CRZ. 10 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	95	coast live oak	*Quercus agrifolia*	~22	Root impacts: Excavation is proposed on the west side of the tree approximately 8 feet from the trunk and into the CRZ. 10 feet of the canopy overhangs the subject property. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	98	coast live oak	*Quercus agrifolia*	6.7	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. No pruning is foreseen.
OS	100	coast live oak	*Quercus agrifolia*	3.8, 6.5	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. No pruning is foreseen.

OFF-SITE (OS)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	CONSTRUCTION IMPACTS AND NOTES
OS	101	coast live oak	*Quercus agrifolia*	6.5	Root impacts: Excavation is proposed on the south side of the tree approximately 10 feet from the trunk and into the CRZ. If pruning is required for construction clearance it will be accomplished with pruning cuts <2" in diameter.
OS	111	coast live oak	*Quercus agrifolia*	4.1	No impacts into the TPZ are foreseen.

TABLE 8 – PUBLIC RIGHT-OF-WAY TREES TO BE REMOVED

PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Remove, Preserve)
PROW	44	weeping fig	*Ficus benjamina*	~14		28	20	25	15	18	A	B	Remove

TABLE 9 – PUBLIC RIGHT-OF-WAY TREES TO BE PRESERVED

PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Remove, Preserve)
PROW	45	Torrey pine	*Pinus torreyana*	5.8		16	8	6	3	4	A	B+	Preserve
PROW	46	Torrey pine	*Pinus torreyana*	7.2		18	8	7	8	10	A	B+	Preserve
PROW	47	Torrey pine	*Pinus torreyana*	7		18	11	9	8	8	A	B+	Preserve
PROW	48	Torrey pine	*Pinus torreyana*	7.6		24	11	12	7	10	A	B+	Preserve
PROW	49	Torrey pine	*Pinus torreyana*	11		26	12	10	12	10	A	B+	Preserve
PROW	50	Canary Island pine	*Pinus canariensis*	10.5		22	11	8	9	9	A	B+	Preserve

TABLE 10 – NON-PROTECTED, ONSITE TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
1	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
2	Texas privet	*Ligustrum texanum*	3.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
3	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
4	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Grading of entire site	None required
5	Texas privet	*Ligustrum texanum*	6.8		15	3	3	3	3	A	B	P	Grading of entire site	None required
6	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
7	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
8	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B	P	Grading of entire site	None required
9	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B	P	Grading of entire site	None required
10	Texas privet	*Ligustrum texanum*	2.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
11	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
12	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
13	Texas privet	*Ligustrum texanum*	4.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
14	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B	P	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
15	Texas privet	*Ligustrum texanum*	4		15	3	3	3	3	A	B	P	Grading of entire site	None required
16	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B	P	Grading of entire site	None required
17	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Grading of entire site	None required
18	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Grading of entire site	None required
19	Texas privet	*Ligustrum texanum*	2		15	3	3	3	3	A	B	P	Grading of entire site	None required
20	Texas privet	*Ligustrum texanum*	8.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
21	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Grading of entire site	None required
22	Texas privet	*Ligustrum texanum*	3		15	3	3	3	3	A	B	P	Grading of entire site	None required
23	Texas privet	*Ligustrum texanum*	5		15	3	3	3	3	A	B	P	Grading of entire site	None required
24	Texas privet	*Ligustrum texanum*	8		15	3	3	3	3	A	B	P	Grading of entire site	None required
25	Texas privet	*Ligustrum texanum*	6		15	3	3	3	3	A	B	P	Grading of entire site	None required
26	Texas privet	*Ligustrum texanum*	5.5		15	3	3	3	3	A	B	P	Grading of entire site	None required
27	Texas privet	*Ligustrum texanum*	7		15	3	3	3	3	A	B	P	Grading of entire site	None required
28	Texas privet	*Ligustrum texanum*	10		15	3	3	3	3	A	B	P	Grading of entire site	None required
29	peach	*Prunus persica*	8.2		18	8	6	10	8	A-	B	P	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
30	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
31	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
32	Mexican fan palm	*Washingtonia robusta*		50'	55	5	5	5	5	B	B	P	Grading of entire site	None required
33	Mexican fan palm	*Washingtonia robusta*		60'	65	5	5	5	5	B	B	P	Grading of entire site	None required
34	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
35	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
36	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	B	B	P	Grading of entire site	None required
37	Mexican fan palm	*Washingtonia robusta*		1'	7	4	0	4	4	A	B	P	Grading of entire site	None required
38	citrus	*Citrus sp.*	1.5		12	7	7	8	7	A-	A-	P	Grading of entire site	None required
39	Indian laurel fig	*Ficus microcarpa*	35 at 2 feet		18	9	11	10	12	A	B+	P	Grading of entire site	None required
40	common myrtle	*Myrtus communis*	8		20	10	9	12	7	A	B+	P	Grading of entire site	None required
41	Mexican fan palm	*Washingtonia robusta*		55'	60	5	5	5	5	A	A-	P	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
42	Mexican fan palm	*Washingtonia robusta*		35'	40	5	5	5	5	A	A-	P	Grading of entire site	None required
43	Mexican fan palm	*Washingtonia robusta*		40'	45	5	5	5	5	A	A-	P	Grading of entire site	None required
44	weeping fig	*Ficus benjamina*	~14		28	20	25	15	18	A	B	P	Grading of entire site	None required
52	Shamel ash	*Fraxinus uhdei*	1, 1.5		12	8	6	6	8	A	A	N	Grading of entire site	None required
56	Aleppo pine	*Pinus halepensis*	20.5		55	0	16	18	16	A	B-	P	Grading of entire site	None required
57	Shamel ash	*Fraxinus uhdei*	2.3, 1.8, 2.1, 2.4, 2.3, 1.6		15	10	9	8	10	A	A-	N	Grading of entire site	None required
58	Aleppo pine	*Pinus halepensis*	26.8		40	16	22	21	6	A	C	P	Grading of entire site	None required
61	Aleppo pine	*Pinus halepensis*	29		44	20	23	21	23	A	B	P	Grading of entire site	None required
69	Chinese elm	*Ulmus parvifolia*	4.1, 3.7, 2.5, 4.8		15	0	10	18	10	A	B	N	Grading of entire site	None required

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Brown Trunk (palms – Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
72	Aleppo pine	*Pinus halepensis*	31		40	21	20	11	20	A-	B	P	Grading of entire site	None required
96	Aleppo pine	*Pinus halepensis*	31.5		40	20	24	10	20	A	B	P	Grading of entire site	None required
114	coast live oak	*Quercus agrifolia*	1.2, .7, .4, .6, .5		10	7	7	6	6	A	B	P	Grading of entire site	None required
115	coast live oak	*Quercus agrifolia*	.7, 1.2		10	9	7	2	0	A	B	P	Grading of entire site	None required
116	coast live oak	*Quercus agrifolia*	1.3, .7, .8		10	7	6	6	5	B	B	P	Grading of entire site	None required

EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 1 OF 4)

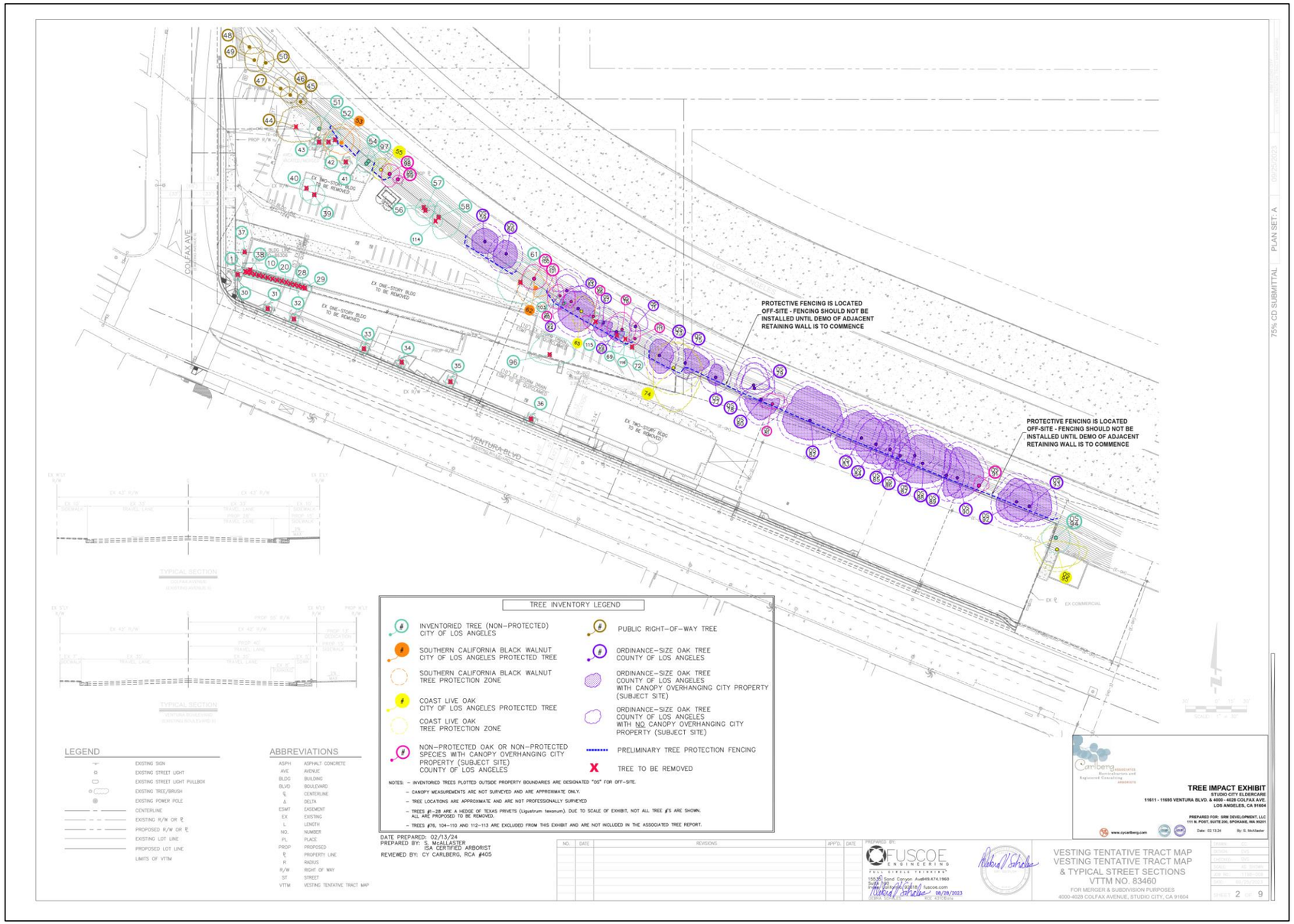


EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 2 OF 4)

EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 3 OF 4)

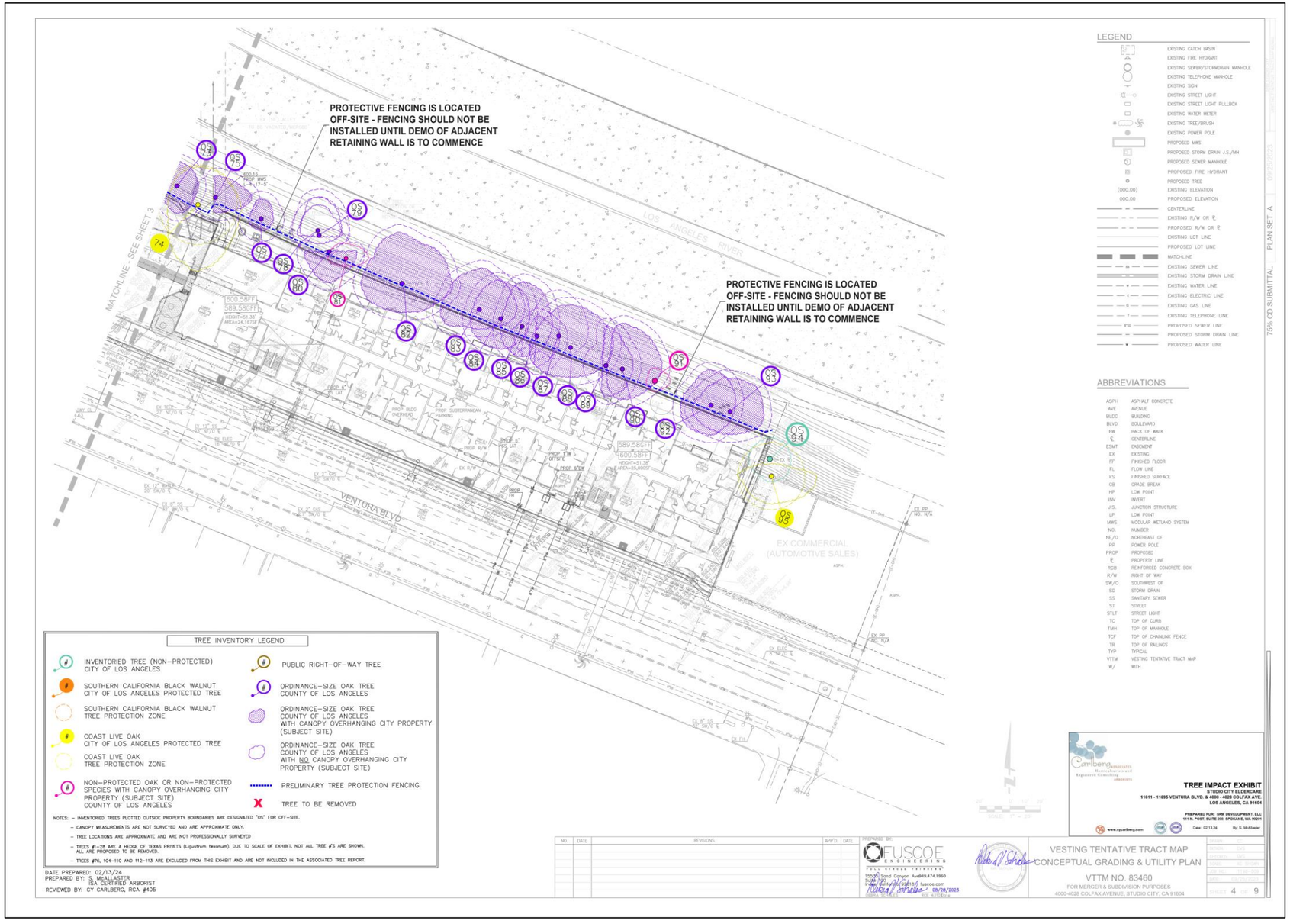


EXHIBIT D – REDUCED COPY OF TREE IMPACT EXHIBIT AND PROTECTION PLAN (P. 4 OF 4)

TREE INVENTORY DATA TABLE

City Protected/ City Non-Protected/ Offsite/PROW	Tree #	Common Name	Botanical Name	Diameter at 4.5 feet (DBH) (in inches)	Brown Trunk if palm (in feet)	Height (in feet)	Canopy Spread N (in feet)	Canopy Spread E (in feet)	Canopy Spread S (in feet)	Canopy Spread W (in feet)	Health	Structure	Planted (P) or Naturally Occurring (N)	Preserve/ Remove
City NP	1	Texas privet	Ligustrum texanum	4		15	3	3	3	3	A	B	P	Remove
City NP	2	Texas privet	Ligustrum texanum	3.5		15	3	3	3	3	A	B	P	Remove
City NP	3	Texas privet	Ligustrum texanum	4.5		15	3	3	3	3	A	B	P	Remove
City NP	4	Texas privet	Ligustrum texanum	5		15	3	3	3	3	A	B	P	Remove
City NP	5	Texas privet	Ligustrum texanum	6.8		15	3	3	3	3	A	B	P	Remove
City NP	6	Texas privet	Ligustrum texanum	2.5		15	3	3	3	3	A	B	P	Remove
City NP	7	Texas privet	Ligustrum texanum	2.5		15	3	3	3	3	A	B	P	Remove
City NP	8	Texas privet	Ligustrum texanum	2		15	3	3	3	3	A	B	P	Remove
City NP	9	Texas privet	Ligustrum texanum	18		15	3	3	3	3	A	B	P	Remove
City NP	10	Texas privet	Ligustrum texanum	2.5		15	3	3	3	3	A	B	P	Remove
City NP	11	Texas privet	Ligustrum texanum	4		15	3	3	3	3	A	B	P	Remove
City NP	12	Texas privet	Ligustrum texanum	4		15	3	3	3	3	A	B	P	Remove
City NP	13	Texas privet	Ligustrum texanum	4.5		15	3	3	3	3	A	B	P	Remove
City NP	14	Texas privet	Ligustrum texanum	5.5		15	3	3	3	3	A	B	P	Remove
City NP	15	Texas privet	Ligustrum texanum	4		15	3	3	3	3	A	B	P	Remove
City NP	16	Texas privet	Ligustrum texanum	3		15	3	3	3	3	A	B	P	Remove
City NP	17	Texas privet	Ligustrum texanum	6		15	3	3	3	3	A	B	P	Remove
City NP	18	Texas privet	Ligustrum texanum	6		15	3	3	3	3	A	B	P	Remove
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

City of Los Angeles Tree Protection Notes:

Root Protection Zone

Tree roots are generally located in the top 12 - 36 inches of soil and can extend to a distance exceeding the trees height and/or width. The larger, structural roots located 3-5 feet from the trunk are often relatively inactive, and if cut, can become infected with root disease that may cause a column of decay or sapwood death in the trunk and root collar. Dieback related to cambium death will reach the lateral branches and top of the tree with time. The smaller feeder/absorptive roots of the tree can sustain damage during construction from lack of water, soil compaction or physical damage resulting from cutting. The following guidelines are designed to minimize damage to the root system of protected trees. The following establish a "Root Protection Zone" to safeguard the health of protected trees and other trees to remain.

1. Some encroachments may be unavoidable. The Project Arborist shall monitor all work that must be performed in the Root Protection Zone.
2. Protective chain-link fencing, at least five feet in height, with an access gate of minimal width should be installed at the Root Protection Zone of protected trees (or as drawn on the Tree Protection Plan) and approved in place by the Project Arborist and city staff prior to the commencement of any demolition, grubbing, grading or construction. This pertains to both public (parkway trees, etc.) and private trees.
3. When chain link fencing cannot be placed to the limits of the Root Protection Zone, the Project Arborist may require that orange snow fencing be placed at the limits of the Root Protection Zone as a temporary protection measure until the encroachment work will be performed. This will be determined at a pre-demo/pre-construction job site meeting with the contractor and/or applicant.
4. The tree protection zone should be irrigated sufficiently with clean potable water to keep the tree in good health and vigor before, during, and after construction. This may mean deeply soaking the ground periodically. Installation of layers of sand bags or other material to create a watering well, or berm, may be necessary. The Project Arborist will recommend this activity, if necessary.
5. No construction staging or disposal of construction materials or byproducts including but not limited to paint, plaster, or chemical solutions is allowed in the Root Protection Zone.
6. The Root Protection Zone should not be subjected to flooding incidental to the construction work.
7. All work conducted in the ground within the Root Protection Zone of any protected tree should be accomplished with hand tools, unless an air-spade is utilized. Trenches in the Root Protection Zone should be tunneled, or completed with an air-spade to avoid damage to small feeder roots within the root protection zone. Information regarding air-spades is available from the project arborist.
8. Where structural footings are required and major roots (over 3" in diameter) will be impacted, the engineer of record should submit acceptable footing design alternatives and/or location alternatives to city staff before proceeding with further plan review.
9. Where more than 50% of the root zone is impacted or roots greater than 3 inches in diameter are to be removed within four feet of the trunk, the engineer of record should submit acceptable design alternatives to staff for review.
10. Any required trenching should be routed in such a manner as to minimize root damage. Radial trenching (radial to the tree trunk) is preferred as it is less harmful than tangential trenching. Construction activity should be diverted from the Root Protection Zone. Cutting of roots should be avoided (i.e. place pipes and cables below uncut roots). Wherever possible and in accordance with applicable code requirements, the same trench should be used for multiple utilities.
11. "Natural" or pre-construction grade should be maintained in the Root Protection Zone. At no time during or after construction should soil be in contact with the trunk of the tree above the basal flair.
12. In areas where the grade around the protected tree will be lowered, some root cutting may be unavoidable. Cuts should be clean and made at right angles to the roots. When practical, cut roots back to a branching lateral root. The Project Arborist shall monitor all root pruning.
13. When removing existing pavement in the Root Protection Zone, avoid the use of heavy equipment, which will compact and damage the root system. The Project Arborist shall monitor all demolition activities in the Root Protection Zones.
14. If the Project Arborist requires mulch in the Root Protection Zone, the mulch materials and location will be shown on the plan.
15. Larger projects may require construction staging plans to indicate where materials will be stored and how the equipment will move in and around the property to minimize damage to the Root Protection Zone and tree canopies. Those plans will be prepared by the project engineer.
16. Root damage and soil compaction may be mitigated in some cases by using plywood, mulch, or mulch and plywood in the Root Protection Zone. Where applicable, this will be illustrated on the Tree Protection Plan.
17. Weather proof, minimum 8 x 10 inches, signage shall be applied to the fencing on all sides that states:

Tree Protection Fencing

Do Not Remove Without Authorization From

The City of Los Angeles

Questions - call Project Arborist: Carlberg Associates

Christy Cuba (626) 428-5072 or Cy Carlberg (310) 451-4804

Pruning

1. Pruning shall be monitored by the Project Arborist at intervals and durations as they see fit to maintain tree integrity.
2. Pruning of all trees should be in accordance with industry standards (International Society of Arboriculture or ANZI 133.1).
3. Pruning of oaks should be limited to the removal of dead wood and the correction of potentially hazardous conditions, as evaluated by the Project Arborist. Excessive pruning is harmful to oaks and many other trees. Removal or reduction of major structural limbs should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i. e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.
4. Pruning of trees other than oaks should be limited to the removal or reduction of major structural limbs and should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i. e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.
5. Landmark Trees must be pruned by or under the direction of a qualified arborist.

D. Inspections

1. Inspection of Protective Fencing: The Project Arborist shall inspect the tree protection fencing prior to demolition, grubbing, grading, or construction. City staff may also inspect fencing to verify placement and approval of materials prior to the commencement of demolition, grading, or construction.
2. Pre-construction meeting. City staff may require an on-site pre-construction meeting with the contractor and or applicant to discuss tree protection with the site supervisor, grading equipment contractors, and demolition crew. The Project Arborist shall be present at that meeting.
3. Inspection of rough grading. City staff my require inspection to ensure protected trees will not be injured by compaction, cut or fill, drainage and trenching activities.
4. Special Activity in the Tree Protection Zone: The Project Arborist shall provide direct on-site supervision of work in the tree protection zone, as they deem appropriate.
5. Periodic Inspections: City staff may require inspections verifying adherence to tree protection measures during the on-going construction process. Allow a minimum of 48 hours for scheduling inspections.
6. The Project Arborist shall report discrepancies or deficiencies in Tree Protection to the site superintendent for corrective action. If corrective actions are not taken in a reasonable time frame, the Project Arborist may notify City staff for enforcement action.

E. Definitions

1. Basal flair or root crown means the tree trunk where it emerges from the root system and flairs out to create the base of the tree.
2. Canopy means the area of a tree that consists primarily of branches and leaves.
3. Dripline means the outermost area of the tree canopy (leafy area of tree).
4. Certified Arborist means an individual who has demonstrated knowledge and competency through obtainment of the current International Society of Arboriculture arborist certification.
5. Root Protection Zone means the area within a distance from the tree trunk that equates to 12 times the Diameter at Standard Height (DSH): e.g., 20" DSH x 12 = 240 inches (20 feet).

Public Trees-Maintained by the City of Los Angeles

Trees that are located in the parkway between the curb face and the property line, and therefore are public trees. To have any work done on these trees, including installation of Tree Protection Fencing, contact Urban Forestry at (213) 847-3077.

Carlberg ASSOCIATES Horticulturists and Registered Consulting Arborists

TREE IMPACT EXHIBIT
STUDIO CITY ELDERCARE
11611 - 11695 VENTURA BLVD. & 4000 - 4028 COLFAX AVE.
LOS ANGELES, CA 91604

PREPARED FOR: SRM DEVELOPMENT, LLC
111 N. POST, SUITE 200, SPOKANE, WA 99201

www.cycarlberg.com Date: 02.13.24 By: S. McAllaster

NO.	DATE	REVISIONS	APP'D.	DATE

PREPARED BY: FUSCOE ENGINEERING — FULL CIRCLE THINKING
15535 Sand Canyon Ave, Suite 100, Irvine, California 92618 — 949.474.1960 — fuscoe.com
DEBRA SCHALES RCE 43101 Date 08/28/2023

VESTING TENTATIVE TRACT MAP
CONCEPTUAL GRADING & UTILITY PLAN
VTTM NO. 83460
FOR MERGER & SUBDIVISION PURPOSES
4000-4028 COLFAX AVENUE, STUDIO CITY, CA 91604

DRAWN:	CC
DESIGN:	DVS
CHECKED:	DVS
SCALE:	AS SHOWN
JOB NO.:	1198-009
DATE:	09/25/2023
SHEET 4 OF 9	

09/25/2023 | PLAN SET: A | 75% CD SUBMITTAL

CONCLUSION AND RECOMMENDATIONS

Implementation of Colfax & Ventura Project, including demolition, grading, construction of improvements, and installation of streets and utilities for the proposed new parking, roads (driveways), new entry, buildings and utility changes, and the public right-of-way merger/vacation will likely result in the following:

Total Onsite Ordinance-Protected trees = 5
Removals = 0
Preserve = 5

Total Street trees = 7
Removals = 1
Preserve = 6

Total Offsite Ordinance-Protected trees = 31
Removals = 0
Preserve = 31

Total Offsite Non-Protected trees = 5
Removals = 0
Preserve = 5

Total Onsite Non-Protected trees = 58
Removals = 54
Preserve = 4

The preservation of onsite protected trees (nos. 53, 55, 62, 65 and 74) has been discussed at length with the developer, engineer, and architect. While engineering and design modifications to retain these trees have been made, the critical root zones[6] of these trees will be significantly impacted. Large roots may require removal to accomplish proposed grading. If large roots are found under the existing hardscape and must be removed from within the CRZ, some or all of these trees may become destabilized. Additionally, if masses of smaller, absorptive roots are found under the existing hardscape and significant amounts of those roots are removed, these trees may experience an irreversible decline in health and vigor.

The preservation of offsite (Los Angeles County) trees is proposed through the removal of the unstable retaining wall and grading the project site down to a level where a new retaining will not be required. The trunks of many of the large oak trees are within a few feet of the retaining wall separating the two properties. Along the existing retaining wall, the current grade of the subject property ranges between eight and ten feet above the grade at the top of the slope on the County property. The current design proposes a curb with 3.5-foot high guard rail to replace the existing fence and retaining wall along the top of the embankment.

[6] Critical root zone is defined as the area of ground approximately 5x the trunk diameter radially from the trunk outward.

Tree Replacements

Non-protected, Onsite Tree Removals:

New trees are proposed in accordance with the requirements set forth by the Ventura Boulevard Corridor Specific Plan (Section 7.D.1) and LAMC Section 12.21.G. The Applicant is proposing to plant 50 trees for the Project, including 21 street trees and 29 on-site trees (see the conceptual landscape plans, Landscape Development, Inc., February 12, 2024). To our knowledge, there is no code provision nor written City of Los Angeles policy that requires the replacement of on-site non-protected trees.

City Protected Tree Removals:

No onsite City of Los Angeles protected trees are proposed for removal; therefore, no replacements are proposed.

Offsite County Tree Removals:

No offsite County of Los Angeles protected oak trees are proposed for removal; therefore, no replacements are proposed.

Street Tree / Public Right-of-way Removals:

1. The one protected PROW tree proposed for removal will be replaced at a 2:1 ratio, as required for parkway trees by the City of Los Angeles, Bureau of Street Services, Urban Forestry Division's standard application for a tree removal permit.

2. Right of way trees are usually replaced with 24-inch box specimens using a 2:1 ratio. (Policy of Bureau of Street Services, Urban Forestry Division).

3. The subdivider posts a bond or other assurance acceptable to the City Engineer to guarantee the survival of the trees for a period of three years (Sec.5. Subsection R. of Section 17.05, 4.d). The bond amount will be determined through negotiations between the City Engineer and the Urban Forestry Division.

Findings for Protected Tree Removal

Since no protected tree removals are proposed, no recommended Findings for Protected Tree Removal are included.

General Recommendations and Best Management Practices for Preservation of Trees During Construction

During a typical demolition and construction project, the following should occur:

- Implementation of a tree protection plan
- Monitoring the site on the specified schedule, and
- Documenting or reporting as specified in the scope of work, such as:
  - Compliance with tree protection plan
  - Monitoring plant health, soil moisture, change in tree risk status, and/or tree damage;
  - Changes or damage to the tree protection zone barriers;
  - Documentation and communication of severely damaged plants and recommendations for minor damage; and,
  - Additional factors as specified.

It is common in the arboricultural industry to use the following sources when identifying project tree protection measures:

- *ANSI A300 - 2023 Tree Care Standards for trees, shrubs, palms and other woody landscape plants.*
- *Los Angeles County Oak Tree Ordinance, Section 22.56.2050: Oak Tree Permit Regulations.*
- *Management of Trees and Shrubs During Site Development and Construction, 3rd Ed. Best Management Practices.*
- *City of Los Angeles Standard Tree Removal Application Checklist*
- *City of Los Angeles's Tree Protection Ordinance No. 186,873*

In my professional opinion the excerpted recommendations below, as well as those appearing on the Tree Impact and Protection Plan, should be implemented for tree protection prior to and during Project demolition and construction.

1. During the pre-construction phase: Tree protection objectives, plans, specifications, and consequences for non-compliance should be communicated to the project manager, property owner and relevant contractors. (ANSI A300-2023, 9.6.1)
2. Exposed roots to remain should be covered with burlap, carpet remnants or other material that may be kept moist until soil can be replaced. (ANSI A300-2023, 9.10.3.8)
3. This report shall be part of the set of plans given to the contractors. Contractors should be familiar with the specific instructions and responsibilities pertaining to protected trees. It is recommended that a professional arborist be retained and meet with the contractor and his personnel prior to commencement of the project. (ANSI A300-2023, 9.6.1)
4. If canopy pruning is found to be necessary for trees to remain, it should only be performed by qualified arborists or other qualified professionals who, through related training and on-the-job experience, are familiar with the standards, practices, and hazards or arboriculture operations and equipment. (ANSI A300-2023, 4.4.3) Climbing "spurs" shall not be used by any tree climber except in an emergency to reach an injured climber, when removing a tree, or in situations that are impractical, as outlined in the ANSI 300-2023 Tree Care Standards. (ANSI A300-2023, 4.5.3, 5.5.14)

5. City of Los Angeles protected trees shall not be removed until/unless approval is granted by the City of Los Angeles' Urban Forestry Division. (City of Los Angeles's Tree Protection Ordinance No. 186,873, Sec. 46.00)
6. County of Los Angeles protected trees shall not be removed until/unless approval is granted by the appropriate county agency. (Los Angeles County Oak Tree Ordinance, Section 22.56.2060)
7. Pruning activities may affect wildlife either directly through disturbance or by manipulation of habitat such as food supplies, cover, nesting or roosting sites. Pruning activities may also violate certain regulations including the federal Migratory Bird Treaty Act, the Endangered Species Act, and other federal, state, and local regulations. Arborists need to be aware of regulations and modify work procedures as appropriate to avoid disturbing injuring or killing protected wildlife. (ANSI 300-2023, A-10)
8. Equipment, materials, and vehicles should not be stored, parked, or operated within the protected zone of trees to remain without approval by the project arborist or qualified professional and with appropriate mitigation. (ANSI 300-2023, 9.10.3.1)
9. Equipment with overhead exhaust should not be placed in such a manner as to scorch overhanging branches or foliage. Smaller equipment should be used in such areas as deemed necessary by the monitoring arborist. (ANSI A300-2023, 9.10.3.3)
10. Five (5) foot high chain link fencing shall be installed as illustrated on the Tree Impact and Protection Plan prior to submission of this report to the Urban Forestry Division of the City of Los Angeles (reports may not be deemed complete by the Division if fencing is not in place). Photographs of the fencing should be submitted with the report. When performing their inspection, Urban Forestry requires that the protective fencing be in place. (City of Los Angeles Standard Tree Removal Application Checklist)
11. Oak tree protection fencing and other protection measures for Los Angeles County oak trees to remain will be implemented in accordance with the Los Angeles County Oak Tree Ordinance. (Los Angeles County Oak Tree Ordinance Chapter 22.56.2180.B)
12. Construction Monitoring

    - Site visits are necessary for the arborist to assess project compliance with the Tree Impact and Protection Plan. Monitoring visits will be conducted at regular intervals during site demolition, grading, excavation, and site preparation. A monitoring schedule will be developed according to the project timeline. (ANSI A300-2023, 4.7).

    - Where grading or any other similar activity is specifically approved within the protected zone, the applicant shall provide an individual with special expertise acceptable to the director to supervise all excavation or grading proposed within the protected zones and to further supervise, monitor and certify to the county forester and fire warden the implementation of all conditions imposed in connection with the applicant's oak tree permit. (Los Angeles County Oak Tree Ordinance Chapter 22.56.2180.B)

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

Respectfully submitted,

Cy Carlberg, Registered Consulting Arborist
Principal, Carlberg Associates

This report comprises a total of 126 pages and two full-size map sets. Unauthorized separation or removal of any portion of this report deems it invalid as a whole.

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

CERTIFICATION OF PERFORMANCE

I, Cy Carlberg, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report and have stated my findings accurately. The extent of the evaluation and appraisal is stated in the attached report and the Terms of Assignment.

- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.

- That the analysis, opinions, and conclusions stated herein are my own.

- That my analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.

- That no one provided significant professional assistance to the consultant, except as indicated within the report.

- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

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

Signed:

Date: February 13, 2024

Cy Carlberg
ASCA Registered Consulting Arborist #405
ISA Certified Arborist, WE-0575A
Qualified Tree Risk Assessor
CAUFC Certified Urban Forester #013

ARBORIST DISCLOSURE STATEMENT

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

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

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

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

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

LIST OF CONTIBUTORS AND RESUMES OF KEY STAFF

Ms. Cy Carlberg, Principal
Ms. Christy Cuba, Senior Arborist
Mr. Scott McAllaster, Staff Arborist and AutoCAD Draftsperson
Mr. Daniel Cowell, Staff Arborist, Biologist

CY CARLBERG
CARLBERG ASSOCIATES
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
cy@cycarlberg.com • o: 310.451.4804 • www.cycarlberg.com

Education
B.S., Landscape Architecture, California State Polytechnic University, Pomona, 1985
Graduate, Arboricultural Consulting Academy, American Society of Consulting Arborists, Chicago, Illinois, February 2002
Graduate, Municipal Forestry Institute, Lied, Nebraska, 2012

Experience
Consulting Arborist, Carlberg Associates, 1998-present
Manager of Grounds Services, California Institute of Technology, Pasadena, 1992-1998
Director of Grounds, Scripps College, Claremont, 1988-1992

Certificates
Certified Arborist (#WE-0575A), International Society of Arboriculture, 1990
Registered Consulting Arborist (#405), American Society of Consulting Arborists, 2002
Certified Urban Forester (#013), California Urban Forests Council, 2004
Qualified Tree Risk Assessor, International Society of Arboriculture, 2011

AREAS OF EXPERTISE

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

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

PREVIOUS CONSULTING EXPERIENCE

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

The Huntington Library and Botanical Gardens
The Los Angeles Zoo and Botanical Gardens
The Rose Bowl and Brookside Golf Course, Pasadena
Walt Disney Concert Hall and Gardens
The Art Center College of Design, Pasadena
Pepperdine University
Loyola Marymount University
The Claremont Colleges (Pomona, Scripps, CMC, Harvey Mudd, Claremont Graduate University, Pitzer, Claremont University Center)
Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
Getty Trust – Eames House
Historic Resources Group
Mia Lehrer + Associates
The City of Claremont
The City of Beverly Hills
The City of Pasadena
The City of Los Angeles
The City of Santa Monica
Santa Monica/Malibu Unified School District
San Diego Gas & Electric
Los Angeles Department of Water and Power
Rancho Santa Ana Botanic Garden, Claremont
Latham & Watkins, LLP (attorneys at law)
Architectural Resources Group
AHBE Landscape Architects
Moule and Polyzoides, Architects and Urbanists

AFFILIATIONS

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

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

CHRISTINE CUBA
CARLBERG ASSOCIATES
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
Satellite Office – 80 W. Sierra Madre Blvd., #241 • Sierra Madre • California • 91024
christy@cycarlberg.com • o: 626.428.5072 • www.cycarlberg.com

Education
B.A., Environmental Analysis & Design, Cum Laude, University of California, Irvine, 1993
Graduate, International Society of Arboriculture Certification Study Program, April 1998
Graduate, Consulting Academy, American Society of Consulting Arborists, February 2008

Experience
Senior Arborist/Associate, Carlberg Associates, 2011 – Present
Director of Environmental Services & Senior Arborist, Land Design Consultants, Pasadena, 1994 – 2011
Park Specialist/Naturalist, City of Monrovia, 1988-1996

Certificates
Certified Arborist, WE-1982A, International Society of Arboriculture, 1998
Registered Consulting Arborist, #502, American Society of Consulting Arborists, 2011
Qualified Tree Risk Assessor, International Society of Arboriculture, 2013

AREAS OF EXPERTISE

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

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

PREVIOUS CONSULTING EXPERIENCE

Ms. Cuba has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. She has over 25 years of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena
City of Monrovia
City of Santa Clarita
City of Glendora
Los Angeles County Fire Department
California Institute of Technology
Mia Lehrer + Associates
Pulte/Centex Homes
Newhall Land and Farming
KOVAC Design Studio
EPT Design
Pamela Burton & Company
Chandler School
San Diego Gas & Electric
Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
The New Home Company
City of South Gate
City of Sierra Madre
Belzberg Architects
Occidental College
Rose Bowl Stadium
Las Encinas Hospital/Aurora Health Services
The Claremont Colleges (Pomona College, Claremont University Consortium, Claremont Graduate University)
Gensler Architects
Mesivta of Greater Los Angeles

AFFILIATIONS

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

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

SCOTT MCALLASTER

CARLBERG ASSOCIATES
Satellite Office – 80 W. Sierra Madre Blvd., #241 • Sierra Madre • California • 91024
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
scott@cycarlberg.com • m: 424.285.3334 • www.cycarlberg.com

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

Experience — Project Planner & Senior Arborist, Land Design Consultants, Inc.
Pasadena, 1999 – 2014

Certificates — Certified Arborist, WE-7011A, International Society of Arboriculture, 2004
Qualified Tree Risk Assessor, International Society of Arboriculture, 2015

AREAS OF EXPERTISE

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

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

PREVIOUS CONSULTING EXPERIENCE

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

City of Pasadena
City of Santa Clarita
City of Glendora
Los Angeles County Fire Department
Los Angeles County Sanitation Districts
Newhall County Water District
Pulte/Centex Homes
Newhall Land and Farming
E & S Ring, Inc.
Hollywood Forever Cemetery
Archdiocese of Los Angeles
St. John's Hospital, Santa Monica
Kovac Architects
Tim Barber, Ltd., Architects
Ojai Valley Community Hospital
The Kibo Group
El Monte Garden Senior Center
IMT Capital, LLC
San Diego Gas & Electric
Corky McMillin Companies
City of South Gate
City of Arcadia
D2 Development
Burrtec, Inc.
The Claremont Colleges
The New Home Company
William Carey University
Claremont Golf Course
Universal Hilton
Gensler Architects
Marmol Radziner, Architects
NAC Architecture
Aurora/Signature Health Services
Monte Vista Grove Homes
Highpointe Communities
Claremont University Center

AFFILIATIONS

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

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

DANIEL COWELL

CARLBERG ASSOCIATES
Satellite Office – 80 W. Sierra Madre Blvd., #241 • Sierra Madre • California • 91024
828 Fifth Street, Suite 3 • Santa Monica • California • 90403
daniel@cycarlberg.com • m: (626) 393-1568 • www.cycarlberg.com

Education
B.A., Environmental Studies/Science Whittier College, Whittier, 2014
A.S., Biological and Physical Sciences and Mathematics, Citrus College, 2010
A.A./A.S., Social and Behavioral Sciences, Citrus College, 2010
Courses in Environmental Biology, California State Polytechnic University, Pomona, 2012

Experience
Staff Arborist, Carlberg Associates, 2020 – Present
Over two dozen Environmental, Biological, Nesting Bird, and Restoration Surveys, 2010 – 2020
Biologist, Harmsworth Associates, 2015 – 2017
Biologist, Arroyo Trabuco Golf Club, 2010 – 2015

Certificates
Wildland Resources and Forestry Certificate Program, 2011

AREAS OF EXPERTISE

Mr. Cowell is experienced in the following areas of environmental and arboricultural monitoring, management and preservation:

- Evaluation of trees for preservation and encroachment during construction
- Inventories & reports for native and non-native trees
- Construction monitoring and reporting
- Post-fire inventories and assessments for native and non-native trees
- Environmental consulting, survey, and compliance monitoring & reporting
- Performance of nesting bird surveys
- Native vegetation and wildlife protection, hazardous materials spill prevention, non-native vegetation spread prevention, and fire management practices
- Creation of mitigation strategies for impacts to wetlands and waters
- Inspection of trees and vegetation near power lines to determine species, growth rates, hazards,
- and making pruning and removal decisions.
- Development of environmental education programs and training of volunteers

PREVIOUS CONSULTING EXPERIENCE

Mr. Cowell has performed hundreds of nesting bird surveys and other environmental studies and monitoring for counties, cities, water districts, resource conservation districts, and utility companies, as well as private developers and professional consultants. He has over 13 years of experience in biology and is trained in environmental planning, state and federal regulatory permitting, and habitat mitigation planning and implementation. Representative clients include:

University of California, Irvine
The Irvine Company
The County of Orange
The County of Orange
The Nature Conservancy
City of Santa Clarita
City of Beaumont
City of Chino Hills
City of Twenty-nine Palms
Arroyo Trabuco Golf Club
Newhall County Water District
First Carbon Solutions
Traveland USA
Irvine Ranch Water District
Endemic Environmental Services
San Diego Gas & Electric
City of Moreno Valley
City of Costa Mesa
City of Newport Beach
City of Murietta
City of Garden Grove
Resource Conservation District of the Santa Monica Mountains
Land Design Consultants
Burrtec, Inc.
The Claremont Colleges
Environmental Intelligence

AFFILIATIONS

Mr. Cowell is affiliated with the following national and regional professional organizations:

- Rancho Santa Ana Botanical Gardens, Claremont (volunteer since 2010)
- California Native Plant Society (San Gabriel Mountains and Orange County Chapters)
- Theodore Payne Foundation for California Wildflowers and Native Plants

EXHIBIT E – DEFINITION OF HEALTH AND STRUCTURE GRADES

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

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

Health

A) Outstanding – Exceptional trees of good growth form and vigor for their age class; exhibiting very good to excellent health as evidenced by normal to exceptional shoot growth during current season, good bud development and leaf color, lack of leaf, twig or branch dieback throughout the crown, and the absence of decay, bleeding, or cankers. Common leaf and/or twig pests may be noted at very minor levels.

B) Above average – Good to very good trees that exhibit minor necrotic or physiological symptoms of stress and/or disease; shoot growth is less than reasonably expected, leaf color is less than optimal in some areas, the crown may be thinning, minor levels of leaf, twig, and branch dieback may be present, and minor areas of decay, bleeding, or cankers may be manifesting. Minor amounts of epicormic growth may be present. Minor amounts of fire damage or mechanical damage may be present. Still healthy, but with moderately diminished vigor and vitality. No significant decline noted.

C) Average – Average, moderately good trees whose growth habit and physiological or fire-induced symptoms indicate an equal chance to either decline or continue with good health into the near future. Most of these trees exhibit moderate to significant small deadwood in outer crown areas, decreased shoot growth and diminished leaf color and mass. Some stem and branch dieback are usually present and epicormic growth may be moderate to extensive. Cavities, pockets of decay, relatively significant fire damage, bark exfoliation, or cracks may be present. Moderate to significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it is expected to negatively impact the lifespan of the tree. Tree may be in early decline.

D) Below Average/Poor - trees whose growth habit and physiological or fire-induced symptoms indicate significant, irreversible decline. Most of these trees exhibit significant dieback of wood in the crown, possibly accompanied by significant epicormic sprouting. Shoot growth and leaf color and mass is either significantly diminished or nonexistent throughout the crown. Cavities, pockets of decay, significant fire damage, bark exfoliation, and/or cracks may be present. Significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it has negatively impacted the lifespan of the tree. Tree appears to be in irreversible decline.

F) Dead or in spiral of decline – this tree exhibits very little to no signs of life.

STRUCTURE

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

B) Above average - Trees with good to very good structure for their species. They exhibit trunk and branch arrangement and orientation that result in a relatively sturdy form or architecture that resists

failure under normal circumstances, but may have some mechanical damage, over-pruning, or other minor structural defects. The spacing, orientation, and size of the branches relative to the trunk are still in the normal range for the species, but they exhibit a minor degree of defects. Minor, sub-critical levels of decay or pathological disease may be present, but the degree of damage is not yet structurally significant. Trees that exhibit naturally inherent branching defects, like multiple, narrow points of attachment from one point on the trunk, would generally fall in to this category. A small percentage of the canopy may be shaded or crowded, but not in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree.

C) Average - Trees with moderately good structure for their species, but with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a less than sturdy form or architecture, which reduces their resistance to failure under normal circumstances. Moderate levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of some of the branches relative to the trunk are not in the normal range for the species. Moderate to significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A moderate to significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be moderately elevated.

D) Well Below Average/Poor - Trees poor structure for their species and with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a significantly less than sturdy form or architecture, significantly reducing their resistance to failure under normal circumstances. Significant levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of many of the branches relative to the trunk are not in the normal range for the species. Significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be advanced.

F) Severely Compromised – trees with very poor structure and numerous or severe defects due to growing conditions, historical or recent pruning, mechanical damage, history of limb or trunk failures, advanced decay, disease, or severe fire damage. Risk of full or partial failure in the near future appears to be severe.

EXHIBIT F - GLOSSARY OF ARBORICULTURAL & DENDROLOGICAL TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Calculated Tree Protection Zone: A TPZ that is calculated using the trunk diameter and a multiplication factor based on the species tolerance to construction and age of the tree. It is often plotted on a plan as a circle or other simple geometric shape. It can be used as a guide for establishing the specified TPZ.

Critical Root Zone (CRZ): Area of soil around a tree where the minimum amount of roots considered critical to the health of the tree or structural stability are located. The are no universally accepted methods to calculate the CRZ.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Heart rot: Decay in the center of the tree (heartwood).

***Included bark*:** Areas of bark on adjacent parts of a tree, typically on the inner faces of a narrow fork, which becomes grown over to occupy part of the internal joint. The bark-to-bark contact is weaker than the more usual woody union.

Lateral branch / limb: The next order of branch that rises from the scaffold limbs.

Leader: The topmost vertical shoot of a tree, present if the tree has strong apical dominance, characteristic of young trees and conifers. Trees with a rounded crown have no leader.

Mulch: a material (such as decaying leaves, bark, or compost) spread around or over a plant to enrich or insulate the soil.

***Parasite*:** An organism that exploits another, e.g., for food, to the prejudice of the host. Parasites may kill their hosts, be pathogenic or have little significant effect.

***Pathogen*:** A kind of parasite that causes disease.

Phloem: A transport tissue characterized by sieve tubes and companion cells, found the vascular bundles of higher plants. Functions in the transport of dissolved organic substances by translocation.

Photosynthesis: The chemical process by which chlorophyll-containing plants use light to convert carbon dioxide and water into carbohydrates, releasing oxygen as a by-product.

Pruning: The cutting off or cutting back of shoots or branches from a tree, whether to direct growth (formative pruning), make safe, to remove an obstructing or diseased part, to increase longevity (veteran trees), to maintain productivity (fruit trees) etc.

Root crown /collar / Root flare: The outwardly curving base of a tree where it joins the roots, often distinguishable as individual root buttresses.

Root crown inspection: Extensive examination of the junction of root & stem, including the area immediately below, aimed at determining stability, presence of disease, decay, etc.

***Root plate*:** The area needed by a tree's root system to keep the tree stable; broadly, that part of the root system displaced when a tree is uprooted.

Root zone: The area of ground around the base of a tree that supports root growth; often extends far beyond the dripline of a tree.

***Scaffold branch / limb*:** The first order of limbs or branches that arise from the trunk of a tree.

Soil: A mixture of mineral particles, often of various sizes due to weathering, roots and other living things, soil organic matter and the associated voids (pores) filled with air and/or water.

Soil aeration: The movement of gases in soil, primarily by diffusion through the soil pores. For example, oxygen diffuses from the atmosphere to the vicinity of the plant root while carbon dioxide diffuses in the opposite direction. The rate of diffusion is related to the proportion of the soil volume that contains air

Soil compaction: An increase in bulk density due to the pressure exerted by animals, vehicles, (locally) by root growth *etc*. Pore space is reduced, which may also restrict soil aeration, water infiltration and drainage.

Soil structure: The aggregation of soil particles into clumps (peds) of various shapes and the associated spaces between them, affecting many properties of soil including its porosity to air and water, and its fertility.

Soil texture: The size of the mineral particles in the soil, classified (from fine to coarse) as clay, silt, sand, gravel or stones, or some mixture of these to give a characteristic particle size distribution. Sandy soils give a light texture, clayey soils give a heavy texture.

***Stub*:** That part of a pruned branch protruding beyond the branch collar. It is not good practice to leave stubs since they impede occlusion and are prone to decay.

Suckers: Shoots arising from the roots of a tree, which can arise surprisingly far from the parent.

Target: A target is the subject of injury or damage within range of a tree hazard

***Topping*:** A kind of pruning in which the branches of a tree are all decapitated to reduce the tree to a specific height. An indiscriminate form of pruning not regarded as good practice, to which some trees, such most conifers, are intolerant.

Training: To change the shape of a tree by means other than (formative) pruning, typically by tying young branches into a particular position.

***Transpiration*:** Loss of water vapor from the surface of leaves & other aboveground parts of the plant.

Tree Protection Zone: a defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to specified trees. The arborist determines the specified TPZ by evaluating on-site conditions, orientation of the canopy, and visible roots of the specific tree, and planned construction. (ANSI A300, Part 5, 2023). When no governing jurisdiction definition of a TPZ is provided by Municipal Code or other governing standards, we use the ANSI definition for the Tree Protection Zone and provide our recommendations for a TPZ on a tree-by-tree basis.

***Vigor / vigorous*:** Overall health; the capacity to grow & resist physiological stress.

EXHIBIT G – LIST OF ACRONYMS

ANTH – Anthracnose disease

BT – brown trunk – commonly used to measure palm tree trunk heights instead of diameters; it excludes the palm head, or canopy

CANK – canker – an area of dead tissue; can be caused by sunburn or disease

CLPD – common leaf pests and diseases (usually subcritical and non-lethal to tree)

COD – codominant stems or trunks – similar diameter trunks or stems arising from the same point of origin – can be a defect depending on the angle of attachment

Compass directions – N=north, E=east, S=south, W=west

DBH – Diameter at breast height (4 ft. 6 in. from grade) – a standard forestry term / protocol used for measuring tree trunk diameter

DSH – Diameter Standard Height – same as DBH but politically correct without the reference to breasts

DN – drippy nut (acorn) disease (common and non-lethal bacterial infection of acorns)

DW – dead wood

EG – epicormic growth – usually stress-induced growth that originates from previously dormant buds located on trunks or branches

GR – girdling root – can cause structural instability

HOB – history of breakage – usually refers to branches, not twiggy growth

HR – heart rot – decay of the heartwood

H2O – water or irrigation

IB – included bark – can cause structurally weak attachments

LCR – live crown ratio – a ratio of canopy foliage to bare trunk – informs structural grade, as low LCR can increase likelihood of failures

Lerp psyllid / Tipu psyllid – sap sucking insects

Lg - large

MBA – multiple branch attachments – can be a structural defect

Mech. Dam or MD – mechanical damage

MPE – multiple pruning events – can lead to reduced structural integrity based on secondary growth characteristics

P/D – pest/disease

PP – poor pruning – usually refers to stub cuts, flush cuts, excessive thinning, topping, etc.

Prune/DPR-QA - prune out dead/infested/diseased portion(s) & consult a licensed Department of Pesticide Regulation Qualified Applicator for potential chemical pest/disease treatments

RRD – root rot disease

SB – sycamore borer – a clear-winged moth that lays eggs on the bark of trees (mostly sycamore and oak species) – larvae burrow and feed in bark layer, usually non-damaging to tree

SS – stump sprouts – epicormic growth that arises from cut trunks – can originate from the remaining trunk tissue or the root crown

T – trunk

TG – Twig girdler – a stem girdling insect (this condition may also be noted under the umbrella of 'CLPD'

Topping cuts – refers to the substandard practice of arbitrarily pruning with no regard to lateral branch points; can include excessive and disfiguring pruning

WW – wound wood – callus tissue growing over a wound

Xylella = suspected bacterial infection with Xylella fastidiosa

EXHIBIT H – TREE INVENTORY FIELD DATA

THE FOLLOWING SHEETS ARE 11” X 17”

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
City NP	1	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	2	Texas privet	*Ligustrum texanum*	3.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	3	Texas privet	*Ligustrum texanum*	4.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	4	Texas privet	*Ligustrum texanum*	5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	5	Texas privet	*Ligustrum texanum*	6.8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	6	Texas privet	*Ligustrum texanum*	2.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	7	Texas privet	*Ligustrum texanum*	2.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	8	Texas privet	*Ligustrum texanum*	2		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	9	Texas privet	*Ligustrum texanum*	10			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	10	Texas privet	*Ligustrum texanum*	2.5		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	11	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	12	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	13	Texas privet	*Ligustrum texanum*	4.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	14	Texas privet	*Ligustrum texanum*	5.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	15	Texas privet	*Ligustrum texanum*	4			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	16	Texas privet	*Ligustrum texanum*	3		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	17	Texas privet	*Ligustrum texanum*	8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	18	Texas privet	*Ligustrum texanum*	8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	19	Texas privet	*Ligustrum texanum*	2		X	15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	20	Texas privet	*Ligustrum texanum*	8.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	21	Texas privet	*Ligustrum texanum*	5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
City NP	22	Texas privet	*Ligustrum texanum*	3			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	23	Texas privet	*Ligustrum texanum*	5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	24	Texas privet	*Ligustrum texanum*	8			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	25	Texas privet	*Ligustrum texanum*	6			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	26	Texas privet	*Ligustrum texanum*	5.5			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	27	Texas privet	*Ligustrum texanum*	7			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	28	Texas privet	*Ligustrum texanum*	10			15	3	3	3	3	A	B			P	maintained as hedgerow	Remove	New Development	None required
City NP	29	peach	*Prunus persica*	8.2			18	8	6	10	8	A-	B			P	growing into adjacent hedgerow	Remove	New Development	None required
City NP	30	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	31	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	32	Mexican fan palm	*Washingtonia robusta*		50'		55	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	33	Mexican fan palm	*Washingtonia robusta*		60'		65	5	5	5	5	B	B			P	adjacent to sidewalk on PP	Remove	New Development	None required
City NP	34	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	35	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	36	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	B	B			P	in parking lot cutout	Remove	New Development	None required
City NP	37	Mexican fan palm	*Washingtonia robusta*		1'		7	4	0	4	4	A	B			P	volunteer on PP adjacent to sidewalk	Remove	New Development	None required
City NP	38	citrus	*Citrus sp.*		1.5		12	7	7	8	7	A-	A-			P	in raised planter	Remove	New Development	None required
City NP	39	Indian laurel fig	*Ficus microcarpa*	35 at 2 feet			18	9	11	10	12	A	B+			P	in parking lot cutout	Remove	New Development	None required

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City NP	40	common myrtle	*Myrtus communis*	8			20	10	9	12	7	A	B+			P	pruned for building clearance, tree not tagged	Remove	New Development	None required
City NP	41	Mexican fan palm	*Washingtonia robusta*		55'		60	5	5	5	5	A	A-			P		Remove	New Development	None required
City NP	42	Mexican fan palm	*Washingtonia robusta*		35'		40	5	5	5	5	A	A-			P		Remove	New Development	None required
City NP	43	Mexican fan palm	*Washingtonia robusta*		40'		45	5	5	5	5	A	A-			P		Remove	New Development	None required
PROW	44	weeping fig	*Ficus benjamina*	~14			28	20	25	15	18	A	B			P	in small cutout, pruned for building clearance, communication wires running through canopy, diameter estimated	Remove	New Development	2:1 (this currently PROW tree will ultimately become an onsite tree. Nevertheless we have listed it to be replaced at a "street tree" replacement ratio subject to Urban Forestry's interpretation.
PROW	45	Torrey pine	*Pinus torreyana*	5.8			16	8	6	3	4	A	B+			P	between parking lot and LA river fence	Preserve with no impacts		N/A
PROW	46	Torrey pine	*Pinus torreyana*	7.2			18	8	7	8	10	A	B+			P	between parking lot and LA river fence	Preserve with no impacts		N/A
PROW	47	Torrey pine	*Pinus torreyana*	7			18	11	9	8	8	A	B+			P	between parking lot and LA river fence	Preserve with no impacts		N/A

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City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
PROW	48	Torrey pine	*Pinus torreyana*	7.6			24	11	12	7	10	A	B+			P		Preserve with no impacts		N/A
PROW	49	Torrey pine	*Pinus torreyana*	11			26	12	10	12	10	A	B+			P		Preserve with no impacts		N/A
PROW	50	Canary Island pine	*Pinus canariensis*	10.5			22	11	8	9	9	A	B+			P		Preserve with no impacts		N/A
CITY NP	51	pecan	*Carya illinoinensis*	7.7			20	12	10	12	10	A	B			P	overhangs to S by 7 feet	Preserve/ Encroach		N/A
CITY NP	52	Shamel ash	*Fraxinus uhdei*	1, 1.5			12	8	6	6	8	A	A			N	overhangs to S by 6 feet	Remove	New Development	None required
CITY P	53	Southern California black walnut	*Juglans californica*	9.1, 12.1, 3, 3, 4			24	15	12	12	18	A-	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A
CITY NP	54	pecan	*Carya illinoinensis*	6.4			22	8	12	9	10	A	A-			P	overhangs to S by 3 feet	Preserve/ Encroach		N/A
CITY P	55	coast live oak	*Quercus agrifolia*	7.6			20	11	10	10	8	B+	B			P	county ordinance size within year	Preserve/ Encroach		N/A
CITY NP	56	Aleppo pine	*Pinus halepensis*	20.5			55	0	16	18	16	A	B-			P	overhangs to S by 14 feet, heavy lean S	Preserve/ Encroach	New Development	N/A
CITY NP	57	Shamel ash	*Fraxinus uhdei*	2.3, 1.8, 2.1, 2.4, 2.3, 1.6			15	10	9	8	10	A	A-			N	overhangs to S by 6	Remove	New Development	N/A
CITY NP	58	Aleppo pine	*Pinus halepensis*	26.8			40	16	22	21	6	A	C			P	overhangs to S by 15 feet, large unbalanced and curved trunk	Remove	New Development	N/A

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OS	59	coast live oak	*Quercus agrifolia*	7.7, 9, 4.8			20	13	13	12	13	A	B			P		Preserve/ Encroach		N/A
OS	60	coast live oak	*Quercus agrifolia*	5.8, 5.8, 4, 3.6, 2.7, 3			20	13	11	14	13	B	B			P		Preserve/ Encroach		N/A
CITY NP	61	Aleppo pine	*Pinus halepensis*	29			44	20	23	21	23	A	B			P	overhangs to S by 20 feet	Remove	New Development	None required
CITY P	62	Southern California black walnut	*Juglans californica*	6.2, 6.5, 5.3			16	14	14	9	2	A-	B-			P	overhangs to S by 3 feet, some broken limbs	Preserve/ Encroach		N/A
OS	63	coast live oak	*Quercus agrifolia*	10.8			28	16	14	0	14	B	B			P		Preserve/ Encroach		N/A
OS	64	coast live oak	*Quercus agrifolia*	18.2			35	17	16	23	20	B	B-			P	overhangs to S by 10 feet, on PL, city or county?	Preserve/ Encroach		N/A
CITY P	65	coast live oak	*Quercus agrifolia*	13.3			32	15	14	19	8	B	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A
OS	66	coast live oak	*Quercus agrifolia*	6.5			18	0	10	14	10	C	C			P	overhangs to S by 8 feet, decay	Preserve/ Encroach		N/A
OS	67	coast live oak	*Quercus agrifolia*	8.7			20	2	9	14	10	B	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A
OS	68	coast live oak	*Quercus agrifolia*	8.1			18	0	8	9	9	B-	B-			P	overhangs to S by 3 feet	Preserve/ Encroach		N/A
City NP	69	Chinese elm	*Ulmus parvifolia*	4.1, 3.7, 2.5, 4.8			15	0	10	18	10	A	B			P	overhangs to S by 16 feet	Remove	New Development	1:1

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OS	70	Shamel ash	*Fraxinus uhdei*	15.9, 13.5, 2.5, 2			40	17	14	14	15	B	B			N	overhangs to S by 2 feet	Preserve/ Encroach		N/A
OS	71	coast live oak	*Quercus agrifolia*	6.7, 9			20	18	12	5	6	B	B-			P		Preserve/ Encroach		N/A
City NP	72	Aleppo pine	*Pinus halepensis*	31			40	21	20	11	20	A-	B			P	overhangs to S by 10 feet	Remove	New Development	None required
OS	73	coast live oak	*Quercus agrifolia*	8.3, 13.3, 2.5			30	16	14	18	10	B	B-			P	overhangs to S by 11 feet	Preserve/ Encroach		N/A
CITY P	74	coast live oak	*Quercus agrifolia*	26.5			42	25	28	44	20	A-	B			P	overhangs to S by 40 feet	Preserve/ Encroach		N/A
OS	75	coast live oak	*Quercus agrifolia*	10.5			25	14	24	10	0	A-	B-			P	overhangs to S by 2 feet	Preserve/ Encroach		N/A

No Tree no. 76

OS	77	coast live oak	*Quercus agrifolia*	9.5			28	13	8	8	8	B	B			P	overhangs to S by 4 feet	Preserve/ Encroach		N/A
OS	78	coast live oak	*Quercus agrifolia*	9.1			26	22	16	9	12	A	B			P		Preserve/ Encroach		N/A
OS	79	coast live oak	*Quercus agrifolia*	13.3			30	20	15	0	14	A	B			P		Preserve/ Encroach		N/A
OS	80	coast live oak	*Quercus agrifolia*	13			32	0	18	20	16	A-	B-			P	overhangs to S by 16 feet	Preserve/ Encroach		N/A
OS	81	coast live oak	*Quercus agrifolia*	6.7			18	10	15	5	12	A	B			P		Preserve/ Encroach		N/A
OS	82	coast live oak	*Quercus agrifolia*	5.3, 6, 32.2, 16.6			40	33	33	20	27	A	B+			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	83	coast live oak	*Quercus agrifolia*	20.1			38	27	25	13	26	A-	B			P	overhangs to S by 8 feet	Preserve/ Encroach		N/A

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
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City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
OS	84	coast live oak	*Quercus agrifolia*	21.8			32	25	19	20	20	A	B			P	overhangs to S by 15	Preserve/ Encroach		N/A
OS	85	coast live oak	*Quercus agrifolia*	18.9, 4			30	29	20	20	14	A-	B			P	overhangs to S by 15	Preserve/ Encroach		N/A
OS	86	coast live oak	*Quercus agrifolia*	8.1, 7.6, 2.5, 2			20	13	15	20	0	B	B-			P	overhangs to S by 15	Preserve/ Encroach		N/A
OS	87	coast live oak	*Quercus agrifolia*	9.5, 5.8, 10, 11.5			18	25	14	8	17	B-	B-			P		Preserve/ Encroach		N/A
OS	88	coast live oak	*Quercus agrifolia*	24.4			35	28	28	20	27	A	B+			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	89	coast live oak	*Quercus agrifolia*	13, 7.6			24	26	18	20	2	A-	B			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	90	coast live oak	*Quercus agrifolia*	12.2, 15.4, 2.4			28	30	26	20	10	A	B			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A
OS	91	Indian laurel fig	*Ficus microcarpa*	2, 3.8, 3.9, 3.5, 3.6			18	9	10	6	6	A	B+			P	overhangs to S by 1 foot	Preserve/ Encroach		N/A
OS	92	coast live oak	*Quercus agrifolia*	18.3			40	23	16	20	20	A	B			P	overhangs to S by 15 feet	Preserve/ Encroach		N/A

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
OS	93	coast live oak	*Quercus agrifolia*	24.4			35	22	22	15	24	A	B			P	overhangs to S by 10 feet	Preserve/ Encroach		N/A
OS	94	mulberry	*Morus alba*	11.1, 14			26	14	14	15	14	C-	C-			P	overhangs to W by 10 feet, in decline	Preserve/ Encroach	With coordination with the tree owner, the applicant intends to preserve this tree if possible. It will be replaced if it becomes unstable or does not survive the construction process.	N/A
OS	95	coast live oak	*Quercus agrifolia*	~22			28	8	30	18	20	A-	B			P	overhangs to W by 14 feet	Preserve/ Encroach		N/A
City NP	96	Aleppo pine	*Pinus halepensis*	31.5			40	20	24	10	20	A	B			P	Substandard pruning	Remove	New Development	None required
City NP	97	coast live oak	*Quercus agrifolia*	3.6			10	13	6	5	12	A	B			N	tree base is one foot north of tree 54's base	Preserve/ Encroach		N/A
OS	98	coast live oak	*Quercus agrifolia*	6.7			18	10	10	13	8	A	B			N		Preserve/ Encroach		N/A
OS	99	Southern California black walnut	*Juglans californica*	1.1, .7			10	4	5	4	5	B	B			N	Volunteer sprout; deciduous	Preserve/ Encroach		N/A
OS	100	coast live oak	*Quercus agrifolia*	3.8, 6.5			20	14	13	11	12	A	B			N		Preserve/ Encroach		N/A
OS	101	coast live oak	*Quercus agrifolia*	6.5			25	11	4	13	12	A	B			N		Preserve/ Encroach		N/A
OS	102	coast live oak	*Quercus agrifolia*	2.8			10	13	4	6	8	B	B			N	Shaded out	Preserve/ Encroach		N/A
City NP	103	coast live oak	*Quercus agrifolia*	.8, 1, .3, .3			6	3	2	2	4	B	B			P	diameters at 1.5 feet	Preserve/ Encroach		N/A

No Tree nos. 104-110

TABLE 11 – TREE FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11" X 17")

City Protected/Non-Protected Offsite/ PROW	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (Preserve, Remove, No Impact, Encroach)	Reason for Removal	Replacement Ratio
OS	111	coast live oak	*Quercus agrifolia*	4.1			16	16	5	6	6	B	B			N		Preserve/ Encroach		N/A
No Tree Nos. 112-113																				
City NP	114	coast live oak	*Quercus agrifolia*	1.2, .7, .4, .6, .5			10	7	7	6	6	A	B			N		Remove	New Development	None required
City NP	115	coast live oak	*Quercus agrifolia*	.7, 1.2			10	9	7	2	0	A	B			N	shaded out	Remove	New Development	None required
City NP	116	coast live oak	*Quercus agrifolia*	1.3, .7, .8			10	7	6	6	5	B	B			N		Remove	New Development	None required

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

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

11611-11695 Ventura Blvd. and 4000-4028 Colfax Ave. Project Tree Report—Tree Photographs (Exhibit I)

49 Pages

Unless otherwise noted in the caption, trees are non-protected.

Protected Trees and Street Trees (or other public rights-of-way trees) are noted.

Tree OS# = Offsite tree, Tree ST# = street tree or right-of-way tree.

Trees 1-28 (L-R) - *Ligustrum texanum* facing north

Tree 29—*Prunus persica* facing north

Trees 30—*Washingtonia robusta* facing west

Tree 31-32—*Washingtonia robusta* facing east

Trees 33-34—*Washingtonia robusta* facing west

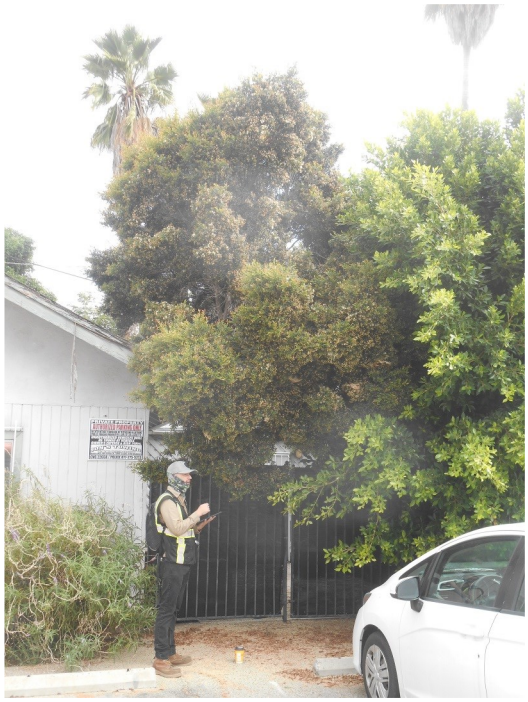
Tree 35—*Washingtonia robusta* facing north

Trees 36—*Washingtonia robusta* facing east

Tree 37—*Washingtonia robusta* facing north

Tree 38—*Citrus sp.* facing east

Tree 39—*Ficus microcarpa* facing north



Trees 40—*Myrtus communis* facing north

Tree 41—*Washingtonia robusta* facing north

Trees 42-43 (R-L) - *Washingtonia robusta* facing north

Tree 44—*Ficus benjamina* facing north

Trees 45—*Pinus torreyana* facing north

Tree 46—*Pinus torreyana* facing north

Tree 47—*Pinus torreyana* facing north

Trees 48-50 (L-R) - *Pinus torreyana, Pinus canariensis* facing north

Trees 51—*Carya illinoinensis* facing south

Tree 52—*Fraxinus uhdei* facing south

- Tree 53 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

Tree 54—*Carya illinoinensis* facing east

Tree 56—*Pinus halepensis* facing east

Tree 57—*Fraxinus uhdei* facing south

Tree 58—*Pinus halepensis* facing west

- Tree 55 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS59 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing east

- Tree OS60 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing east

Tree 61—*Pinus halepensis*
facing south

- Tree 62 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

- Tree OS63 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS64 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing east

- Tree 65 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS66 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS67 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS68 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

Tree 69—*Ulmus parvifolia* facing south

Tree OS70—*Fraxinus uhdei* facing south

Tree 72—*Pinus halepensis* facing south

- Tree OS71 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS73 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree 74 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS75 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS77 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

- Tree OS78 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

- Tree OS79 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

- Tree OS80 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS81 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS82 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS83 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS84 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS85 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS86 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS87 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS88 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS89 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS90 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

Tree OS91—*Ficus microcarpa* facing south

Trees OS94—*Morus alba* facing south

Tree 96—*Pinus halepensis* facing north

- Tree OS92 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS93 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS95 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

Tree 97—*Quercus agrifolia* facing east

Tree OS102—*Quercus agrifolia* facing east

Tree 103—*Quercus agrifolia* facing east

- Tree OS98 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS99 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

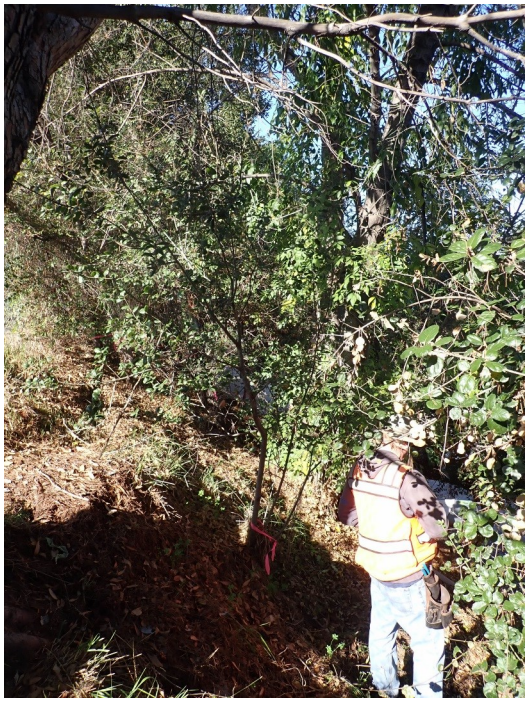
- Tree OS100 (Protected)
- *Juglans californica*
- Arborist's opinion - Planted
- Facing south

- Tree OS101 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing south

- Tree OS111 (Protected)
- *Quercus agrifolia*
- Arborist's opinion - Planted
- Facing west

Tree 114—*Quercus agrifolia* facing east

Tree 115—*Quercus agrifolia* facing south



Tree 116—*Quercus agrifolia* facing east

EXHIBIT J – BIBLIOGRAPHY OF GENERAL REFERENCES USED TO PREPARE THE DOCUMENT

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APPENDIX A – DCI ENGINEERS ANALYSIS OF CMU RETAINING WALL

December 28, 2023

SRM Development
111 N Post St
#200
Spokane, WA 99201

Re: SRM Studio City – Colfax & Ventura – Existing CMU Retaining Wall

To whom it may concern

In response to concerns about an existing CMU retaining wall located at the project site on Colfax and Ventura in Studio City California (Permit #B22LA25569) DCI Engineers observed the condition of the wall and evaluated the wall stability. In this report you will find our conclusions and recommendations on the future stability of the retaining wall.

The existing site retaining wall consists of 8in CMU blocks, is approximately 16ft tall, and is retaining approximately 8ft of soil. Site "potholing" was performed to nail down the size of the footing and we found that the footing extends approximately 2ft from inside face of the wall and is 12in-18in thick.

We performed an analysis on the existing wall with the conditions described above and with recommendations for the soil condition from the geotechnical report for this project and found that the wall is not stable under current code requirements. Please see attached appendix 1. The stability factor of safety for both overturning and sliding are both under 0.4 and the code requires them to 1.5 or higher. Therefore, this retaining wall is at a high risk of collapse. Additionally, soil was observed to be eroding away from the outside face of the footing and in some cases has left the bottom of the footing exposed and not in contact with the bottom of the footing. The exposed footings have not been considered in the analysis results provided and will only add to the concerns about the wall stability.

Image 1. Exposed Footing

DCI ENGINEERS

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Due to the poor soil conditions, erosion, and the undersized footing, the wall is at high risk of collapse. DCI recommends the wall and footing be removed to avoid a collapse of the wall.

Sincerely,
DCI Engineers

TJ Bolser, PE
Senior Project Manager

Craig Crowley, PE, SE
Principal, COO

DCI ENGINEERS

LOCAL EXPERTISE, NATIONAL EXPERIENCE. LEARN MORE AT DCI-ENGINEERS.COM

Appendix 1

Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall

Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Code Reference:

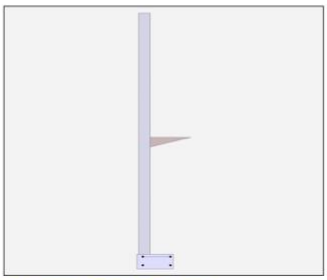
Calculations per IBC 2015 1807.3, CBC 2016, ASCE 7-10

Criteria

Retained Height	=	8.00 ft
Wall height above soil	=	8.50 ft
Slope Behind Wall	=	0.00
Height of Soil over Toe	=	0.00 in
Water table above bottom of footing	=	0.0 ft

Soil Data

Allow Soil Bearing	=	1,500.0 psf
Equivalent Fluid Pressure Method		
Active Heel Pressure	=	45.0 psf/ft
	=	
Passive Pressure	=	300.0 psf/ft
Soil Density, Heel	=	110.00 pcf
Soil Density, Toe	=	110.00 pcf
Footing||Soil Friction	=	0.400
Soil height to ignore for passive pressure	=	12.00 in



Surcharge Loads

Surcharge Over Heel	=	100.0 psf
NOT Used To Resist Sliding & Overturning		
Surcharge Over Toe	=	0.0
Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	0.0 lbs
Axial Live Load	=	0.0 lbs
Axial Load Eccentricity	=	0.0 in

Earth Pressure Seismic Load

Method : Uniform

Multiplier Used	=	0.023
(Multiplier used on soil density)		

Stem Weight Seismic Load

Lateral Load Applied to Stem

Lateral Load	=	0.0 #/ft
...Height to Top	=	0.00 ft
...Height to Bottom	=	0.00 ft
Load Type	=	Wind (W) (Service Level)
Wind on Exposed Stem (Strength Level)	=	25.0 psf

Uniform Seismic Force	=	0.207
Total Seismic Force	=	1.863

F_p / W_p Weight Multiplier = 0.200 g

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs
Footing Width	=	0.00 ft
Eccentricity	=	0.00 in
Wall to Ftg CL Dist	=	0.00 ft
Footing Type		Spread Footing
Base Above/Below Soil at Back of Wall	=	0.0 ft
Poisson's Ratio	=	0.300

Added seismic base force 0.0 lbs

Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall

Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Design Summary

Wall Stability Ratios

Overturning	=	0.39	UNSTABLE!
Sliding	=	0.37	UNSTABLE!
Global Stability	=	1.08	
Total Bearing Load	=	1,488 lbs	
...resultant ecc.	=	67.48 in	
Soil Pressure @ Toe	=	0 psf	OK
Soil Pressure @ Heel	=	0 psf	OK
Allowable	=	1,500 psf	
Soil Pressure Less Than Allowable			
ACI Factored @ Toe	=	0 psf	
ACI Factored @ Heel	=	0 psf	
Footing Shear @ Toe	=	0.2 psi	OK
Footing Shear @ Heel	=	25.8 psi	OK
Allowable	=	82.2 psi	

Sliding Calcs

Lateral Sliding Force	=	2,319.5 lbs	
less 100% Passive Force	-	0.0 lbs	
less 100% Friction Force	-	866.1 lbs	
Added Force Req'd	=	1,453.4 lbs	NG
....for 1.5 Stability	=	2,613.1 lbs	NG

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing

Load Factors

Building Code	
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.600
Seismic, E	1.000

Stem Construction

		Bottom		
		Ratio > 1.0		
Design Height Above Ftg	ft =	0.00		
Wall Material Above "Ht"	=	Masonry		
Design Method	=	ASD	SD	SD
Thickness	=	8.00		
Rebar Size	=	# 8		
Rebar Spacing	=	24.00		
Rebar Placed at	=	Center		
Design Data				
fb/FB + fa/Fa	=	**3.572**		
Total Force @ Section				
Service Level	lbs =	1,896.4		
Strength Level	lbs =			
Moment....Actual				
Service Level	ft-# =	6,717.6		
Strength Level	ft-# =			
Moment.....Allowable	=	1,880.5		
Shear.....Actual				
Service Level	psi =	20.7		
Strength Level	psi =			
Shear.....Allowable	psi =	43.6		
Anet (Masonry)	in2 =	91.50		
Wall Weight	psf =	0.0		
Rebar Depth 'd'	in =	3.81		

Masonry Data

f'm	psi =	1,500
Fs	psi =	20,000
Solid Grouting	=	Yes
Modular Ratio 'n'	=	21.48
Equiv. Solid Thick.	in =	7.63
Masonry Block Type	=	
Masonry Design Method	=	ASD

Concrete Data

f'c	psi =
Fy	psi =

Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall

Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Footing Data

Toe Width	=	0.10 ft
Heel Width	=	2.00
Total Footing Width	=	2.10
Footing Thickness	=	12.00 in
Key Width	=	0.00 in
Key Depth	=	0.00 in
Key Distance from Toe	=	0.00 ft

f'c = 3,000 psi Fy = 60,000 psi
Footing Concrete Density = 150.00 pcf
Min. As % = 0.0018
Cover @ Top 2.00 @ Btm.= 3.00 in

Footing Design Results

		Toe	Heel	
Factored Pressure	=	0	0 psf	
Mu' : Upward	=	0	0 ft-#	
Mu' : Downward	=	4	2,995 ft-#	
Mu: Design	=	-4 OK	2,995 ft-#	OK
phiMn	=	27,464	11,003 ft-#	
Actual 1-Way Shear	=	0.18	25.83 psi	
Allow 1-Way Shear	=	82.16	82.16 psi	

Toe Reinforcing = # 8 @ 12.00 in
Heel Reinforcing = # 5 @ 14.35 in
Key Reinforcing = None Spec'd
Footing Torsion, Tu = 0.00 ft-lbs
Footing Allow. Torsion, phi Tu = 0.00 ft-lbs

If torsion exceeds allowable, provide supplemental design for footing torsion.

Other Acceptable Sizes & Spacings

Toe: #4@ 9.25 in, #5@ 14.35 in, #6@ 20.37 in, #7@ 27.77 in, #8@ 36.57 in, #9@ 46.29 in, #10@ 58.79 in

Heel: #4@ 9.25 in, #5@ 14.35 in, #6@ 20.37 in, #7@ 27.77 in, #8@ 36.57 in, #9@ 46.29 in, #10@ 58.79 in

Key: No key defined

Min footing T&S reinf Area 0.54 in2
Min footing T&S reinf Area per foot 0.26 in2 /ft

If one layer of horizontal bars:	If two layers of horizontal bars:
#4@ 9.26 in	#4@ 18.52 in
#5@ 14.35 in	#5@ 28.70 in
#6@ 20.37 in	#6@ 40.74 in

Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall

Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING

DESCRIPTION: North Existing Retaining Wall

Summary of Overturning & Resisting Forces & Moments

Item		.....OVERTURNING..... Force lbs	Distance ft	Moment ft-#		.....RESISTING..... Force lbs	Distance ft	Moment ft-#
HL Act Pres (ab water tbl)		1,822.5	3.00	5,467.5	Soil Over HL (ab. water tbl)	1,173.3	1.43	1,681.8
HL Act Pres (be water tbl)					Soil Over HL (bel. water tbl)		1.43	1,681.8
Hydrostatic Force					Water Table			
Buoyant Force	=				Sloped Soil Over Heel	=		
Surcharge over Heel	=	368.2	4.50	1,656.8	Surcharge Over Heel	=		
Surcharge Over Toe	=				Adjacent Footing Load	=		
Adjacent Footing Load	=				Axial Dead Load on Stem	=		
Added Lateral Load	=				* Axial Live Load on Stem	=		
Load @ Stem Above Soil	=	127.5	13.25	1,689.4	Soil Over Toe	=		
Seismic Earth Load	=	1.3	4.50	5.9	Surcharge Over Toe	=		
Seismic Stem Self Wt	=				Stem Weight(s)	=		
					Earth @ Stem Transitions	=		
Total	=	2,319.5	**O.T.M.** =	8,819.6	Footing Weight	=	315.0	1.05	330.8
					Key Weight	=		
					Vert. Component	=	676.9	2.10	1,421.5
					Total =		2,165.3 lbs	**R.M.=**	3,434.1

Resisting/Overturning Ratio = **0.39**
Vertical Loads used for Soil Pressure = 1,488.3 lbs

* Axial live load NOT included in total displayed, or used for overturning resistance, but is included for soil pressure calculation.

If seismic is included, the OTM and sliding ratios may be 1.1 per section 1807.2.3 of IBC.

Vertical component of active lateral soil pressure IS considered in the calculation of Sliding Resistance.

Vertical component of active lateral soil pressure IS considered in the calculation of Overturning Resistance.

Tilt

Horizontal Deflection at Top of Wall due to settlement of soil

(Deflection due to wall bending not considered)

Soil Spring Reaction Modulus	250.0	pci
Horizontal Defl @ Top of Wall (approximate only)	0.000	in

The above calculation is not valid if the heel soil bearing pressure exceeds that of the toe, because the wall would then tend to rotate into the retained soil.

Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

Rebar Lap & Embedment Lengths Information

Stem Design Segment: Bottom
Stem Design Height: 0.00 ft above top of footing
Calculated Rebar Stress, fs = 63004.53 psi

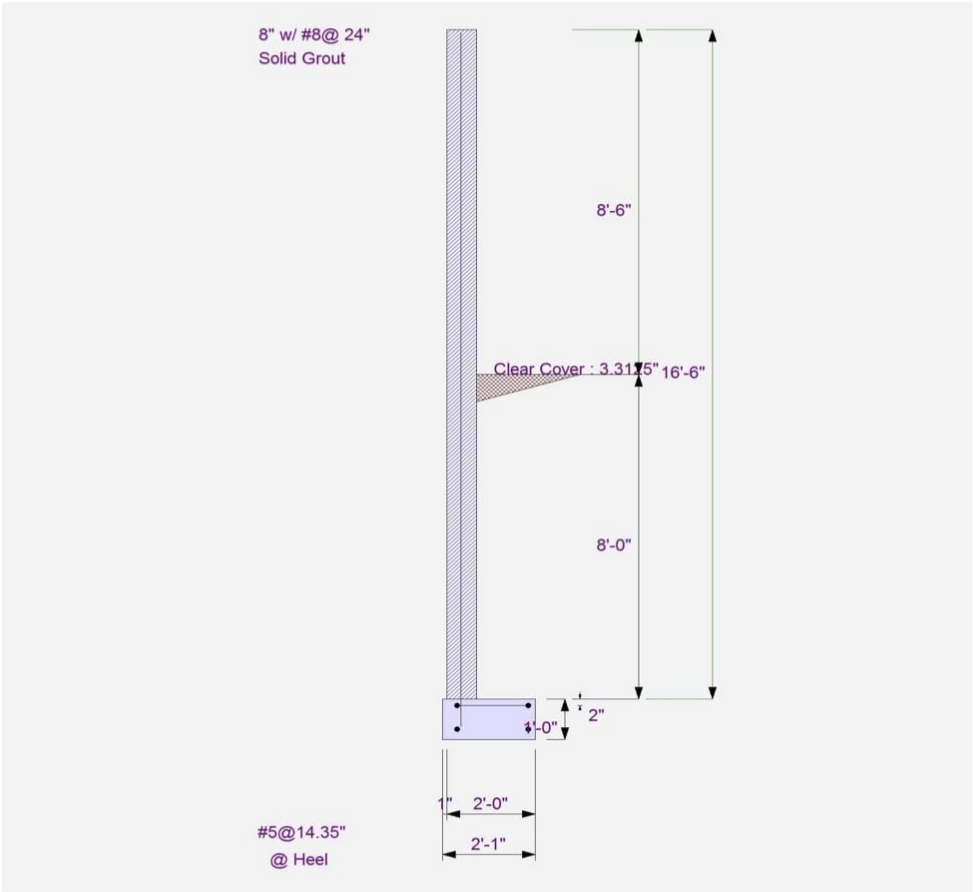
Lap Splice length for #8 bar specified in this stem design segment (25.4.2.3a) =	72.00 in
Development length for #8 bar specified in this stem design segment =	189.01 in
Hooked embedment length into footing for #8 bar specified in this stem design segment =	10.22 in
As Provided =	0.3950 in2/ft
As Required =	1.3252 in2/ft

Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall



Project Title:
Engineer:
Project ID:
Project Descr:

Cantilevered Retaining Wall Project File: Studio City.ec6

LIC# : KW-06013979, Build:20.23.10.02 DCI ENGINEERING (c) ENERCALC INC 1983-2023

DESCRIPTION: North Existing Retaining Wall

APPENDIX C – TRANSPORTATION ASSESSMENT

Armen Hovanessian
Transportation Consulting

SRM STUDIO CITY
11611 TO 11695 VENTURA BOULEVARD & 4010 TO 4028 COLFAX AVENUE
TRANSPORTATION ASSESSMENT REPORT

FEBRUARY 12, 2023

Armen D. Hovanessian

6520 PLATT AVENE, #923

WEST HILLS, CA 91307

CONTACT@AHTRAFFIC.COM

(818) 438-2253

Contents

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Tables

INTRODUCTION

This transportation assessment study is consistent with the City of Los Angeles (City) Department of Transportation (LADOT), Transportation Assessment Guidelines (TAG), dated August 2022. This study evaluates the potential project-specific transportation effects of the proposed project. The analysis focuses on traditional mobility considerations as well as safety, sustainability, smart growth, and the reduction of greenhouse gas emissions.

The TAG conforms to the requirements of Senate Bill 743 (SB 743) and is consistent with the California Environmental Quality Act (CEQA), requiring the use of Vehicle Miles Traveled (VMT) as the primary metric for evaluating a project's transportation impacts. The TAG also requires the traffic analysis to examine whether the proposed project conflicts with the City's plans, programs, ordinances, and policies. In addition, non-CEQA transportation analysis is also required to assess the project's potential transportation effects on pedestrian, bicycle and transit facilities, project access, safety and circulation, project construction, and the potential for residential street intrusion.

PROJECT DESCRIPTION

Project Location and Characteristics

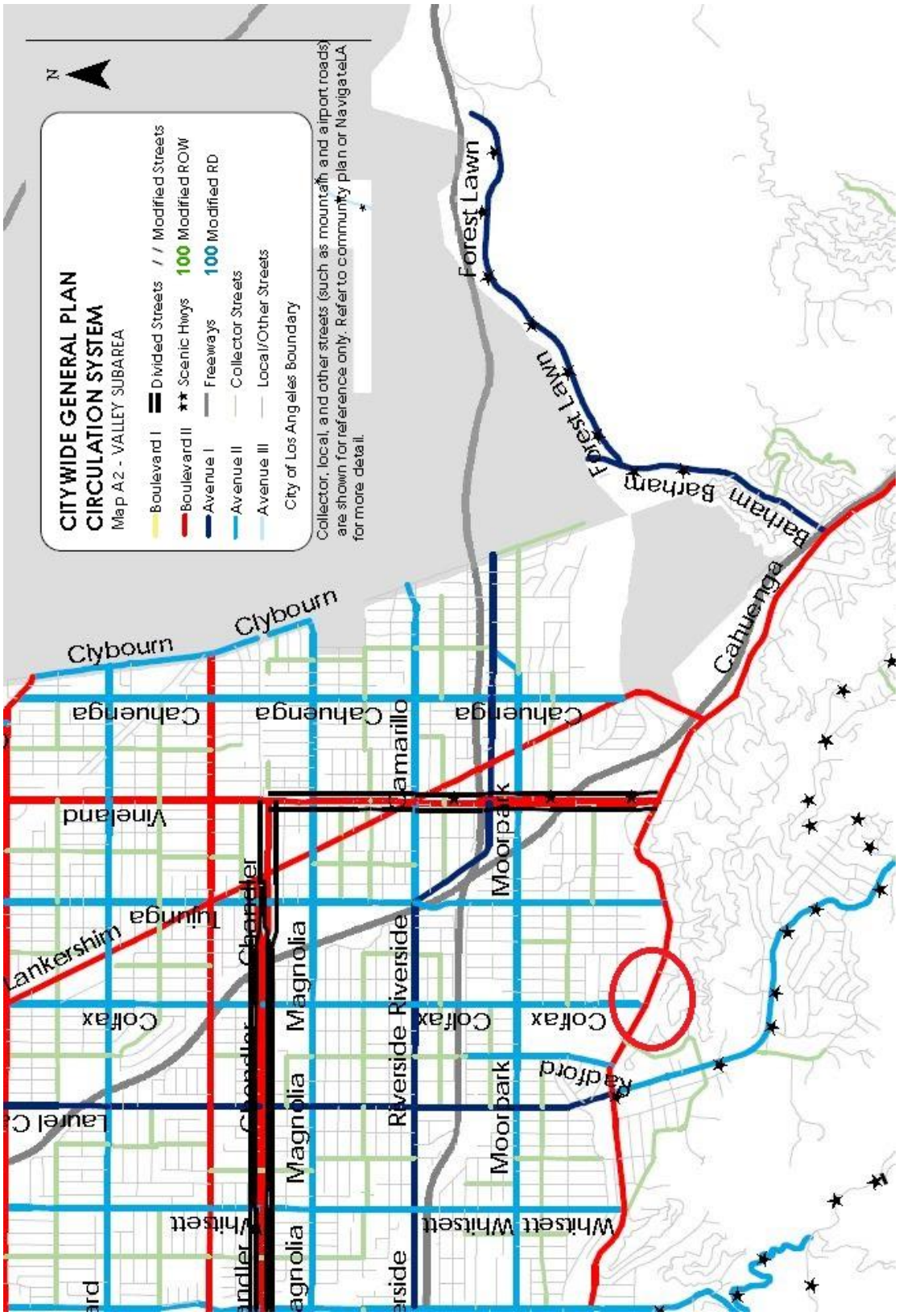
The Owner and Applicant, SRM Studio City, LLC (the "Applicant"), proposes the demolition/removal of all existing structures and improvements for the construction, use, and maintenance of an Eldercare Facility for persons 62 years of age and older (the "Project" or the "Eldercare Facility) on an approximately 99,521-square foot (2.28-acre) property[1][1] located in the C2-1VL-RIO Zone at the northeast corner of Colfax Avenue and Ventura Boulevard, at 11611-11695 Ventura Boulevard and 4000-4028 Colfax Avenue (the "Project Site"), in Studio City and within the boundaries of Ventura/Cahuenga Boulevard Corridor Specific Plan. The Eldercare Facility will provide a range of senior housing and senior amenities and services, and will include: 1) A five-story building with 140 licensed Assisted Living Care Housing ("AL") dwelling units and associated common areas, amenities and services ("Main Building"), 2) A three-story Senior Independent Housing ("IL") building with 62 IL dwelling units and associated common areas and amenities ("IL Building"), and 3) An approximately 2,997-square foot publicly-accessible, privately-owned and maintained, local-serving pocket park. Both proposed buildings will share one level of subterranean parking. In total, the Project will provide approximately 202,974 square feet of Floor Area, 202 dwelling units (140 AL dwelling units and 62 IL dwelling units) and 149 on-site automobile parking spaces.

[1] Lot area, after anticipated dedications and proposed adjoining street and alley/public right-of-way mergers.

Figure 1 – Project Area Map

As illustrated in the Street Designation Map in Figure 2, Ventura Boulevard is a major east-west arterial in the City of Los Angeles designated as a Boulevard II. Colfax Avenue is a north-south roadway designated as an Avenue II serving the communities north of Ventura Boulevard.

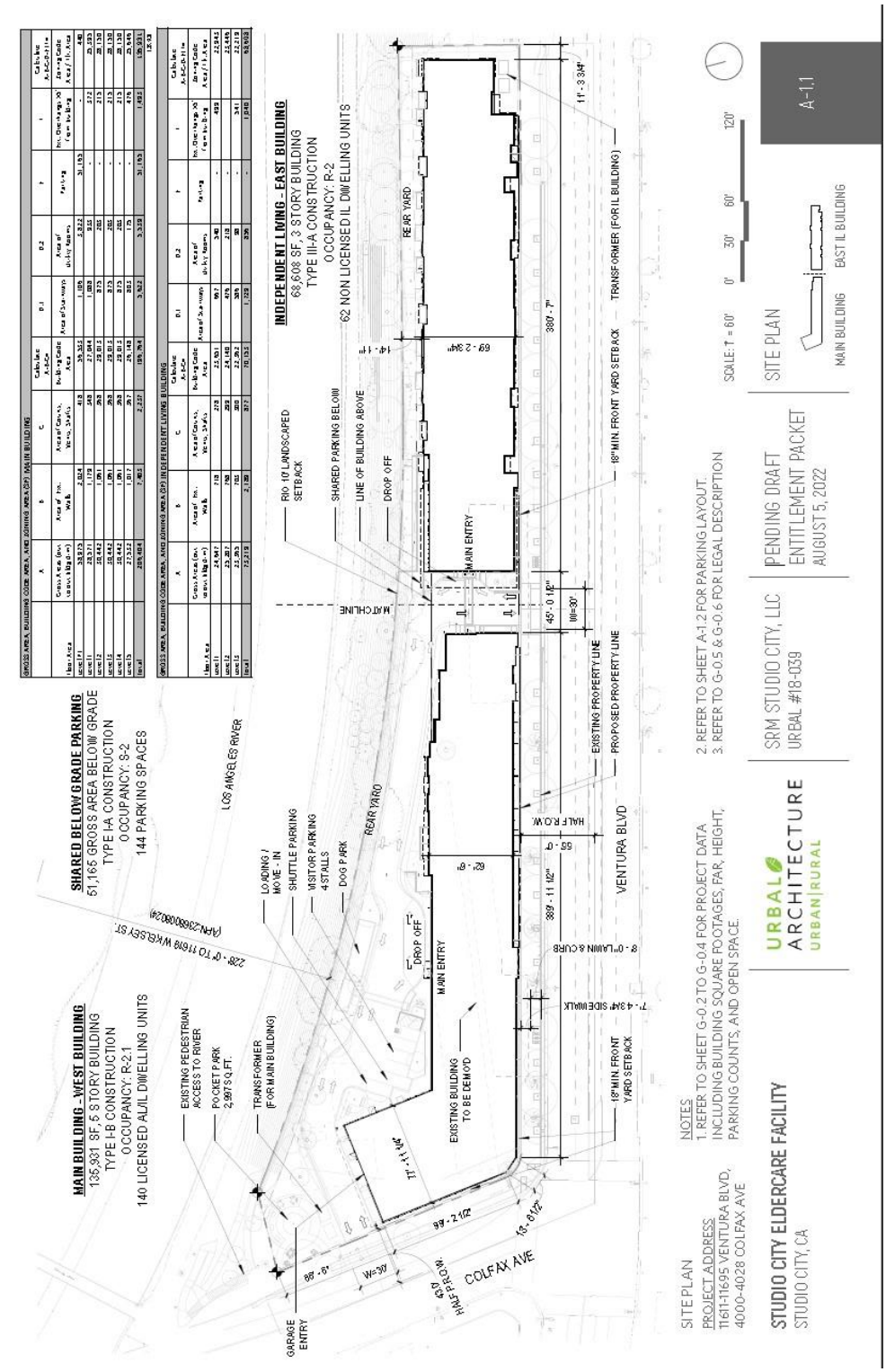
Figure 2 – Street Designation Map



Project Site Plan

Figure 3 illustrates the project site plan showing driveway locations, distance of the project driveways from the adjacent intersection, and the loading/unloading areas.

Figure 3- Site Plan



Project Site Vehicle Access

As shown in Figure 3, the project will have one driveway on Ventura Boulevard, eliminating four existing driveways, and one driveway on Colfax Avenue to provide ingress and egress access to the project site. The site plan also illustrates the surface parking spaces on the project site as well as the on-site loading and delivery locations and shuttle parking area.

Project Passenger Loading/Unloading

The driveway on Colfax Avenue provides access to the elder care facility, as shown in Figure 3, using a two-way 24-foot access to the visitor parking, shuttle parking, dog/pocket park, and the passenger loading/unloading area.

Additionally, the driveway on Ventura Boulevard provides access to the elder care facility as well as to the independent living facility.

Project Parking

The project will provide the following number of parking spaces for Assisted Living and Independent Living uses on P1 parking level in the garage:

Table 1 - Provided Parking Spaces

Level	Accessible	Compact	Standard	EV	Total
L1 (Visitor)	1		3		4
L1 (Shuttle)					1
P1 Resident	3	2	58	7	71
P1- IL Resident	4		63	7	74
Total	8	2	124	14	149

PROJECT CONTEXT

A comprehensive analysis and an inventory of the existing transportation infrastructure and conditions within a ¼ mile radius of the project site, as shown in the aerial map in Figure 4, was collected. The collected data was analyzed to determine the street designations, classifications, and modal priorities as identified in the City's Mobility Plan 2035.

Figure 4 – ¼ Mile Radius Area Map

The following describes the details of the transportation infrastructure in the vicinity of the project:

Non-Vehicular Transportation System

The following sections describe the non-vehicular transportation system for Pedestrian Facilities, Bicycle Facilities, and Transit Services:

Pedestrian Facilities

A review of the project area was conducted to evaluate the effects of the project on pedestrian activity within ¼ mile radius of the project. The map in Figure 4 indicates potential pedestrian destinations within 1,320 feet of the edge of the project site. According to the City of Los Angeles' Mobility Plan 2035, the project site is not a part of the Pedestrian Enhanced District. The Pedestrian Enhanced Districts map is included in Appendix 1. The following pedestrian facilities are provided:

Sidewalks

A sidewalk inventory within the ¼ mile vicinity of the project was taken. The collected data for existing pedestrian sidewalks is listed in Table 2 below:

Table 2 – Sidewalk Inventory

Street Name	From	To	Street Side	Sidewalk Width	Condition
Ventura	Colfax	w/o Carpenter	NS /SS	~6 to 10 Feet	Good
Ventura	Colfax	e/o Blue Canyon	NS/SS	~6 to10 Feet	Good
Colfax	Ventura	n/o Chiquita	ES/WS	~5 to 11 Feet	Good

Crosswalks, Curb Ramps & Pedestrian Push Buttons

Within ¼ mile vicinity of the project site, pedestrian crosswalks, curb ramps and pedestrian push buttons are available at the following locations, shown in Table 3:

Table 3 – Crosswalk, Curb Ramp & Pedestrian Push Button Inventory

Intersection Name		Signal Phasing	Ped Push Button	Crosswalk Type	Curb Ramp	Cond.
Ventura	Colfax	7	Yes	North Leg Continental	Yes	Good
				South Leg	No	NA
				East Leg Continental	Yes	Good
				West Leg Continental	Yes	Good
Ventura	Carpenter	2	Yes	North Leg Continental	Yes	Good
				South Leg Continental	Yes	Good
				East Leg Continental	Yes	Good
				West Leg Continental	Yes	Good
Ventura	Blue Canyon	Stop Control	N/A	North Leg No Crosswalk	N/A	N/A
				South Leg No Crosswalk	Yes	Good
				East Leg No Crosswalk	N/A	N/A
				West Leg No Crosswalk	N/A	N/A
Colfax	Chiquita	Stop Control	N/A	North Leg No Crosswalk	Northeast Yes	Good

				South Leg No Crosswalk	Northwest No	Bad
				East Leg No Crosswalk	Southeast Yes	Good
				West Leg No Crosswalk	No	N/A

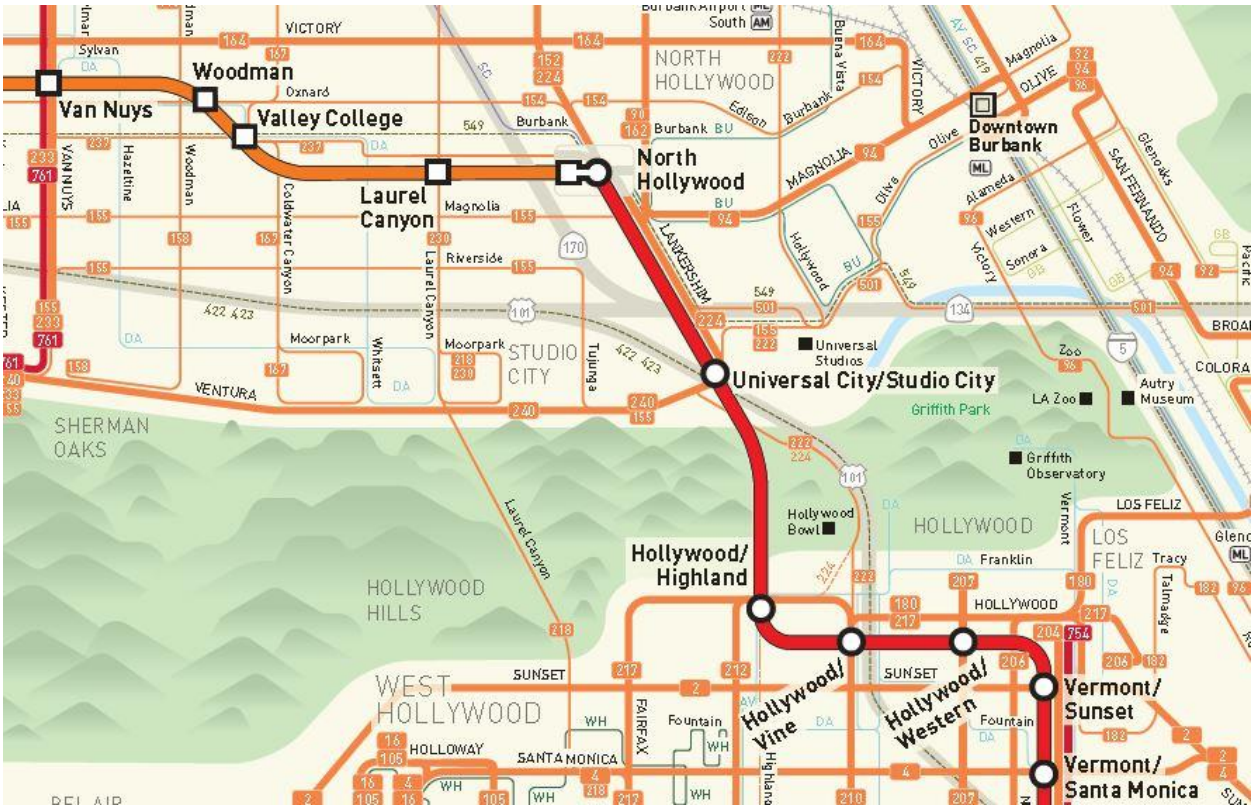
Bicycle Facilities

According to the City of Los Angeles' Mobility Plan 2035, the project site is near the Bicycle Enhanced Network. The City's Bicycle Enhanced Network and Bicycle Lane Network map is shown in Appendix 2.

Transit Services

According to the City of Los Angeles' Mobility Plan 2035, the project site along Ventura Boulevard is adjacent to Transit Enhance Network. Ventura Boulevard in this area is classified as a "Moderate Plus Transit Enhanced Street". Within ¼ mile radius of the project site transit services in the project area are provided by Los Angeles County Metropolitan Transportation Authority (Metro). As shown on the Bus Service Area Map in Figure 5, Metro operates bus routes 218 and 240 on Ventura Boulevard. Bus schedules including location of bus stops and frequency of service are provided in Appendix 3.

Figure 5 – Bus Service Area Map



Vehicular Transportation System

An assessment of the roadway system within a ¼ mile radius of the project site was conducted. The assessment included the number of traffic lanes, direction of flow, and the presence of peak period tow-away lanes affecting roadway travel capacity, the presence of bicycle lanes, and any other significant street information.

Regional Freeway System

The project area is served by Ventura Freeway, US 101. The project site is more than ¼ mile from the freeway. The nearest intersection freeways are the State Routes 170 and 134 to the north. The segment of the US 101 freeway near the project site generally consists of five mixed-flow travel lanes in each direction. Approximately 1.5 mile from the project site, there are north and southbound freeway ramps to access the US 101 near Lankershim Boulevard.

Area Roadway System

The project area is served by the following surrounding major roadways:

- Ventura Boulevard adjacent to the project site is an east-west roadway designated as "Boulevard II" by the City of Los Angeles General Plan. It has two travel lanes in each direction separated by a continuous two-way left-turn lane. Parking is allowed on both sides of the street.
- Colfax Avenue adjacent to the project site is a north-south roadway designated as "Avenue II" by the City of Los Angeles General Plan. It has one travel lane and a Tier 2 bicycle lane in each direction separated by a continuous two-way left-turn lane. Parking is allowed on both sides of the street.
- Ventura Boulevard and Colfax Avenue adjacent to the project site are not included in the City's High Injury Network map.

Please refer to Appendix 4 for City of Los Angeles Street Designation map and local High Injury Network map.

CEQA ANALYSIS OF TRANSPORTATION IMPACTS

In compliance with CEQA and/or in accordance with City regulations, LADOT may require applicants to analyze and assess project-specific transportation impacts based on the following criteria:

- If the Development Project is estimated to generate a net increase of 250 or more daily vehicle trips and requires discretionary action, a transportation assessment for a Development Project is required, or
- A transportation assessment is required by City ordinance or regulation.

According to the TAG, the preparation of a transportation impact assessment requires analysis and prediction of impacts or deficiencies to the circulation system generated by Development or Transportation Projects as well as the identification of feasible measures or corrective conditions to offset any impacts or deficiencies identified through a transportation assessment.

Project Daily Vehicle Trip Generation

LADOT's VMT calculator, Version 1.3, was used to determine if the project would exceed any of the Transportation Impact Assessment criteria which would require further transportation impact analysis. Based on the land use and size of the existing and proposed project the VMT calculator determined that the project would generate 607 Net New Daily Vehicle Trips. Refer to Appendix 5 for VMT Calculator sheets. Since the project's Daily Vehicle Trips exceed the 250 thresholds, as shown in the Table 4 below, further transportation impact assessment would be required.

Table 4 – VMT Calculator Results

	Existing Land Use	Proposed Project	Net Increase
Daily Vehicle Trips	0	607	607
Daily VMT	0	4,070	4,070

Analysis Methodology

There are two categories of transportation impact analysis required by the LADOT's TAG. The first category, in Section 2, relates to potential transportation impacts under CEQA. Should a project exceed thresholds identified in the TAG, its impact would be considered significant under CEQA and thus would require any feasible mitigation measures be implemented to reduce the impact below the threshold of significance, to the extent feasible. The CEQA thresholds identified in the TAG are consistent with City adopted thresholds and with State CEQA guidance.

The other category of analysis, non-CEQA transportation impact analysis found in Section 3 of the TAG, analyze transportation issues relating to safety, access, and circulation as they may be the result of the construction or operation of a project. The TAG identifies specific screening criteria in Sections 2 and 3 to determine whether each type of CEQA and non-CEQA transportation analysis is required depending on the size, use and daily vehicular trip generation of the project.

City of Los Angeles CEQA Thresholds

The City's TAG identifies three thresholds to assess the project's transportation impacts, as follows:

- **Threshold T-1:** Conflicting with Plans, Programs, Ordinances, or Policies
    - **Impact Criteria:** Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?
- **Threshold T-2.1:** Causing Substantial Vehicle Miles Traveled
    - **Impact Criteria:** Development Projects - The development project will have a potential impact if the project meets the following:

- For residential projects, the project would generate household VMT per capita exceeding 15% below the existing average household VMT per capita for the Area Planning Commission (APC) area in which the project is located. (Table 2.2-1 of the TAG, Table 5 in this report)
- For office projects, the project would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located. (see Table 2.2-1 of the TAG, Table 5 in this report)
- For regional serving retail projects, the project would result in a net increase in VMT.
- For other land use types, measure VMT impacts for the work trip element using the criteria for office projects above. (see Table 2.2-1 of the TAG, Table 5 in this report)

Table 5 – VMT Impact Thresholds

Table 2.2-1 of the TAG: VMT Impact Criteria (15% Below APC Average)		
Area Planning Commission	Daily Household VMT per Capita	Daily Work VMT per Employee
Central	6.0	7.6
East LA	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South LA	6.0	11.6
South Valley	9.4	11.6
West LA	7.4	11.1

- Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use
    - **Impact Criteria:** Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Threshold T-1: Conflict with Plans, Programs, Ordinances, or Policies

According to the City's TAG, the City has adopted programs, plans, ordinances, and policies that establish the transportation planning regulatory framework for all travel modes. The overall goals of these policies are to achieve a safe, accessible, and sustainable transportation system for all users.

Screening Criteria for T-1

The City's TAG, Table 2.1-1, lists all policies that should be reviewed as part of the analysis to identify any potential conflicts with the proposed project. The TAG also provides a list of questions, as shown in Table 6, to guide the review of the documents in Table 2.1-1.

Table 6 – Screening Criteria Questions for T-1

	Screening Criteria Questions	Answer	Action
1	Does the project require discretionary action?	Yes	If answer is yes to 1, answer the next questions otherwise no further analysis
2	Does the project require a discretionary action that requires the decision maker to find that the decision substantially conforms to the purpose, intent, and provisions of the General Plan?	Yes	If the answer to 1 and 2 or 3 or (4a & 4b) or (5a & 5b) is Yes further analysis is required
3	Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?	No	
4a	Is the project **required** to make modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?	Yes	
4b	Is the modification along the project frontage on a roadway designated as an **Avenue** or a **Boulevard** in the Mobility Plan 2035?	Yes	
5a	Is the project **proposing voluntarily** to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?	No	
5b	Is the modification along the project frontage on a roadway designated as an **Avenue** or a **Boulevard** in the Mobility Plan 2035?	No	

Impact Analysis for T-1

The TAG requires the completion of the Plan Consistency Worksheet to determine whether the project conflicts with any City circulation system policy. According to the TAG, a mere conflict with adopted transportation related policies, or standards that requires administrative relief or legislative change does not in itself constitute an impact. A copy of the completed Plan Consistency Worksheet is attached in Appendix 5.1.

Project Consistency Analysis for T-1

According to the completed Plan Consistency Worksheet, the project is consistent with each of the criteria in Plan Consistency Worksheet. Therefore, the project would not result in a significant impact under Threshold T-1 and no mitigation measures are required. The project, together with the Related Projects, is consistent with the documents and no significant cumulative impact would occur.

Proposed Mitigation Measures for T-1

The project would not result in a significant impact under Threshold T-1 and no mitigation measures are required.

Summary for T-1

The analysis to determine project transportation related impacts were conducted according to the City's TAG. The analysis revealed that the project does conflict with any of the City program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities Therefore, the project would not result in significant impact under Threshold T-1.

Threshold T-2: Causing Substantial Vehicle Miles Traveled (VMT)

LADOT created a VMT calculator tool which is specifically designed and intended to be used to develop project specific daily household VMT per capita and daily work VMT per employee for land use development projects in the City of Los Angeles. The calculator implements the methodologies and significance thresholds described in Section 2.2 of the TAG for residential and employment projects. A proposed project's daily trips should be estimated using the VMT calculator tool or the most recent version of the ITE Trip Generation Manual as described in the Section 2.2.4 of the TAG. TDM strategies should not be considered for the purpose of screening.

Screening Criteria for T-2

According to City's TAG, if the project requires a discretionary action, and the answer is no to either T-2.1-1 or T-2.1-2, further analysis will not be required for Threshold T-2.1, and a "no impact" determination can be made for that threshold:

- T-2.1-1: Would the land use project generate a net increase of 250 or more daily vehicle trips?
- T-2.1-2: Would the project generate a net increase in daily VMT?

In addition to the above screening criteria, the portion of, or the entirety of a project that contains small-scale or local serving retail uses are assumed to have less than significant VMT impacts. If

the answer to the following question is no, then that portion of the project meets the screening criteria, and a no impact determination can be made for the portion of the project that contains retail uses. However, if the retail project is part of a larger mixed-use project, then the remaining portion of the project may be subject to further analysis in accordance with the above screening criteria. Projects that include retail uses in excess of the screening criteria would need to evaluate the entirety of the project's vehicle miles traveled, as specified in Section 2.2.4.

- If the project includes retail uses, does the portion of the project that contain retail uses exceed a net 50,000 square feet?

Independent of the above screening criteria, and the project requires a discretionary action, further analysis will be required if the following statement is true:

- Would the Project or Plan located within a one-half mile of a fixed-rail or fixed-guideway transit station replace an existing number of residential units with a smaller number of residential units?

For the purpose of screening for proposed change in housing units located near fixed-rail or fixed- guideway transit for development projects, the total number of housing units that exist on the project site should be counted and compared to the total number of housing units as proposed by the project to determine if the project would result in a net decrease in housing units. For the purposes of screening for proposed change in housing units that are in proximity to transit for land use plans, the total number of existing housing units within a one-half mile of a fixed-rail transit station that fall within the land use plan area should be counted and compared to the total housing capacity within the same area that could be built as a result of the land use plan to determine if the plan could result in a net decrease in housing.

Impact Analysis for T-2

LADOT's VMT calculator was used to evaluate Project VMT and compare it to the VMT impact criteria. The VMT Calculator was set up with the project's land uses and the respective sizes as the primary input. The VMT analysis results from the VMT Calculator are shown in the table below for before and after implementation of the project's proposed TDM measures. The detailed output from the VMT calculator is provided in Appendix 5.

Table 7 – VMT Impact Analysis for T-2

VMT Analysis Results			
Project Area Planning Commission		South Valley	
Total Employees		80	
Total Population		388	
VMT Calculator Report			
	Proposed Project	**With Mitigation**	**Reductions**
Daily Vehicle Trips	607	607	0
Daily VMT	4,070	4,070	0

Household VMT / Capita	0	0	0
Impact Threshold	9.4	9.4	
Significant Impact	**NO**	**NO**	
Work VMT Per Employee	8.3	8.3	0
Impact Threshold	11.6	11.6	
Significant Impact	**NO**	**NO**	

As shown in the table above, the project does not result in significant VMT impact.

Summary for T-2

The analysis revealed that the project does not result in significant impact under Threshold T-2.

Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use

The City's TAG indicates that impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from the project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. The analysis for T-3 should explore any potential conflicts that may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections.

Screening Criteria for T-3

According to the City's TAG, if the project requires a discretionary action, and the answer is "yes" to either of the following questions, further analysis will be required to assess whether the project would result in impacts due to geometric design hazards or incompatible uses:

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?
- Is the project proposing to, or required to make any voluntary or required, modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?

Impact Analysis

Project access and circulation plans were reviewed considering commonly accepted traffic engineering design standards[2] to ascertain whether any deficiencies are apparent in the site

[2] One example of traffic engineering design standards includes but is not limited to Section 321 of LADOT's Manual of Policies and Procedures, which provides guidance on driveway design.

access plans which would be considered significant. According to the TAG, the determination of significance shall be on a case-by-case basis, considering the following factors:

- The relative amount of pedestrian activity at project access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.
- The type of bicycle facilities the project driveway(s) crosses and the relative level of utilization.
- The physical conditions of the site and surrounding area, such as curves, slopes, walks, landscaping, or other barriers, that could result in vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle impacts.
- The project location, or project-related changes to the public right-of-way, relative to proximity to the High Injury Network or a Safe Routes to School program area.
- Any other conditions, including the approximate location of incompatible uses that would substantially increase a transportation hazard.

T-3 Proposals Discussion

As shown on the project's site plan for access and circulation in Figure 3, the Project proposes one two-way driveway on Ventura Boulevard and one two-way driveway on Colfax Avenue for ingress and egress. The driveway on Colfax Avenue provides access to the elder care facility, as shown in Figure 3, using a two-way 24-foot access to the visitor parking, shuttle parking, dog/pocket park, and the passenger loading/unloading area. Additionally, the driveway on Ventura Boulevard provides access to the elder care facility as well as to the independent living facility.

Driveway Design

The driveway locations minimize the potential conflict between the parking facilities and pedestrians, bicycles, and vehicles on the street. Generally, each of the driveways would comply with LADOT's design standards, and requirements in accordance with the Manual of Policies and Procedures.

Project Site Pedestrian and Bicycle

The project would provide pedestrian access points on Ventura Boulevard and Colfax Avenue. Bicycle parking would be provided on site in an area of the parking separate from the vehicular parking. The project proposes to eliminate four existing driveways on Ventura Boulevard. Ventura Boulevard and Colfax Avenue adjacent to the project site are not part of the High Injury Network. Therefore, the project access and circulation plan are less than likely to cause injuries resulting from collisions between vehicles and pedestrians, bicyclists, or other vehicles.

Mitigation Measures for T-3

A complete review of all project access points, internal circulation, and parking access from an operational and safety perspective into and out of project driveways was conducted. The review did not reveal any operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts. According to the TAG, significant cumulative impact for Threshold T-3 may only occur if the project, and other related projects combined with access points proposed along the same block(s), would create significant impacts.

Summary for T-3

Based on the project site plan review and design assumptions, the project does not present any geometric design hazards related to traffic movement, mobility, or pedestrian accessibility, and no significant impact would occur with respect to Threshold T-3. Therefore, no mitigation measures would be required.

NON-CEQA TRANSPORTATION ANALYSIS

The City of Los Angeles' police powers provides the authority to regulate the use of land. In certain applications, the City is required to make specific findings to exercise its discretionary authority to approve a land use development project. The City's Site Plan Review approval process establishes discretionary authority in Section 16.05 of the Los Angeles Municipal Code (LAMC) to review and correct for transportation deficiencies that may result from a development project. Therefore, the City of Los Angeles is requiring non-CEQA transportation analysis and potentially requiring improvements to address identified transportation related deficiencies.

Pedestrian, Bicycle, and Transit Access Assessment

The pedestrian, bicycle, and transit facilities in the vicinity of the project were assessed to determine the potential effects of the project on these facilities. According to the TAG, the deficiencies could be physical (through removal, modification, or degradation of facilities) or demand-based (by adding pedestrian or bicycle demand to inadequate facilities).

Screening Criteria

The TAG establishes three main screening criteria to determine whether further non-CEQA transportation analysis would be required to assess any potential project related effects and determine any possible adverse effect on existing pedestrian, bicycle, or transit facilities. The screening criteria is listed in Table 8 below:

Table 8 – Screening Criteria for Pedestrian, Bicycle and Transit Access

	Screening Criteria Questions	Answer	Action
1	Does the project require discretionary action?	Yes	If answer is yes to 1, 2 & 3 further
2	Does the land use project include the construction, or addition of:	No	

	▪ 50 (or more) dwelling units or guest rooms or combination thereof, or		analysis is required
	▪ 50,000 square feet (or more) of non-residential space?		
3	Would the project generate a net increase of 1,000 or more daily vehicle trips, or is the project's frontage along an Avenue, Boulevard, or Collector (as designated in the City's General Plan) 250 linear feet or more, or is the project's building frontage encompassing an entire block along an Avenue or Boulevard (as designated in the City's General Plan)?	Yes	

The project exceeds the screening criteria. Therefore, further analysis of pedestrian, bicycle and transit access is required.

Project Access, Safety, and Circulation Evaluation

The TAG requires an evaluation of the project's access and circulation constraints. The evaluation may include operational, or capacity constraints. Constraints can be related to vehicular/vehicular, vehicular/bicycle, or vehicular/pedestrian constraints as well as to operational delays. A detailed review of the project access, safety and circulation was conducted to determine any project related adverse effects. The review analyzed the operation of vehicular traffic volumes as well as pedestrian and bicycle traffic.

Screening Criteria

The TAG establishes two main screening criteria to determine whether further non-CEQA transportation analysis would be required to assess any potential project related effects and determine any possible adverse effect on access, safety, and circulation. The screening criteria is listed in Table 9 below:

Table 9 – Screening Criteria for Access, Safety, and Circulation

	Screening Criteria Questions	Answer	Action
1	Does the project require discretionary action?	Yes	If answer is yes to 1 & 2 further analysis is required
2	Would the land use project generate a net increase of 250 or more daily vehicle trips?	Yes	

The project exceeds the screening criteria as determined by LADOT on the Transportation Study Assessment referral form. Additionally, the project is within the Ventura/Cahuenga Boulevard Specific Plan area. Therefore, LADOT has determined that the project would be required to conduct access, safety, and circulation evaluation.

Evaluation Criteria

The TAG requires operational, safety and passenger loading evaluations of the project's effects on access, safety, and circulation. Project access is considered constrained if the project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard (as designated in the Mobility Plan 2035) at project driveway(s) or would cause or substantially extend queuing at nearby signalized intersections. Unacceptable or extended queuing may be defined as spill over from turn pockets into through lanes, block cross streets, or alleys, and contribute to "gridlock" congestion.

Operational Evaluation

An operational evaluation of the project area was conducted to determine any project impact on access, safety, and circulation on the roadway network in the vicinity of the project.

Study Intersections

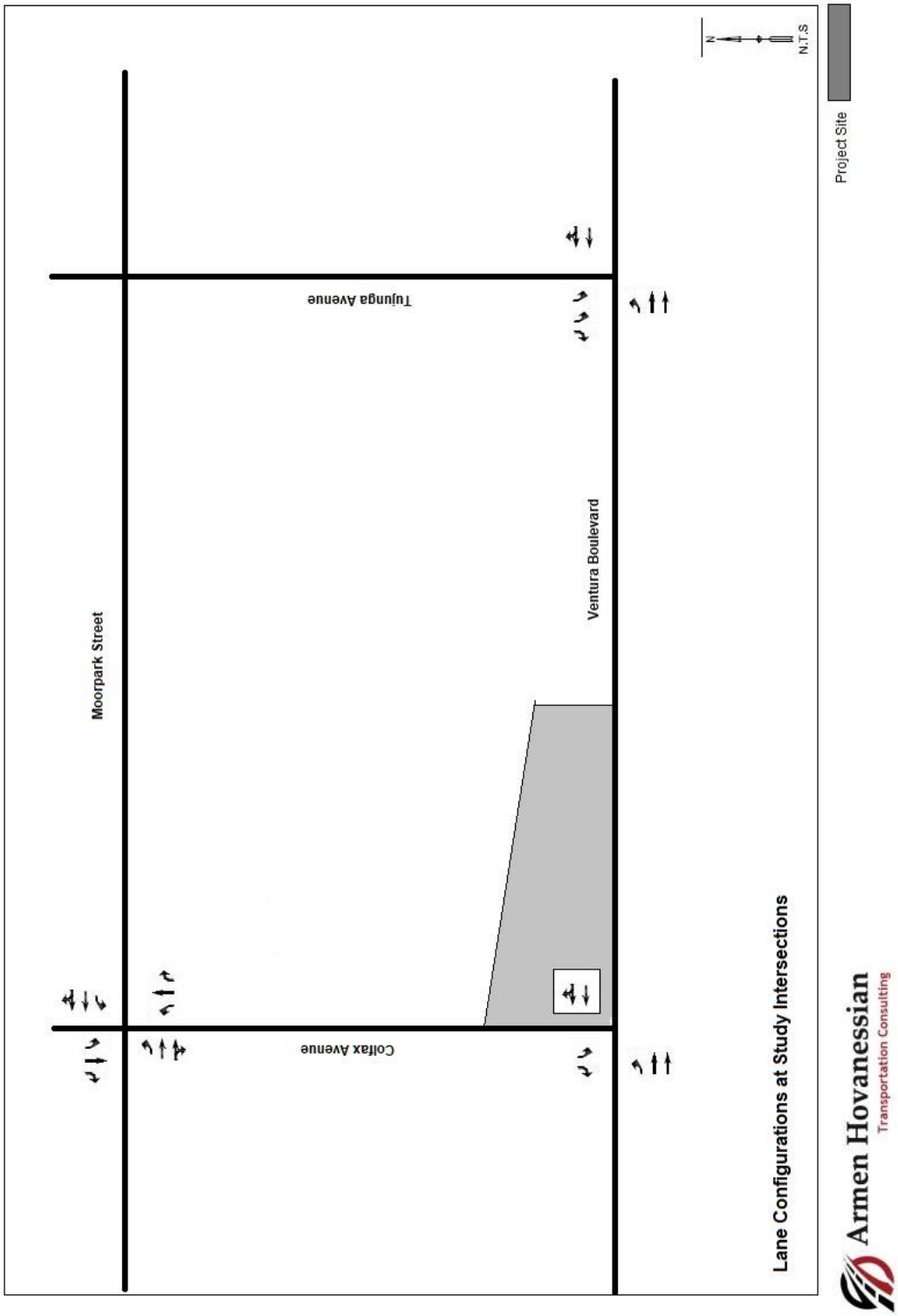
After a consultation with LADOT, it was determined that the following intersections would be analyzed and evaluated for operational assessment, as shown in Table 10 below:

Table 10 – Study Intersections

Intersection(s)	Configuration	Control
Ventura Boulevard & Colfax Avenue	T-intersection	Traffic Signal
Ventura Boulevard & Tujunga Avenue	T-intersection	Traffic Signal
Colfax Avenue & Moorpark Street	4-legged	Traffic Signal

Refer to Figure 6 below for a depiction of the configurations of traffic lanes at the approaches to the study intersections.

Figure 6 – Study Intersections Lane Configurations



Traffic Volume Counts

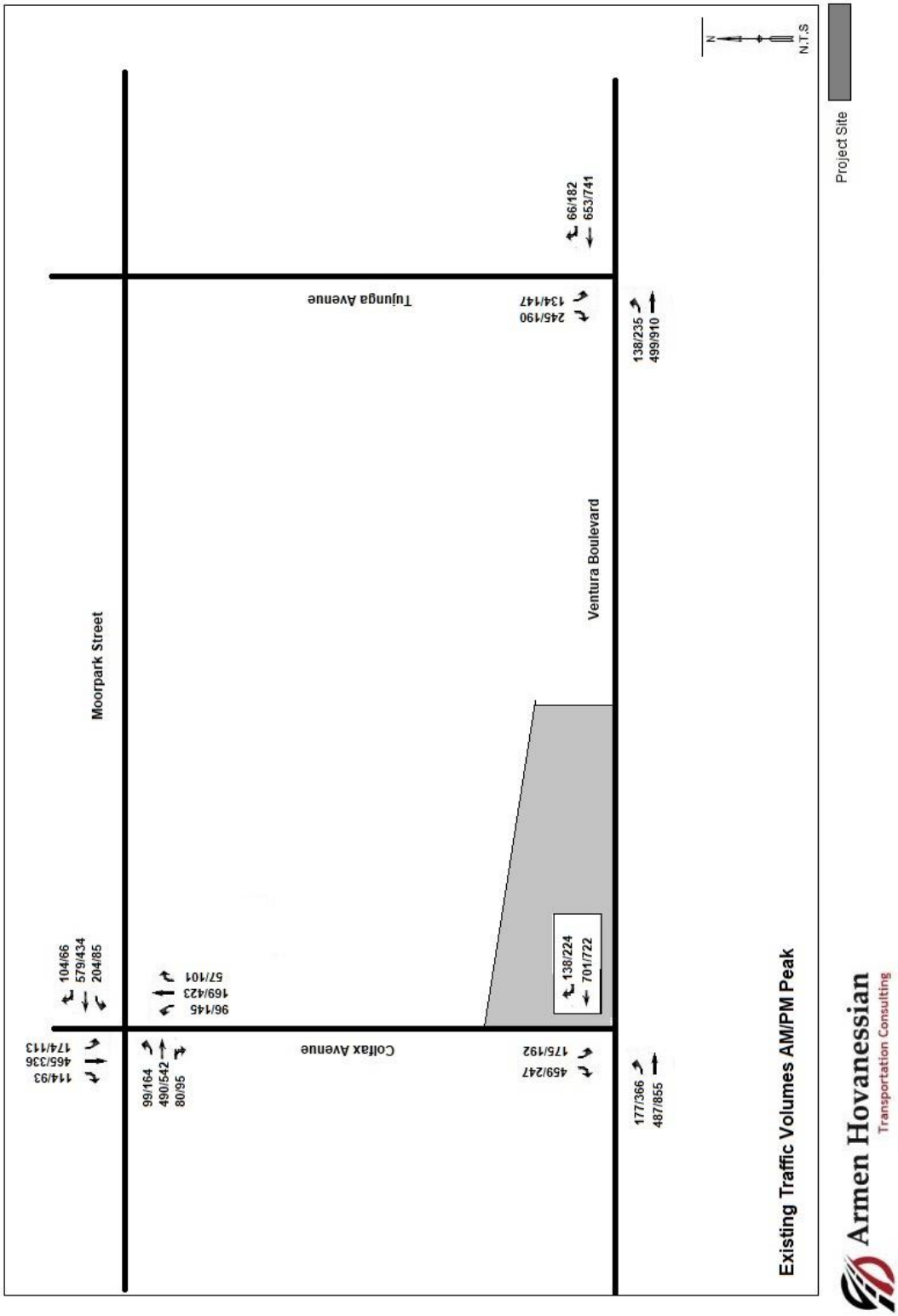
Traffic volume counts were obtained for vehicular turning movements at the following three (3) study intersections:

- Ventura Boulevard & Colfax Avenue
- Ventura Boulevard & Tujunga Avenue
- Colfax Avenue & Moorpark Street

Vehicular turning movement counts were conducted on Tuesday, October 19, 2021, during the typical commuter hours of 7:00 AM to 10:00 AM and 3:00 PM to 6:00 PM, to obtain existing traffic volumes for the AM and PM peak hours.

Please refer to Appendix 6 for the manual traffic counts, and Figure 7 below for Existing (AM/PM Peak) Traffic Volumes for an illustration of the AM and PM peak-hour turning movement counts used for the study intersections.

Figure 7 – Existing Traffic Volumes at Study Intersections



Project Trip Generation

Trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual 11th Edition* were used in this analysis. The trip generation calculations are consistent with the TAG and have been approved by City staff.

The project proposes to add new uses without taking existing use trip credit for existing uses as shown in Table 11 below. The project is forecast to result in 81 AM peak trips and 94 PM peak hour trips. The total daily net new trips will be 707.

Table 11 – Project Trip Generation

PROJECT TRIP GENERATION

	Land Use (ITE Code)	Size	Unit	AM Peak Hour Trips				PM Peak Hour Trips				Daily Trips	
				Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total
Proposed	Congregate Care Facility - Independent Living (253)	62	DU	0.19	Split	56%	44%	0.23	Split	54%	46%	2.21	137
					12	7	5		14	8	7		
	Assisted Living (254)	135.931	SF (1000)	0.51	Split	65%	35%	0.59	Split	39%	61%	4.19	570
					69	45	24		80	31	49		
					Split				Split				0
					0	0	0		0	0	0		
					Split				Split				0
					0	0	0		0	0	0		
	Total New Trips				81	52	29		94	39	55		707
Existing					Split				Split				0
					0	0	0		0	0	0		
					Split				Split				0
					0	0	0		0	0	0		
					Split				Split				0
					0	0	0		0	0	0		
					Split				Split				0
					0	0	0		0	0	0		
					Split				Split				0
					0	0	0		0	0	0		
	Total Existing Trips				0	0	0		0	0	0		0
NET INCREASE/DECREASE TRIPS					81	52	29		94	39	55		707

Source: ITE Trip Generation Manual, 11th Edition

Project Trip Distribution and Assignment

Trip distribution assumptions are used to determine the origin and destination of new vehicle trips associated with the Project. The geographic distribution of project trips is based on the functional classification of streets in the vicinity, the magnitude of traffic volumes, as well as local knowledge of the roadway network. Based on the project trip generation, shown in Table 11 and the regional trip distribution assumptions, a proposed study area for the traffic analysis was derived. The location and the number of the intersections to be analyzed was reviewed and approved by the LADOT staff.

Refer to Figures 8 and 9 below for illustrations showing the Project's Trip Distributions and Assignments at the study intersections.

Figure 8 – Project Trip Distribution

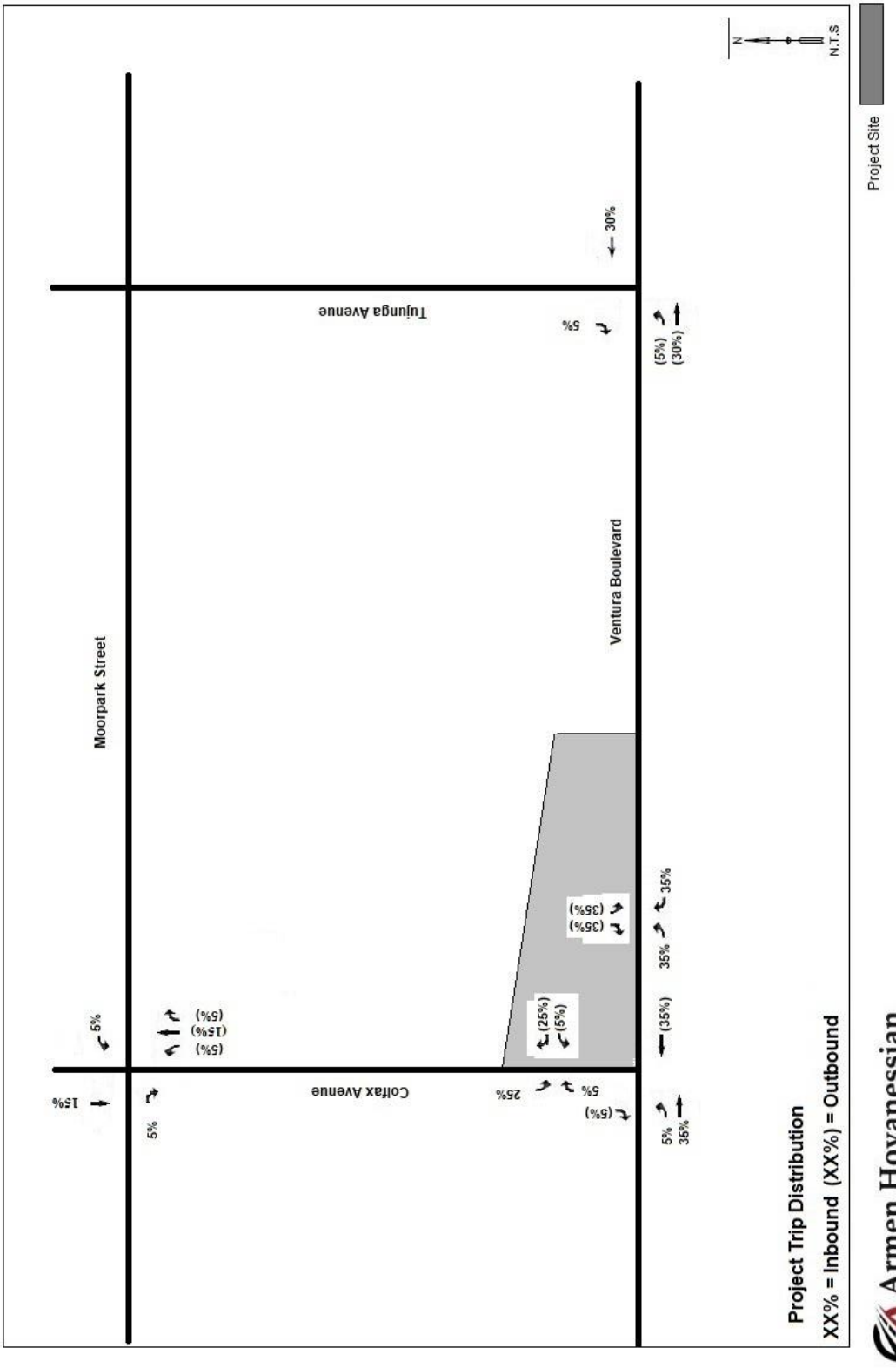
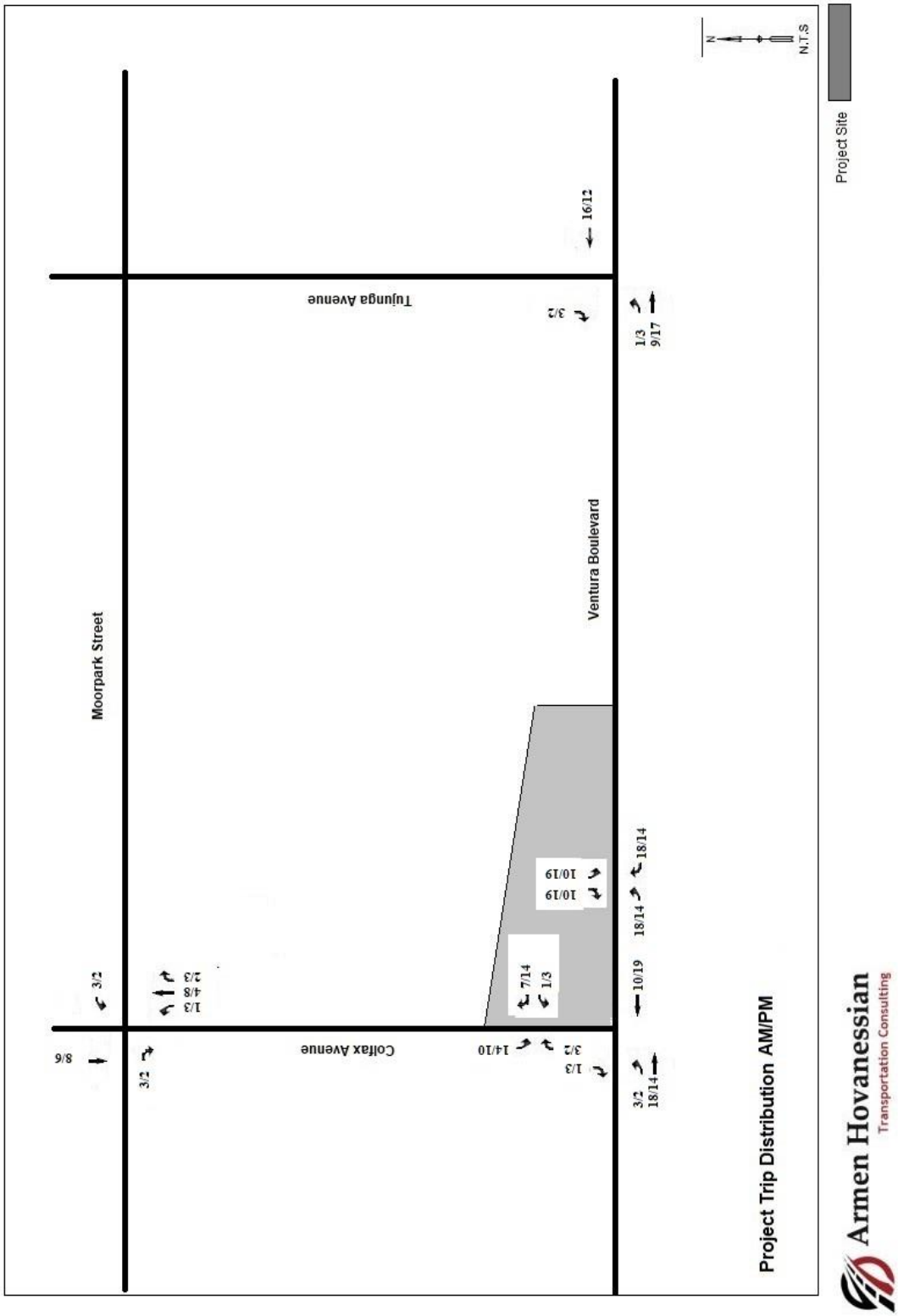


Figure 9 – Project Trip Assignments



Traffic Forecasts

In general, future peak hour traffic projections for the study intersections are estimated to include future growth due to (1) related projects within ½ mile of the project site and (2) ambient traffic growth.

Related Projects

To understand the relative traffic impacts for the projected year of completion, this traffic study analyzed potential traffic trips due to the development of related projects in the area. A list of related projects and the trip volumes was provided by the City of Los Angeles. The associated trip volumes were calculated using the ITE Trip Generation Manual. A map of the locations of these related projects, with respect to the project site is shown in Figure 10.

Figure 10 – Related Projects Map

A list of the related projects, with their corresponding traffic volumes at the study intersections, can be viewed in Table 12 below:

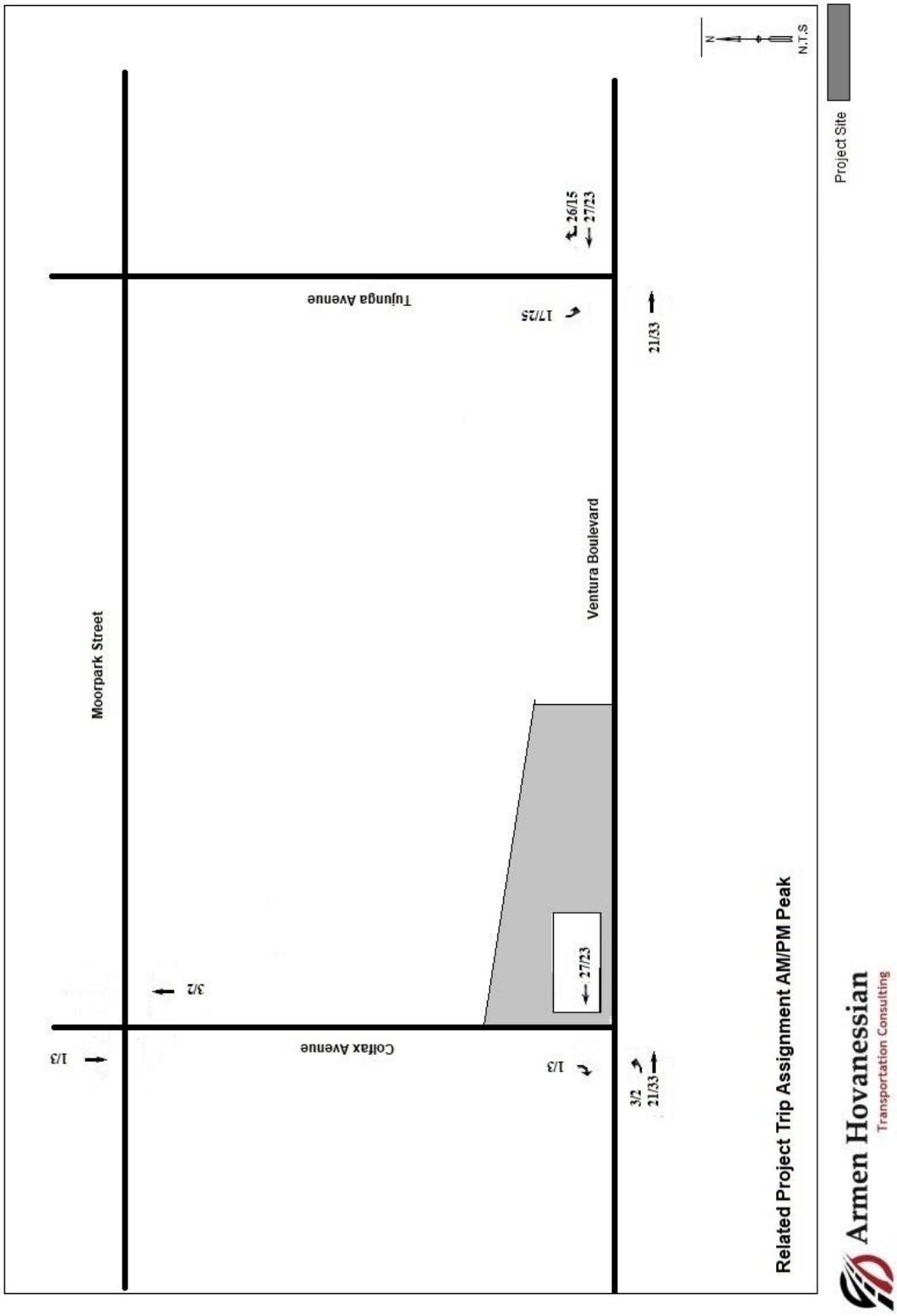
Table 12- Related Projects List

#	Location	Land Use	Size	Unit	Daily Trips	Weekday Peak Hour					
						AM			PM		
						In	Out	Total	In	Out	Total
1	11331 Ventura Bl.	Condo	62	DU	418	7	23	30	22	14	36
1	11331 Ventura Bl.	Office replaced	21694	SF	-235	-29	-4	-33	-5	-26	-31
2	4021 N. Radford Avenue	Apartment	58	DU	264	6	15	21	14	9	23
2	4021 N. Radford Avenue	Cafe	2225	SF	239	18	13	31	19	18	37
2	4021 N. Radford Avenue	General Variety Retail	1822	SF	116	4	5	9	7	7	14
2	4021 N. Radford Avenue	Auto repair * replaced	8340	SF	Rate not available	-14	-10	-24	-15	-15	-30
3	11263 - 11325 Ventura Bl.	Supermarket	34832	SF	3269	123	114	237	163	157	320
3	11263 - 11325 Ventura Bl.	Commercial/Variety Retail	5053	SF	322	11	12	23	19	19	38
3	11263 - 11325 Ventura Bl.	Restaurant	2775	SF	298	22	16	38	24	22	46
3	11263 - 11325 Ventura Bl.	Commercial/Variety Retail replaced	13629	SF	-868	-31	-31	-62	-51	-51	-102
3	11263 - 11325 Ventura Bl.	Fitness Club * replaced	17810	SF	Rate not available	-12	-13	-25	-36	-34	-70
3	11263 - 11325 Ventura Bl.	Restaurant replaced	2775	SF	-298	-22	-16	-38	-24	-22	-46
4	~~11617 Ventura Bl.~~	~~Apartments/Retail~~	~~391 & 12663~~	~~DU & SF~~	~~2077~~	~~36~~	~~169~~	~~205~~	~~62~~	~~136~~	~~198~~
					3525	83	124	207	137	98	235

#4 Same as project site prior project canceled
*ITE Trip Generation does not provide a daily rate

Refer to Figure 11 below for illustration showing the Related Projects' Trip Assignments at the study intersections.

Figure 11 – Related Projects' Trip Assignments



Ambient Traffic Growth

To account for the future ambient traffic growth from intensification of existing developments, and other projects that are located further than a half mile from the project site, the existing traffic volumes were increased by an ambient growth rate of 1% per year to the anticipated year of completion 2025. These values were used in addition to the related project trip generation to forecast future traffic volumes without project traffic volumes as shown in Figure 12.

Operational Evaluation

Operational analyses of vehicle average control delays, levels of service, and queueing were conducted at the study intersections for the following conditions and their traffic volumes.

1) Existing Traffic Conditions (See Figure 7)
2) Existing Plus Project Traffic Conditions (See Figure 13)
3) Future (2025) Without Project Traffic Conditions (See Figure 12)
4) Future (2025) Plus Project Traffic Conditions (See Figure 14)

Figure 12 – Future without Project Traffic Volumes

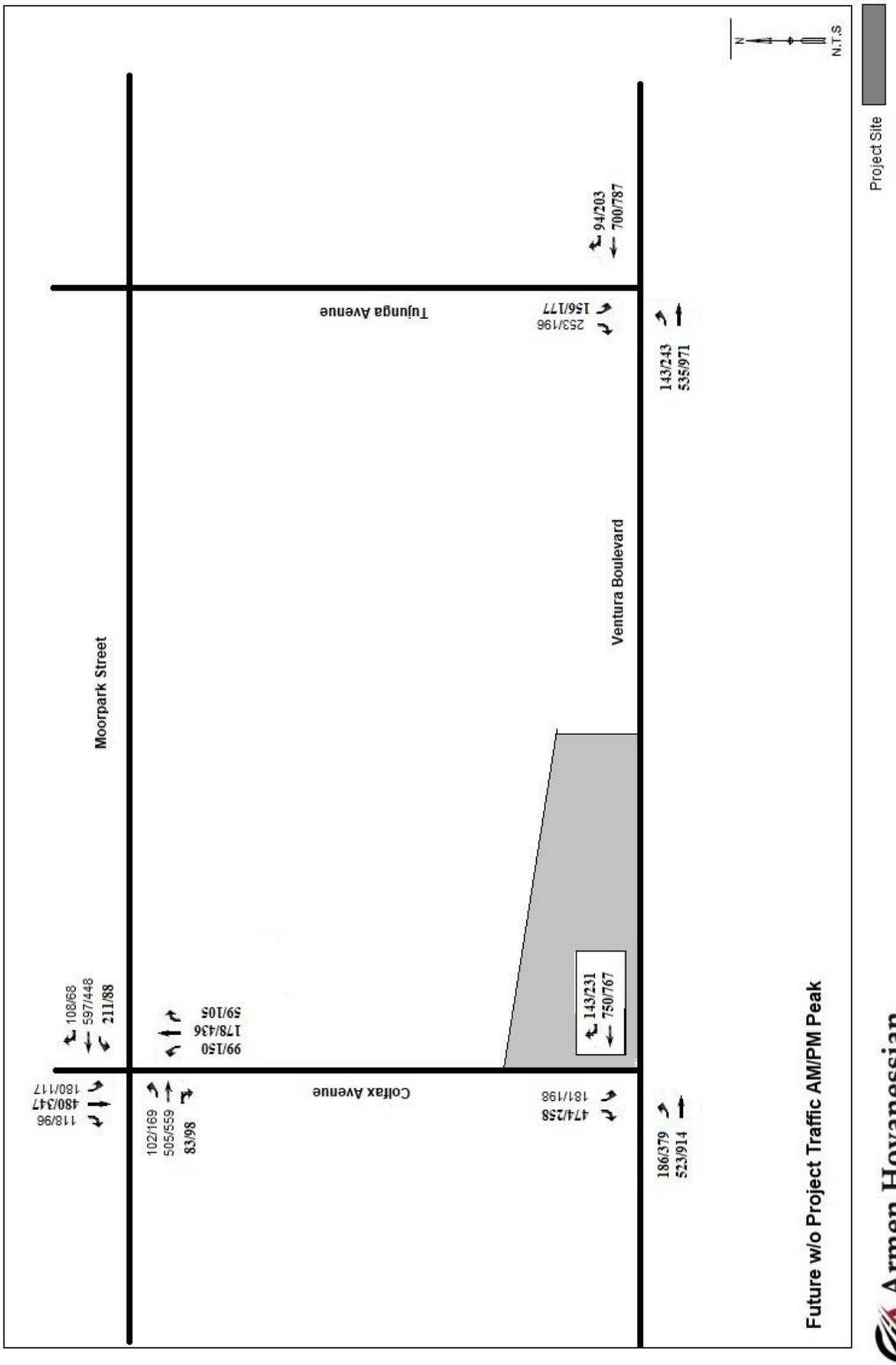


Figure 13 – Existing Plus Project Traffic Volumes

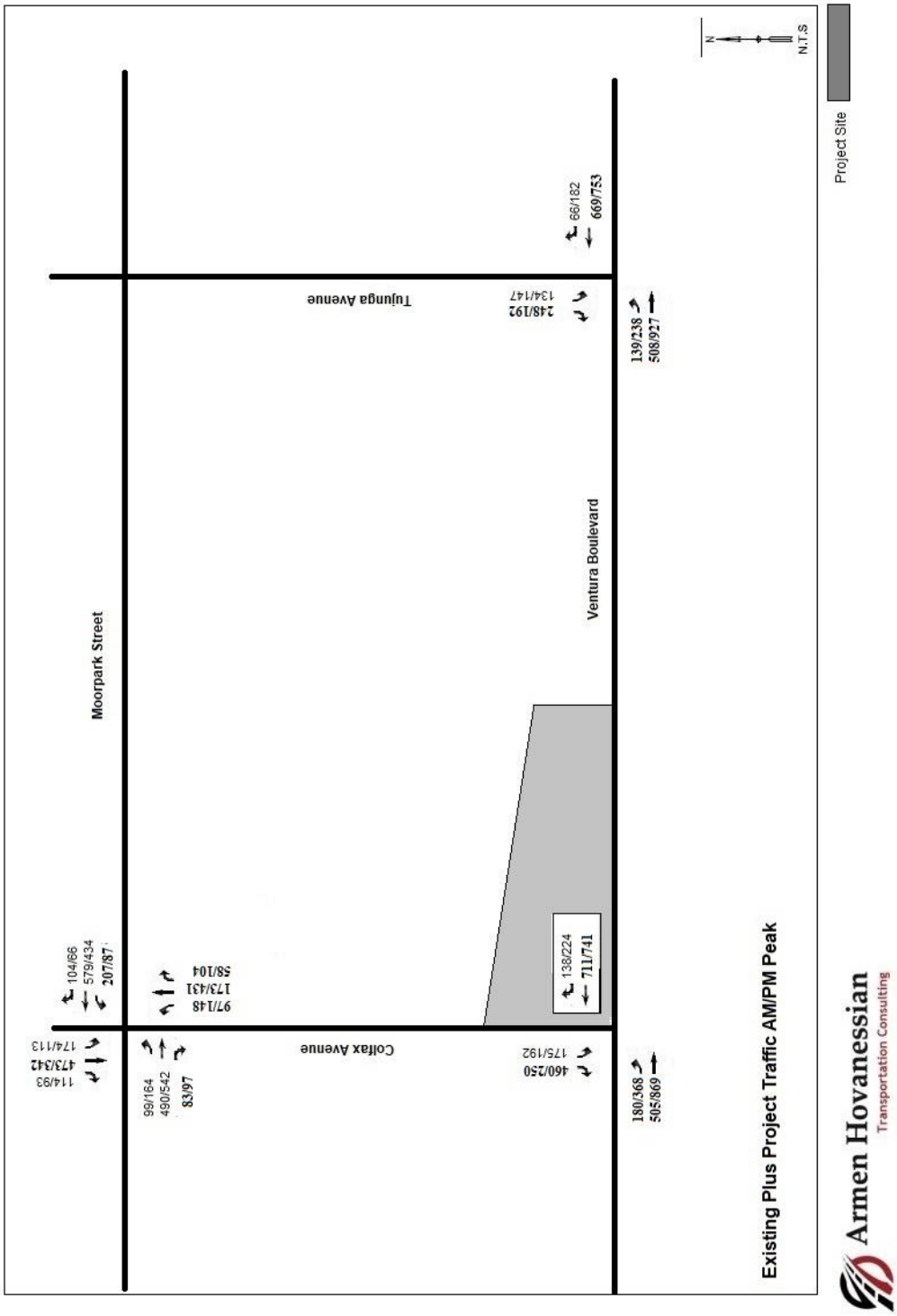
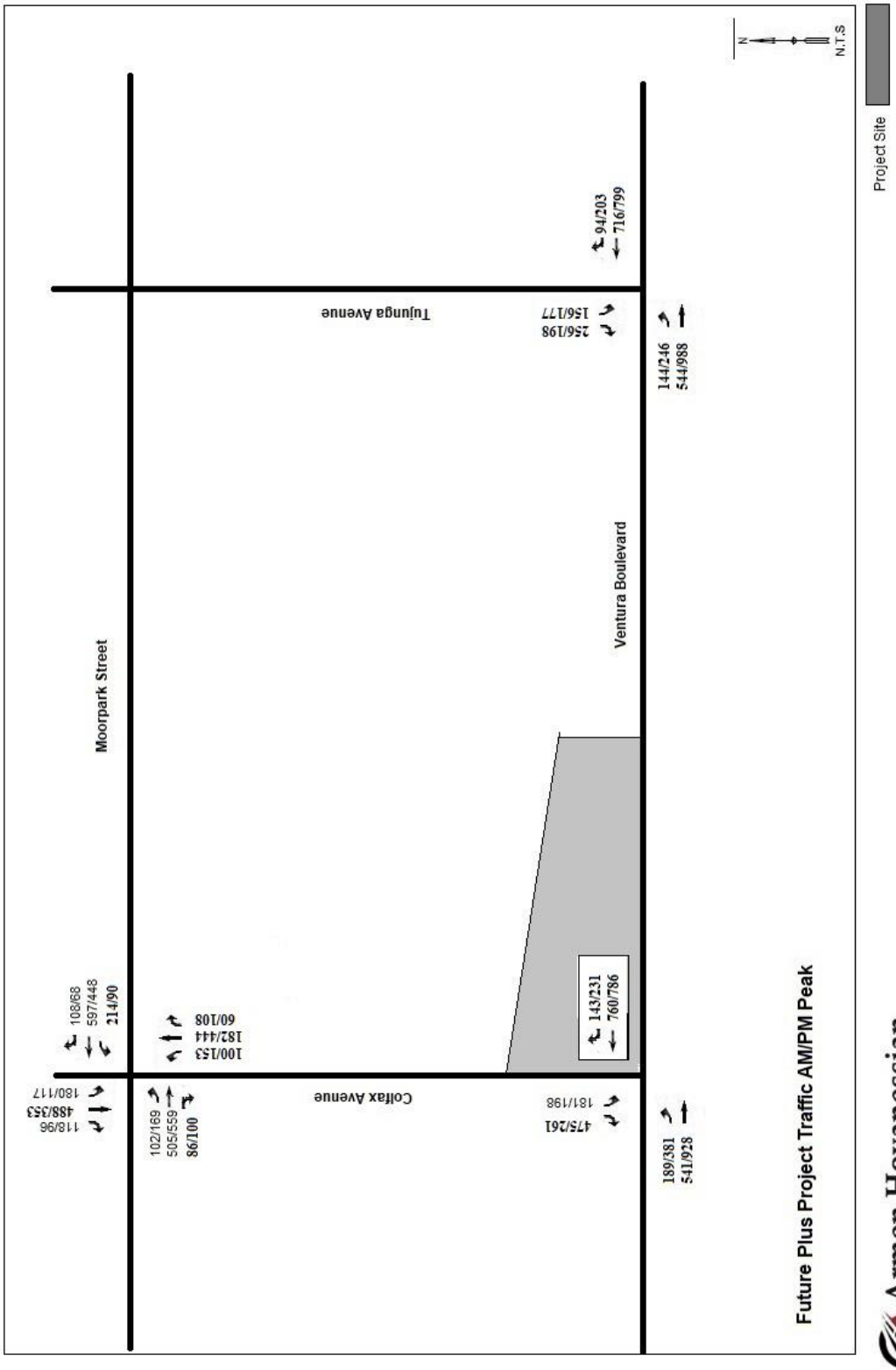


Figure 14 – Future Plus Project Traffic Volumes



Delay and Queueing Methodology

Signalized Intersections

For signalized intersections, the City utilizes the Highway Capacity Manual (HCM) operations methodology for performing signalized intersection capacity analysis. This method relies on the determination of a delay or Level of Service (LOS) at each of the study intersection by first determining their corresponding average control delay per vehicle. Control delay includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. It is a measure of driver discomfort, frustration, fuel consumption and lost travel time.

Level of Service (LOS) varies from at best LOS A (free flow/excellent) to at worst LOS of F (stop-and-go/failure). Shown below, in Table 13, are the LOS categories and their corresponding HCM average control delay ranges for signalized intersections.

Table 13 – LOS at Signalized Intersection

Level of Service	Average Control Delay per Vehicle (Sec/Veh)
A	0 to 10.00
B	10.01 to 20.00
C	20.01 to 35.00
D	35.01 to 55.00
E	55.01 to 80.00
F	Over 80.00

Unsignalized Intersections

For unsignalized intersections, the City utilizes the Highway Capacity Manual (HCM) methodologies for performing two-way stop-controlled (TWSC) and all-way Stop-controlled (AWTC) intersection capacity analyses. For TWSC intersection analysis, LOS is calculated for each movement of the intersection and the most critical LOS is the one that represents the effectiveness of that intersection. For AWSC intersection analysis, LOS is defined by the control delay of the entire intersection. The LOS thresholds for TWSC and AWSC intersections differ from those for signalized intersections to reflect different driver expectations. Shown below are the LOS categories and their corresponding HCM average control delay ranges for TWSC and AWSC intersections.

Table 14 – LOS at Unsignalized Intersections

Level of Service	Average Control Delay per Vehicle (Sec/Veh)
A	0 to 10.00
B	Over 10 to 15
C	Over 15 to 25
D	Over 25 to 35
E	Over 35 to 50
F	Over 50

Level of Service and Queueing Analysis

The results of the operational analyses are summarized in the following tables:

- Table 15: Levels of Service, Delays and Queue Lengths for existing conditions.
- Table 16: Levels of Service, Delays and Queue Lengths for existing plus project conditions.
- Table 17: Levels of Service, Delays and Queue Lengths for future without project conditions.
- Table 18: Levels of Service, Delays and Queue Lengths for future with project conditions.

Table 15 – LOS Existing Conditions

Study Intersection	Int. Control	Approach	Movement	Existing					
				AM			PM		
				Delay (sec)	LOS	95th % Queue (ft)	Delay (sec)	LOS	95th % Queue (ft)
Ventura Boulevard & Colfax Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	35.5	D	186	36.2	D	204
			through	-	-	-	-	-	-
			right	17.2	B	260	12.8	B	120
		WB	left	-	-	-	-	-	-
			through*	67.2	E	467	99.2	F	574
			right *	69.3	E	467	102.2	F	574
		EB	left	17.5	B	124	34.3	C	332
			through	10.3	B	118	12.2	B	232
			right	-	-	-	-	-	-
Ventura Boulevard & Tujunga Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	22.10	C	53	22.3	C	57
			through	-	-	-	-	-	-
			right	29.2	C	52	26.8	C	47
		WB	left	-	-	-	-	-	-
			through	28.8	C	256	36.9	D	350
			right	29.2	C	256	38.1	D	350
		EB	left *	35.5	D	77	58.8	E	200
			through	12.6	B	119	15.3	B	247
			right	-	-	-	-	-	-
Colfax Avenue & Moorpark Street	Traffic Signal	NB	left	33.8	C	96	31.5	C	141
			through *	26.8	C	139	45.4	D	412
			right	24.2	C	0	25.6	C	30
		SB	left	19.6	B	109	23.3	C	74
			through	22.2	C	313	18.8	B	213
			right	15.5	B	30	15.2	B	27
		WB	left	44.1	D	269	28.5	C	91
			through	37.1	D	258	30.5	C	182
			right	37.2	D	258	30.6	C	182
		EB	left	20.5	C	66	21.1	C	101
			through	18.2	B	157	18.9	B	178
			right	18.2	B	157	18.9	B	178

Table 16 – LOS Existing + Project Conditions

Study Intersection	Int. Control	Approach	Movement	Existing + Project					
				AM			PM		
				Delay (sec)	LOS	95th % Queue (ft)	Delay (sec)	LOS	95th % Queue (ft)
Ventura Boulevard & Colfax Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	35.5	D	186	36.2	D	204
			through	-	-	-	-	-	-
			right	17.3	B	263	12.8	B	123
		WB	left	-	-	-	-	-	-
			through*	69.1	E	484	105.5	F	593
			right	71.3	E	484	108.5	F	593
		EB	left	17.7	B	129	34.5	C	334
			through	10.4	B	125	12.3	B	238
			right	-	-	-	-	-	-
Ventura Boulevard & Tujunga Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	22.10	C	53	22.2	C	57
			through	-	-	-	-	-	-
			right	29.3	C	52	26.8	C	47
		WB	left	-	-	-	-	-	-
			through	29.2	C	265	37.3	D	356
			right	29.6	C	265	38.5	D	356
		EB	left *	36.2	D	78	62.1	E	211
			through	12.7	B	123	15.5	B	254
			right	-	-	-	-	-	-
Colfax Avenue & Moorpark Street	Traffic Signal	NB	left	34.6	C	99	31.8	C	143
			through *	27	C	142	46.9	D	423
			right	24.2	C	0	25.7	C	29
		SB	left	19.7	B	109	23.6	C	74
			through	22.5	C	322	18.9	B	214
			right	15.5	B	30	15.2	B	27
		WB	left	44.9	D	275	28.8	C	94
			through	37.1	D	258	30.5	C	182
			right	37.2	D	258	30.6	C	182
		EB	left	21	C	66	21.6	C	102
			through	18.2	B	158	18.9	B	179
			right	18.2	B	158	18.9	B	179

Table 17 – LOS Future without Project Conditions

Study Intersection	Int. Control	Approach	Movement	Future w/o Project					
				AM			PM		
				Delay (sec)	LOS	95th % Queue (ft)	Delay (sec)	LOS	95th % Queue (ft)
Ventura Boulevard & Colfax Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	*35.7*	*D*	*193*	*36.4*	*D*	*210*
			through	-	-	-	-	-	-
			right	*17.7*	*B*	*278*	*12.9*	*B*	*128*
		WB	left	-	-	-	-	-	-
			through	*79.3*	*E*	*526*	*118.6*	*F*	*627*
			right	*81.5*	*F*	*526*	*121.6*	*F*	*627*
		EB	left	*18.1*	*B*	*133*	*35.5*	*D*	*349*
			through	*10.5*	*B*	*129*	*12.6*	*B*	*254*
			right	-	-	-	-	-	-
Ventura Boulevard & Tujunga Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	*22.30*	*C*	*60*	*22.5*	*C*	*67*
			through	-	-	-	-	-	-
			right	*29.7*	*C*	*53*	*26.9*	*C*	*47*
		WB	left	-	-	-	-	-	-
			through	*30.9*	*C*	*291*	*41.2*	*D*	*386*
			right	*31.5*	*C*	*291*	*42.8*	*D*	*386*
		EB	left	*38.8*	*D*	*79*	*71.8*	*E*	*242*
			through	*12.8*	*B*	*131*	*15.9*	*B*	*271*
			right	-	-	-	-	-	-
Colfax Avenue & Moorpark Street	Traffic Signal	NB	left	*35.6*	*D*	*102*	*32.2*	*C*	*145*
			through	*27.1*	*C*	*146*	*48.1*	*D*	*431*
			right	*24.3*	*C*	*2*	*25.7*	*C*	*33*
		SB	left	*20*	*C*	*113*	*24.1*	*C*	*76*
			through	*22.7*	*C*	*329*	*19.1*	*B*	*220*
			right	*15.6*	*B*	*30*	*15.2*	*B*	*27*
		WB	left	*46.8*	*D*	*283*	*29*	*C*	*96*
			through	*38.3*	*D*	*268*	*30.9*	*C*	*188*
			right	*38.4*	*D*	*268*	*31*	*C*	*188*
		EB	left	*20.9*	*C*	*67*	*21.5*	*C*	*105*
			through	*18.3*	*B*	*163*	*19.1*	*B*	*186*
			right	*18.4*	*B*	*163*	*19.2*	*B*	*186*

Table 18 – LOS Future + Project Conditions

Study Intersection	Int. Control	Approach	Movement	Future + Project					
				AM			PM		
				Delay (sec)	LOS	95th % Queue (ft)	Delay (sec)	LOS	95th % Queue (ft)
Ventura Boulevard & Colfax Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	35.7	D	193	36.4	D	210
			through	-	-	-	-	-	-
			right	17.7	B	279	13	B	131
		WB	left	-	-	-	-	-	-
			through	82	F	537	125.7	F	545
			right	84.3	F	537	128.8	F	645
		EB	left	19.1	B	136	35.7	D	351
			through	10.6	B	135	12.7	B	260
			right	-	-	-	-	-	-
Ventura Boulevard & Tujunga Avenue	Traffic Signal	NB	left	-	-	-	-	-	-
			through	-	-	-	-	-	-
			right	-	-	-	-	-	-
		SB	left	22.30	C	60	20.9	C	62
			through	-	-	-	-	-	-
			right	29.8	C	53	25.5	C	46
		WB	left	-	-	-	-	-	-
			through	31.4	C	297	46.6	D	400
			right	32	C	297	48.7	D	400
		EB	left	39.4	D	81	63.5	E	234
			through	12.9	B	133	14.6	B	260
			right	-	-	-	-	-	-
Colfax Avenue & Moorpark Street	Traffic Signal	NB	left	36.4	D	104	44.3	D	169
			through	27.3	C	150	52.1	D	491
			right	24.3	C	1	29.3	C	41
		SB	left	20.1	C	113	35.3	D	102
			through	23	C	336	26.2	C	282
			right	15.6	B	30	20.7	C	33
		WB	left	48	D	290	25.3	C	90
			through	38.3	D	268	23.2	C	177
			right	38.4	D	268	23.2	C	169
		EB	left	21.4	C	68	20.1	C	106
			through	18.4	B	164	17.4	B	190
			right	18.4	B	164	17.4	B	190

Please refer to Appendix 7 for the (HCM) analysis worksheets for the analyzed intersections.

As shown in the Level of Service comparison Table 19, with the addition of the project traffic to the future traffic, the level of services for all traffic movements at the study intersections will remain substantially the same. At the intersection of Colfax Avenue and Moorpark Street the northbound left turn movement in the PM peak hour will go from level of service C to D and the through and the right turn movements for southbound will go from level of service B to C. However, the queueing length will only increase by approximately 3 car lengths, and the delay will increase by 12 seconds. Therefore, the project does not add any substantial amount of traffic to the study intersections.

Table 19 – Comparison of LOS- Future to Future + Project Conditions

Study Intersection	Int. Control	Approach	Movement	Comparison of Future To Future + Project									
				AM					PM				
				Diff. in Delay (sec)	LOS Future	LOS Future + Project	Diff. in 95% Queue (ft)	Number of Cars	Diff. in Delay (sec)	LOS Future	LOS Future + Project	Diff. in 95% Queue (ft)	Number of Cars
Ventura Boulevard & Colfax Avenue	Traffic Signal	NB	left	-	-	-	-	-	-	-	-	-	-
			through	-	-	-	-	-	-	-	-	-	-
			right	-	-	-	-	-	-	-	-	-	-
		SB	left	0	D	D	0	0	0	D	D	0	0
			through	-	-	-	-	-	-	-	-	-	-
			right	0	B	B	1	0.05	0.1	B	B	3	0.15
		WB	left *	-	-	-	-	-	-	-	-	-	-
			through*	2.7	E	F	11	0.55	7.1	F	F	-82	-4.1
			right	2.8	F	F	11	0.55	7.2	F	F	18	0.9
		EB	left	1	B	B	3	0.15	0.2	D	D	2	0.1
			through	0.1	B	B	6	0.3	0.1	B	B	6	0.3
			right	-	-	-	-	-	-	-	-	-	-
Ventura Boulevard & Tujunga Avenue	Traffic Signal	NB	left	-	-	-	-	-	-	-	-	-	-
			through	-	-	-	-	-	-	-	-	-	-
			right	-	-	-	-	-	-	-	-	-	-
		SB	left	0	C	C	0	0	-1.6	C	C	-5	-0.25
			through	-	-	-	-	-	-	-	-	-	-
			right	0.1	C	C	0	0	-1.4	C	C	-1	-0.05
		WB	left	-	-	-	-	-	-	-	-	-	-
			through	0.5	C	C	6	0.3	5.4	D	D	14	0.7
			right	0.5	C	C	6	0.3	5.9	D	D	14	0.7
		EB	left	0.6	D	D	2	0.1	-8.3	E	E	-8	-0.4
			through	0.1	B	B	2	0.1	-1.3	B	B	-11	-0.55
			right	-	-	-	-	-	-	-	-	-	-
Colfax Avenue & Moorpark Street	Traffic Signal	NB	left	0.8	D	D	2	0.1	12.1	C	D	24	1.2
			through	0.2	C	C	4	0.2	4	D	D	60	3
			right	0	C	C	-1	-0.05	3.6	C	C	8	0.4
		SB	left	0.1	C	C	0	0	11.2	C	D	26	1.3
			through	0.3	C	C	7	0.35	7.1	B	C	62	3.1
			right	0	B	B	0	0	5.5	B	C	6	0.3
		WB	left	1.2	D	D	7	0.35	-3.7	C	C	-6	-0.3
			through	0	D	D	0	0	-7.7	C	C	-11	-0.55
			right	0	D	D	0	0	-7.8	C	C	-19	-0.95
		EB	left	0.5	C	C	1	0.05	-1.4	C	C	1	0.05
			through	0.1	B	B	1	0.05	-1.7	B	B	4	0.2
			right	0	B	B	1	0.05	-1.8	B	B	4	0.2

As illustrated in Table 20, the intersectional Level of Services for all study intersections remains the same when comparing existing and future conditions to with and without project traffic volumes. There is also minimal increase in intersectional delays.

Table 20 - Delay and Level of Service by Intersection

Summary of Delay and Level of Service									
Intersection	Peak Hour	Existing		Existing + Project		Future		Future + Project	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Ventura Boulevard & Colfax Avenue	AM	37.3	D	37.9	D	42.3	D	43.3	D
	PM	49.2	D	51.7	D	56.5	E	59.3	E
Ventura Boulevard & Tujunga Avenue	AM	24.3	C	24.5	C	25.6	C	25.9	C
	PM	29.4	C	29.9	C	32.5	C	33.1	C
Colfax Avenue & Moorpark Street	AM	27.2	C	27.3	C	27.9	C	28.1	C
	PM	26.9	C	27.3	C	27.7	C	28.7	C

1% annual growth rate was applied

Recommended Actions

The project does not have any major adverse effects on access, safety, and circulation in the roadway system within the study area or at the analyzed intersections. Therefore, no additional actions would be needed.

Highway Dedication and Street Improvement Requirements

The project will comply with the requirements of the City of Los Angeles Mobility Plan 2035 street designations and standard roadway dimensions and any specific requirements imposed by LADOT and the Bureau of Engineering's Land Development Group.

Project Construction

This section evaluates the project construction transportation effects. The evaluation is related to the temporary construction related effects that may result from the construction activities of the project, which may include safety, operational, or delay impacts.

Screening Criteria

The TAG establishes seven screening criteria to determine whether further non-CEQA transportation analysis is required to address any potential project construction transportation effects and determine any possible adverse effect on existing pedestrian, bicycle, or transit facilities. The screening criteria is listed below:

Table 21 – Screening Criteria for Temporary Project Construction Effects

	Screening Criteria Questions	Answer	Action
1	Would the project require construction activities to take place within the right-of-way of a Boulevard or Avenue (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than one day (including day and evening hours, and overnight closures if on a residential street)?	Yes	If answer is yes to any of these questions further analysis is required
2	Would the project require construction activities to take place within the right-of-way of a Collector or Local Street (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than seven days (including day and evening hours, and including overnight closures if on a residential street)?	No	
3	Would in-street construction activities result in the loss of regular vehicle, bicycle, or pedestrian access, including loss of bicycle parking to an existing land use for more than one day, including day and evening hours and overnight closures if access is lost to residential units?	No	
4	Would in-street construction activities result in the loss of regular ADA pedestrian access to an existing transit station, stop, or facility (e.g., layover zone) during revenue hours?	Yes	
5	Would in-street construction activities result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus route that serves the project site?	No	
6	Would construction activities result in the temporary removal and/or loss of on-street metered parking for more than 30 days?	Yes	

7	Would the project involve a discretionary action to construct new buildings or additions of more than 1,000 square feet that require access for hauling construction materials and equipment from streets of less than 24-feet wide in a hillside area?	Yes	

Evaluation Criteria

The TAG establishes assessment factors to be considered in evaluating temporary construction related effects that may result from the construction activities of the project. These factors are listed below:

Table 22 – Evaluation Criteria for Temporary Project Construction Effects

Assessment Factors	Answers
Temporary Transportation Constraints:	
The length of time of temporary street closures or closures of two or more travel lanes	10 days
The classification of the street (major arterial, state highway, substandard hillside local or collector, etc.) affected	Boulevard II & Avenue II
The existing congestion levels on the affected street segments and intersections	LOS D in AM and E in PM
The operational constraints of substandard hillside streets needing to access construction sites	NA
Whether the affected street directly leads to a freeway on- or off-ramp or other state highway	Yes
Potential safety issues involved with street or lane closures	No
The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street	No
Temporary loss of access:	
The length of time of any loss of pedestrian or bicycle circulation past a construction area	10 days
The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area	10 days
The length of time of any loss or impedance of access by emergency vehicles or area residents to hillside properties	NA
The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility	NA

The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access	Both are available within ¼ mile
The type of land uses affected, and related safety, convenience, and/or economic issues	None
Temporary Loss of Bus Stops or Rerouting of Bus Lines:	
The length of time that an existing bus stop would be unavailable or that existing service would be interrupted	NA
The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated	NA
The existence of other bus stops or routes with similar routes/destinations within a ¼-mile radius of the affected stops or routes	Yes, they are available
Whether the interruption would occur on a weekday, weekend, or holiday, and whether the existing bus route typically provides service that/those day(s).	Weekdays only

A comprehensive analysis and inventory of the existing transportation infrastructure and conditions within a 1/4-mile radius of the project was conducted and is included in the Project Context section of this report. Additionally, a review proposed construction procedures/plans to determine whether construction activity within the street right-of-way would cause/require any of the following:

Table 23 -Construction Activity Effect

During Construction	
Street, sidewalk, or lane closures	Yes
Block existing vehicle, bicycle, or pedestrian access along a street or to parcels fronting the street	Only in front of the project site
Modification of access to transit stations, stops, or facilities during revenue hours	NA
Closure or movement of an existing bus stop or rerouting of an existing bus line	NA
Creation of transportation hazards	No

Corrective Measures

The project construction activities may result in temporary adverse effects on certain transportation facilities. To minimize and address these adverse effects, the following corrective measures were analyzed and recommended:

Table 24 – Project Construction Corrective Measures

Corrective Measures	Recommended
Traffic Management Plan	The project will prepare and seek approval for Traffic Control Plan
Detour Plan	The project will prepare and seek approval for a detour plan
Modification of construction procedures	Will comply with LADOT standards
Limit major road obstructions to off-peak hours	Will comply with LADOT standards
Coordinate with emergency service and public transit providers	Will comply with LADOT standards
Provide alternative vehicular, bicycle, and/or pedestrian access to affected parcels	Will comply with LADOT standards
Consult LADOT's Parking Meters Division regarding revenue recovery costs for the removal of parking meter spaces, if applicable	Will comply with LADOT standards
Coordinate access with adjacent property owners and tenants	Will comply with LADOT standards
Coordinate with Metro regarding maintenance of ADA access to Metro stations, stops, and transit facilities (e.g., layover zones) during revenue hours	Will comply with LADOT standards
Coordinate with transit providers regarding the need to temporarily close or relocate bus stops or reroute service	Will comply with LADOT standards

Residential Street Cut-Through Analysis

The objective of this analysis is to determine potential increases in average daily traffic (ADT) volumes on designated Local Streets near a project that can be classified as cut-through trips generated by the project, and that can adversely affect the character and function of those streets. Cut-through trips are defined as those which feature travel along a street classified as a Local Street in the City's General Plan, with residential land-use frontage, as an alternative to a higher classification street segment (e.g., Collector, Avenue, or Boulevard as designated in the City's General Plan) to access a destination that is not within the neighborhood within which the Local Street is located.

SCREENING CRITERIA

The TAG establishes the criteria to determine whether further analysis would be required to determine potential cut-through traffic increase because of the project. In addition to these two criteria,

- A net increase of 250 or more daily vehicle trips, and
- Project subject to a discretionary action that would be under review by the Department, the project would be subject to the following criteria:

Table 25 – Screening Criteria for Residential Street Cut-Through Traffic

Screening Criteria	Answer	
The project is located along a currently congested Boulevard or Avenue and adds trips that may lead to trip diversion to parallel routes along residential Local Streets. The congestion level of the Boulevard or Avenue can be determined based on the estimated peak hour LOS under project conditions of the study intersection(s) (as determined in Section 3.3). LOS E and F are considered to represent congested conditions	No	If answer is yes to 1, 2 & 3 further analysis is required
The project is projected to add a substantial amount of automobile traffic to the congested Boulevard(s), Avenue(s), or Collector(s) that could potentially cause a shift to alternative route(s);	No	
Nearby local residential street(s) (defined as Local streets as designated in the City's General Plan passing through a residential neighborhood) provide motorists with a viable alternative route. A viable alternative route is defined as one which is parallel and reasonably adjacent to the primary route as to make it attractive as an alternative to the primary route. LADOT has discretion to define which routes are viable alternative routes, based on, but not limited to, features such as geography and presence of existing traffic control devices, etc.	No	

Evaluation Criteria

The TAG establishes the evaluation criteria based on an estimate of the amount of daily project traffic that may shift to local residential streets, considering that the street system is less congested during non-peak hours than during peak hours. Once the estimated traffic volumes are

identified, then these numbers must exceed the traffic volumes thresholds as shown in the table below:

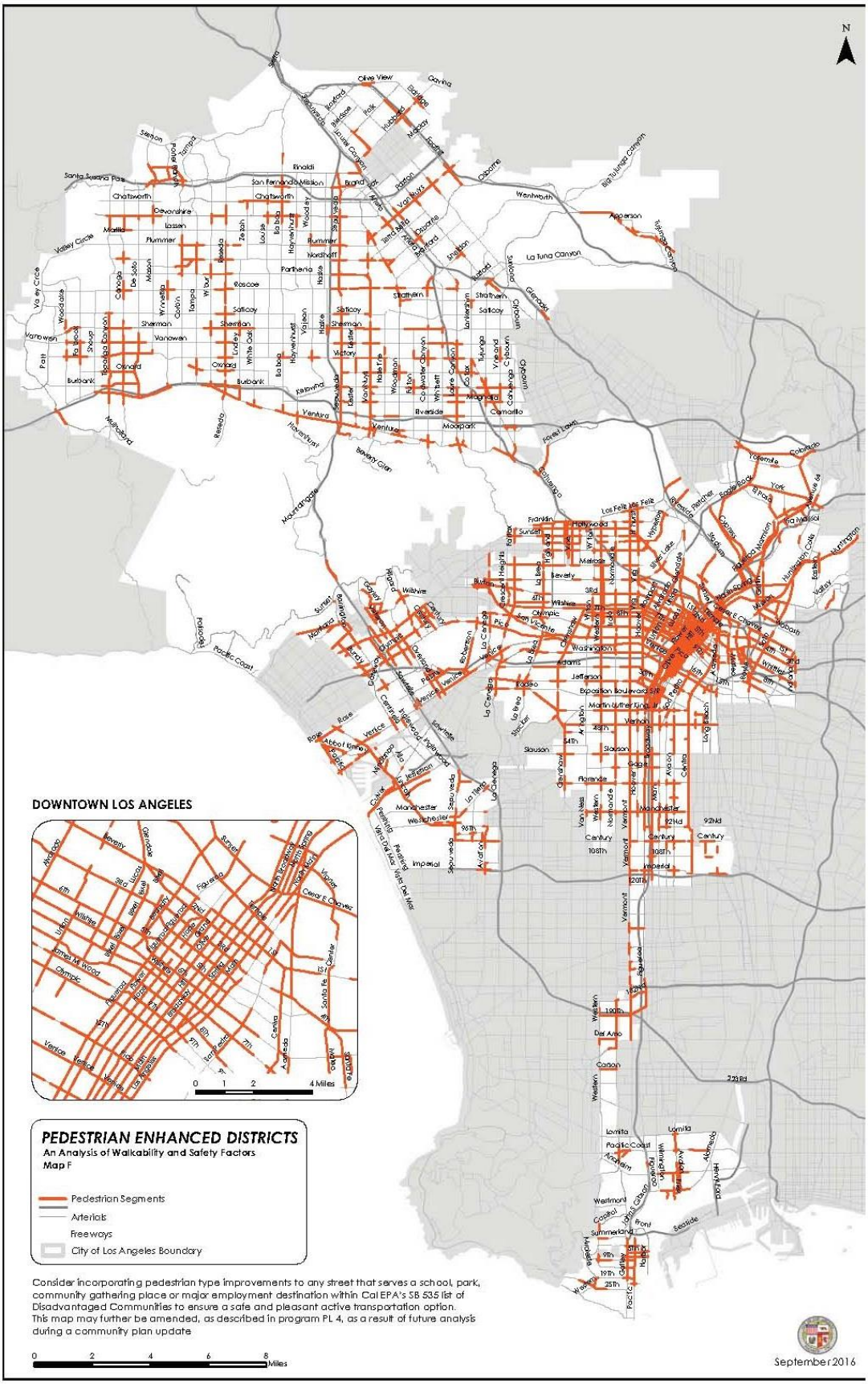
Table 26 – Residential/Local Street Diversion Criteria

Project ADT with Project (Final ADT)	Project Related Increase in ADT
1 to 999	120 or more
1,000 to 1,999	12 percent or more of final ADT
2,000 to 2,999	10 percent or more of final ADT
3,000 or more	8 percent or more of final ADT

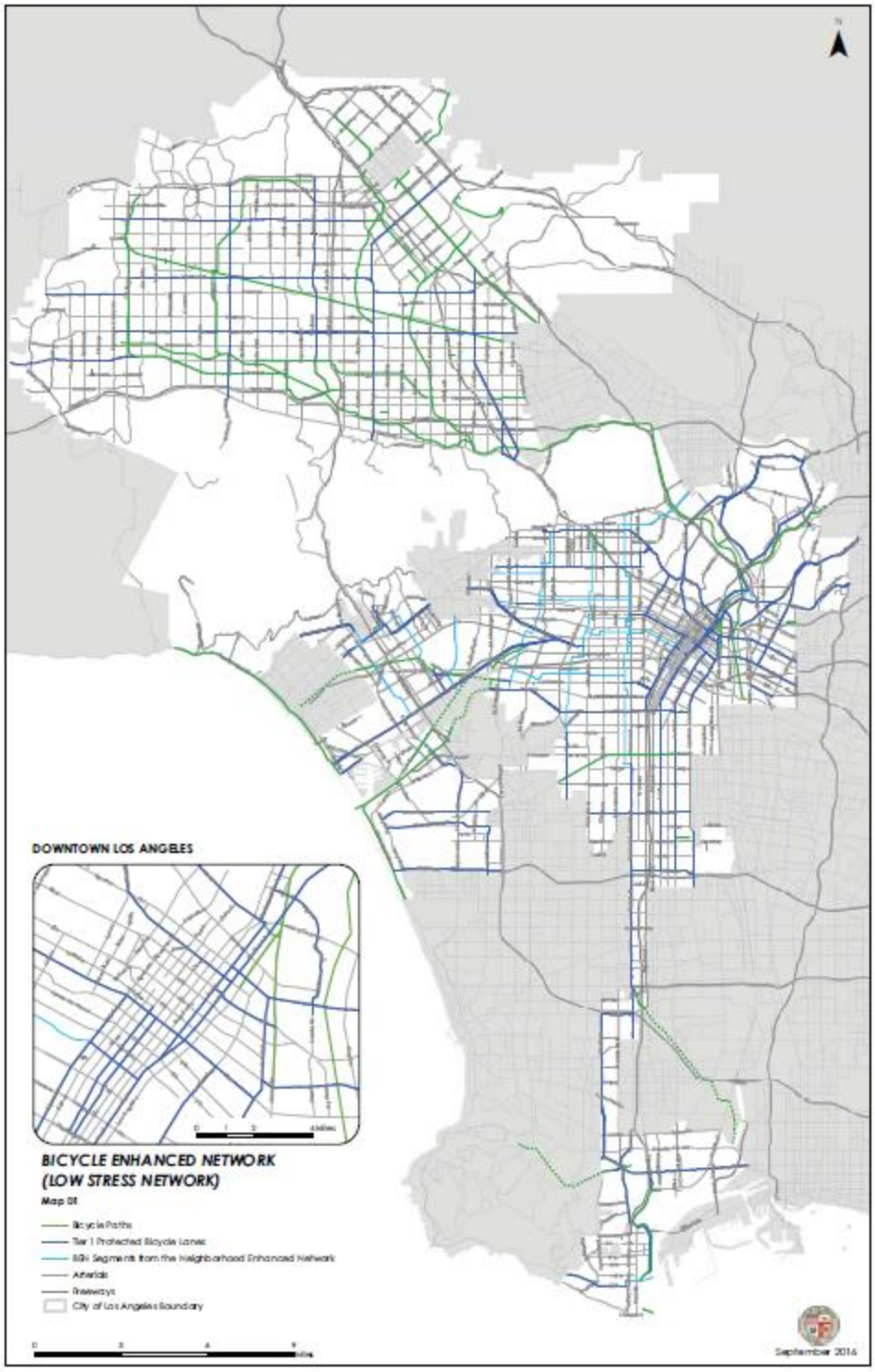
Recommended Actions

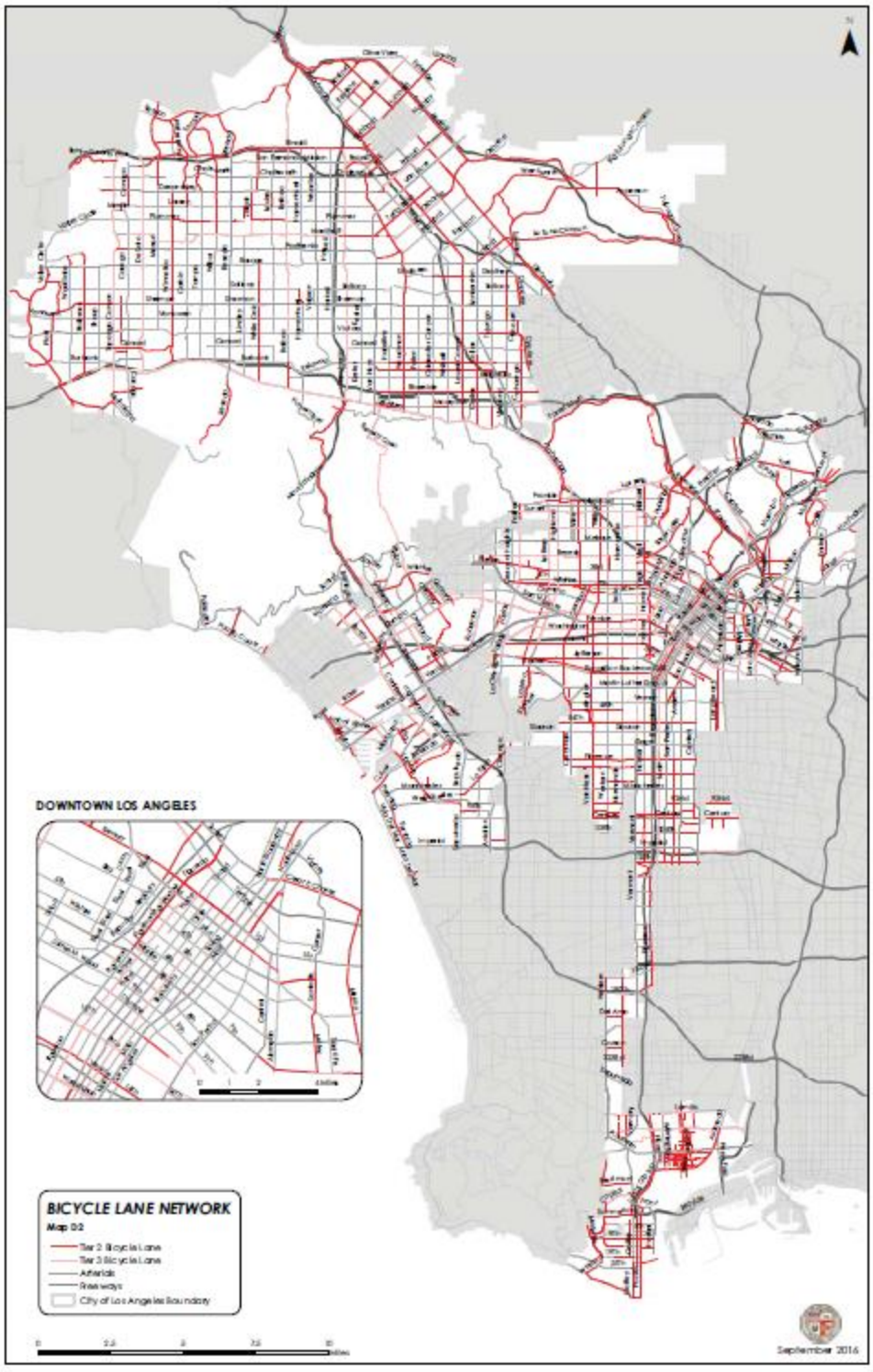
The project related traffic does not exceed the thresholds. Therefore, the project related traffic does not result in residential street diversion. The project is not subject to implementing corrective measures.

Appendix 1 – Pedestrian Districts Map


N
DOWNTOWN LOS ANGELES
0 1 2 4 Miles
PEDESTRIAN ENHANCED DISTRICTS
An Analysis of Walkability and Safety Factors
Map F
Pedestrian Segments
Arterials
Freeways
City of Los Angeles Boundary
Consider incorporating pedestrian type improvements to any street that serves a school, park, community gathering place or major employment destination within Cal EPA's SB 535 list of Disadvantaged Communities to ensure a safe and pleasant active transportation option. This map may further be amended, as described in program PL 4, as a result of future analysis during a community plan update
0 2 4 6 8 Miles
September 2016

Appendix 2 - Bicycle Lane Network Maps


DOWNTOWN LOS ANGELES
BICYCLE ENHANCED NETWORK
(LOW STRESS NETWORK)
Map 01
Bicycle Paths
Tier 1 Protected Bicycle Lanes
Bike Segments from the Neighborhood Enhanced Network
Arterials
Freeways
City of Los Angeles Boundary
September 2016


DOWNTOWN LOS ANGELES
BICYCLE LANE NETWORK
Map D2
Tier 2 Bicycle Lane
Tier 3 Bicycle Lane
Arterials
Freeways
City of Los Angeles Boundary
September 2016

Appendix 3 - Bus Schedules

Saturday

Effective Sep 12 2021

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Northbound (Approximate Times)

LOS ANGELES	PARK LA BREA	WEST HOLLYWOOD	LOS ANGELES		STUDIO CITY
Cedars-Sinai Medical Center	Fairfax & 3rd	Fairfax & Santa Monica	Crescent Heights & Sunset	Laurel Canyon & Hollyland	Ventura Pl & Ventura Bl
5:55A	6:03A	6:11A	6:15A	6:23A	6:31A
6:50	6:58	7:06	7:10	7:18	7:26
7:45	7:53	8:01	8:05	8:13	8:21
8:40	8:48	8:56	9:00	9:09	9:17
9:35	9:44	9:52	9:57	10:06	10:14
10:30	10:39	10:47	10:52	11:01	11:09
11:25	11:34	11:43	11:48	11:57	12:05P
12:20P	12:29P	12:38P	12:43P	12:52P	1:00
1:15	1:24	1:33	1:38	1:47	1:55
2:10	2:19	2:28	2:33	2:42	2:50
3:05	3:14	3:23	3:28	3:37	3:45
4:00	4:09	4:18	4:23	4:32	4:40
4:55	5:04	5:13	5:18	5:27	5:35
5:50	5:59	6:08	6:13	6:22	6:30
6:45	6:54	7:03	7:07	7:15	7:23
7:40	7:49	7:57	8:01	8:09	8:17
8:35	8:43	8:50	8:54	9:02	9:10
9:30	9:38	9:45	9:49	9:57	10:05

Southbound (Approximate Times)

STUDIO CITY	LOS ANGELES		WEST HOLLYWOOD	PARK LA BREA	LOS ANGELES
Ventura Pl & Ventura Bl	Laurel Canyon & Hollyland	Crescent Heights & Sunset	Fairfax & Santa Monica	Fairfax & 3rd	Cedars-Sinai Medical Center
5:56A	6:03A	6:11A	6:16A	6:25A	6:33A
6:51	6:59	7:07	7:12	7:21	7:29
7:46	7:54	8:02	8:07	8:16	8:25
8:41	8:49	8:57	9:02	9:11	9:20
9:36	9:44	9:52	9:57	10:06	10:15
10:31	10:39	10:47	10:52	11:01	11:10
11:26	11:34	11:42	11:47	11:56	12:05P
12:21P	12:29P	12:37P	12:42P	12:51P	1:00
1:16	1:24	1:32	1:37	1:46	1:55
2:11	2:19	2:27	2:32	2:41	2:50
3:06	3:14	3:22	3:27	3:36	3:45
4:01	4:09	4:17	4:22	4:31	4:40
4:56	5:04	5:12	5:17	5:26	5:35
5:51	5:59	6:07	6:12	6:21	6:30
6:46	6:54	7:02	7:06	7:14	7:22
7:41	7:48	7:56	8:00	8:08	8:16
8:36	8:43	8:51	8:55	9:03	9:11
9:36	9:43	9:51	9:55	10:03	10:11

Sunday and Holiday Schedule

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Northbound (Approximate Times)

LOS ANGELES	PARK LA BREA	WEST HOLLYWOOD	LOS ANGELES		STUDIO CITY
Cedars-Sinai Medical Center	Fairfax & 3rd	Fairfax & Santa Monica	Crescent Heights & Sunset	Laurel Canyon & Hollyland	Ventura Pl & Ventura Bl
5:55A	6:03A	6:11A	6:15A	6:23A	6:28A
6:50	6:58	7:06	7:10	7:18	7:23
7:45	7:53	8:01	8:05	8:13	8:18
8:40	8:48	8:56	9:00	9:09	9:14
9:35	9:44	9:52	9:57	10:06	10:11
10:30	10:39	10:47	10:52	11:01	11:06
11:25	11:34	11:43	11:48	11:57	12:02P
12:20P	12:29P	12:38P	12:43P	12:52P	12:57
1:15	1:24	1:33	1:38	1:47	1:52
2:10	2:19	2:28	2:33	2:42	2:47
3:05	3:14	3:23	3:28	3:37	3:45
4:00	4:09	4:18	4:23	4:32	4:40
4:55	5:04	5:13	5:18	5:27	5:35
5:50	5:59	6:08	6:13	6:22	6:30
6:45	6:54	7:03	7:07	7:15	7:23
7:40	7:49	7:57	8:01	8:09	8:17
8:35	8:43	8:50	8:54	9:02	9:10
9:30	9:38	9:45	9:49	9:57	10:05

Southbound (Approximate Times)

STUDIO CITY	LOS ANGELES		WEST HOLLYWOOD	PARK LA BREA	LOS ANGELES
Ventura Pl & Ventura Bl	Laurel Canyon & Hollyland	Crescent Heights & Sunset	Fairfax & Santa Monica	Fairfax & 3rd	Cedars-Sinai Medical Center
5:56A	6:03A	6:11A	6:16A	6:25A	6:33A
6:45	6:59	7:07	7:12	7:21	7:29
7:39	7:54	8:02	8:07	8:16	8:25
8:34	8:49	8:57	9:02	9:11	9:20
9:29	9:44	9:52	9:57	10:06	10:15
10:23	10:39	10:47	10:52	11:01	11:10
11:18	11:34	11:42	11:47	11:56	12:05P
12:13P	12:29P	12:37P	12:42P	12:51P	1:00
1:08	1:24	1:32	1:37	1:46	1:55
2:03	2:19	2:27	2:32	2:41	2:50
2:58	3:14	3:22	3:27	3:36	3:45
4:01	4:09	4:17	4:22	4:31	4:40
4:56	5:04	5:12	5:17	5:26	5:35
5:51	5:59	6:07	6:12	6:21	6:30
6:46	6:54	7:02	7:06	7:14	7:22
7:41	7:48	7:56	8:00	8:08	8:16
8:36	8:43	8:51	8:55	9:03	9:11
9:36	9:43	9:51	9:55	10:03	10:11

Saturday, Sunday and Holiday Schedules

Saturday, Sunday and Holiday Schedule in effect on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Horarios de sábado, domingo y días feriados

Horarios de sábado, domingo, y días feriados en vigor para New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day y Christmas Day

Nextrip

Text "metro" and your intersection or stop number to 41411 (example: metro Vignes & Cesar E Chavez or metro 1563). You can also visit metro.net or call 511 and say "Nextrip"

Nextrip

Envíe un mensaje de texto con "Metro" y el número de su parada al 41411. Nextrip le enviará un mensaje de texto con los próximos llegados de cada autobús en esa parada. También puede visitar metro.net o

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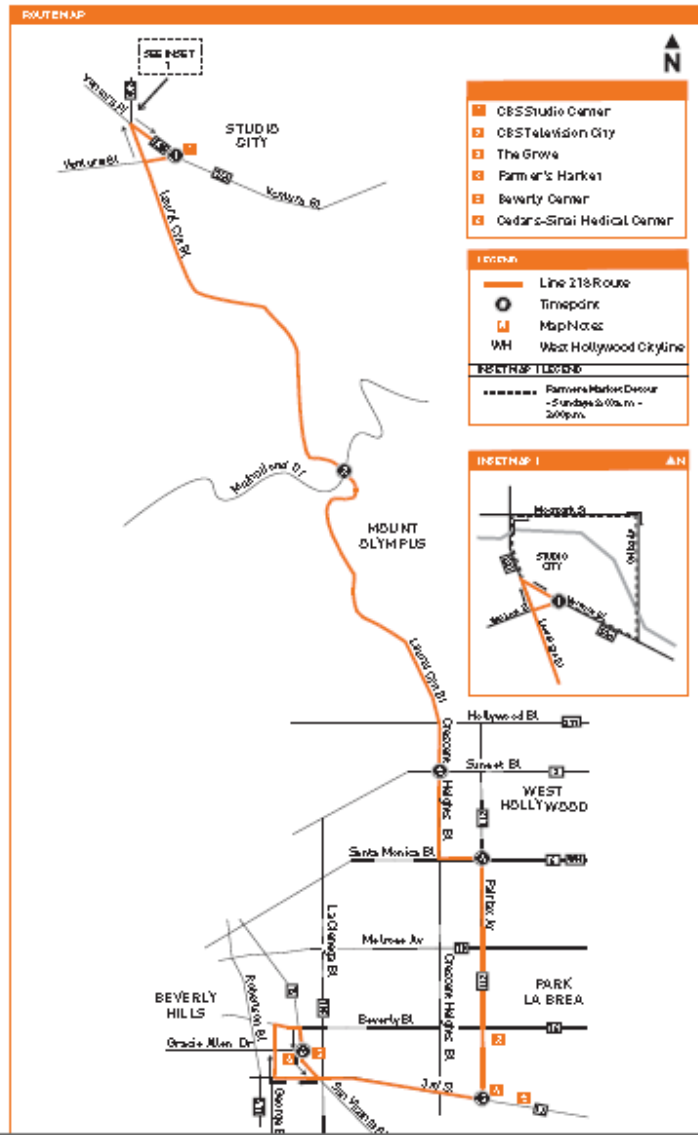
Northbound (Appendix Travel)

LOS ANGELES	PARK LA BREA	WEST HOLLYWOOD	LOS ANGELES		STUDIO CITY
Cedars-Sinai Medical Center	Fairfax & 3rd	Fairfax & Sinai Temple	Cahuenga & Hollywood Blvd	Laurel Canyon & Mulholland	Vineland & Ventura Bl
5:00A	5:08A	5:11A	5:20A	5:23A	5:31A
5:55	6:03	6:11	6:15	6:23	6:31
6:50	6:58	7:06	7:10	7:18	7:26
7:45	7:53	8:01	8:05	8:13	8:21
8:40	8:48	8:56	9:00	9:08	9:17
9:35	9:43	9:51	9:55	10:04	10:13
10:30	10:37	10:47	10:52	11:01	11:10
11:25	11:35	11:43	11:48	11:57	12:04P
12:20P	12:30P	12:38P	12:43P	12:52P	1:01
1:15	1:23	1:31	1:36	1:50	1:57
2:10	2:21	2:31	2:38	2:45	2:54
3:05	3:15	3:23	3:28	3:41	3:51
4:00	4:11	4:21	4:28	4:34	4:45
4:55	5:05	5:16	5:21	5:27	5:38
5:50	6:00	6:08	6:13	6:22	6:30
6:45	6:54	7:02	7:07	7:15	7:23
7:40	7:47	7:57	8:02	8:10	8:18
8:35	8:42	8:52	8:57	9:05	9:13
9:30	9:37	9:47	9:52	10:00	10:08

Southbound (Appendix Travel)

STUDIO CITY	LOS ANGELES		WEST HOLLYWOOD	PARK LA BREA	LOS ANGELES
Vineland & Ventura Bl	Laurel Canyon & Mulholland	Cahuenga & Hollywood Blvd	Fairfax & Sinai Temple	Fairfax & 3rd	Cedars-Sinai Medical Center
5:01A	5:07A	5:17A	5:21A	5:29A	5:37A
5:56	6:04	6:12	6:16	6:24	6:32
6:51	6:57	7:07	7:12	7:20	7:28
7:46	7:54	8:02	8:07	8:15	8:23
8:41	8:47	8:57	9:02	9:10	9:18
9:36	9:44	9:52	9:57	10:05	10:14
10:31	10:37	10:47	10:52	11:00	11:07
11:26	11:34	11:42	11:48	11:57	12:07P
12:21P	12:27P	12:37P	12:43P	12:52P	1:02
1:16	1:25	1:33	1:39	1:48	1:57
2:11	2:20	2:33	2:38	2:48	2:56
3:06	3:15	3:23	3:29	3:38	3:47
4:01	4:10	4:18	4:24	4:33	4:44
4:56	5:04	5:12	5:18	5:27	5:38
5:51	5:57	6:07	6:12	6:20	6:27
6:46	6:54	7:02	7:06	7:14	7:22
7:41	7:48	7:53	8:00	8:08	8:14
8:36	8:43	8:51	8:55	9:03	9:11
9:31	9:38	9:51	9:55	10:03	10:11

ROUTE MAP



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Eastbound *Al Este* | Approximate Times / Tiempos Aproximados |

NORTHRIDGE		RESEDA	TARZANA		ENCINO	SHERMAN OAKS	STUDIO CITY	UNIVERSAL CITY
1	2	3	4	5	6	7	8	9
Reseda & Dewonshire	CSUN Transit Center	Reseda & Sherman Way	Reseda G line [Orange] Station	Ventura & Reseda	Ventura & Balboa	Ventura & Van Nuys	Ventura & Laurel Cyn	Universal/Studio City Station
4:27A	4:32A	4:42A	4:48A	4:52A	4:57A	5:04A	5:14A	5:22A
4:41	4:46	4:54	5:02	5:06	5:11	5:20	5:28	5:36
4:56	5:01	5:09	5:15	5:19	5:26	5:33	5:41	5:49
5:06	5:11	5:19	5:25	5:29	5:35	5:44	5:52	6:00
5:16	5:21	5:29	5:35	5:39	5:46	5:54	6:02	6:10
5:23	5:28	5:37	5:45	5:49	5:55	6:04	6:12	6:20
5:33	5:38	5:49	5:55	5:59	6:06	6:15	6:23	6:31
5:43	5:48	5:59	6:05	6:09	6:16	6:25	6:33	6:42
5:52	5:57	6:09	6:15	6:19	6:26	6:34	6:45	6:54
6:02	6:07	6:19	6:25	6:29	6:36	6:47	6:56	7:06
6:10	6:15	6:27	6:34	6:39	6:46	6:57	7:06	7:16
6:19	6:24	6:37	6:44	6:49	6:56	7:07	7:16	7:26
6:29	6:34	6:47	6:54	6:59	7:06	7:17	7:26	7:36
6:39	6:44	6:57	7:04	7:09	7:16	7:27	7:37	7:47
6:49	6:54	7:07	7:14	7:19	7:26	7:37	7:47	7:57
6:59	7:04	7:17	7:24	7:29	7:37	7:47	7:57	8:07
7:09	7:14	7:27	7:34	7:39	7:47	7:57	8:07	8:17
7:19	7:24	7:37	7:44	7:49	7:57	8:07	8:17	8:27
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7:58	8:04	8:17	8:24	8:29	8:37	8:47	8:57	9:07
8:08	8:14	8:27	8:34	8:39	8:47	8:57	9:07	9:17
8:18	8:24	8:37	8:44	8:49	8:57	9:10	9:20	9:30
8:28	8:34	8:47	8:54	8:59	9:07	9:20	9:30	9:40
8:37	8:43	8:54	9:03	9:08	9:17	9:30	9:40	9:50
8:47	8:53	9:04	9:13	9:18	9:27	9:40	9:50	10:00
8:57	9:03	9:14	9:23	9:28	9:37	9:50	10:00	10:10
9:07	9:13	9:24	9:33	9:38	9:47	10:00	10:10	10:20
9:17	9:23	9:34	9:43	9:48	9:57	10:10	10:20	10:30
9:27	9:33	9:44	9:53	9:57	10:07	10:20	10:30	10:40
9:37	9:43	9:54	10:03	10:08	10:17	10:30	10:41	10:51
9:47	9:53	10:04	10:13	10:18	10:27	10:42	10:53	11:03
9:57	10:03	10:14	10:23	10:28	10:38	10:53	11:04	11:14
10:04	10:12	10:25	10:33	10:39	10:48	11:03	11:14	11:24
10:15	10:21	10:34	10:43	10:49	10:58	11:13	11:24	11:34
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10:35	10:41	10:54	11:03	11:09	11:18	11:33	11:44	11:54
10:45	10:51	11:04	11:13	11:19	11:28	11:43	11:54	12:04P
10:55	11:01	11:14	11:23	11:29	11:38	11:53	12:04P	12:14
11:05	11:11	11:24	11:33	11:39	11:48	12:04P	12:14	12:24
11:15	11:21	11:34	11:43	11:49	11:58	12:14	12:24	12:34
11:25	11:31	11:44	11:53	11:59	12:08P	12:25	12:35	12:45
11:35	11:41	11:54	12:03P	12:09P	12:18	12:35	12:45	12:55
11:45	11:51	12:04P	12:13	12:19	12:28	12:45	12:55	1:05
11:55	12:01P	12:14	12:23	12:29	12:38	12:55	1:05	1:15
12:05P	12:11	12:24	12:33	12:39	12:48	1:05	1:15	1:25
12:15	12:21	12:34	12:43	12:49	12:58	1:15	1:25	1:35
12:25	12:31	12:44	12:53	12:59	1:08	1:25	1:35	1:45
12:35	12:41	12:54	1:03	1:09	1:18	1:35	1:45	1:55
12:45	12:51	1:04	1:13	1:19	1:28	1:45	1:55	2:05
12:55	1:01	1:14	1:23	1:29	1:38	1:55	2:05	2:15
1:05	1:11	1:24	1:33	1:39	1:48	2:05	2:15	2:25
1:15	1:21	1:34	1:43	1:49	1:58	2:15	2:25	2:35
1:25	1:31	1:44	1:53	1:59	2:08	2:25	2:35	2:45
1:35	1:41	1:54	2:03	2:09	2:18	2:35	2:45	2:55
1:45	1:51	2:04	2:13	2:19	2:28	2:45	2:55	3:05
1:55	2:01	2:14	2:23	2:29	2:38	2:55	3:05	3:15
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2:15	2:21	2:34	2:43	2:49	2:58	3:15	3:25	3:35
2:25	2:31	2:44	2:53	2:59	3:08	3:25	3:35	3:45
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2:45	2:51	3:04	3:13	3:19	3:28	3:45	3:55	4:05
2:55	3:01	3:14	3:23	3:29	3:38	3:55	4:05	4:15
3:05	3:11	3:24	3:33	3:39	3:48	4:05	4:15	4:25
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3:25	3:31	3:44	3:53	3:59	4:08	4:25	4:35	4:45
3:35	3:41	3:54	4:03	4:09	4:18	4:35	4:45	4:55
3:45	3:51	4:04	4:13	4:19	4:28	4:45	4:55	5:05
3:55	4:01	4:14	4:23	4:29	4:38	4:55	5:05	5:15
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4:25	4:31	4:44	4:53	4:59	5:08	5:25	5:35	5:45
4:35	4:41	4:54	5:03	5:09	5:18	5:35	5:45	5:55
4:45	4:51	5:04	5:13	5:19	5:28	5:45	5:55	6:05
4:55	5:01	5:14	5:23	5:29	5:38	5:55	6:05	6:15
5:05	5:11	5:24	5:33	5:39	5:48	6:04	6:17	6:27
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5:34	5:42	5:55	6:03	6:09	6:18	6:33	6:44	6:54
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6:27	6:33	6:44	6:53	6:59	7:07	7:21	7:33	7:43
6:38	6:44	6:57	7:04	7:09	7:17	7:31	7:42	7:52
6:48	6:54	7:07	7:14	7:19	7:27	7:40	7:51	8:01
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7:12	7:18	7:31	7:38	7:43	7:51	8:04	8:14	8:24
7:28	7:34	7:44	7:53	7:58	8:05	8:18	8:28	8:38
7:45	7:51	8:03	8:10	8:15	8:22	8:34	8:44	8:54
8:05	8:11	8:23	8:30	8:34	8:41	8:52	9:02	9:12
8:27	8:33	8:44	8:51	8:55	9:02	9:13	9:23	9:33
8:48	8:54	9:05	9:12	9:16	9:23	9:34	9:44	9:54
9:12	9:18	9:27	9:34	9:40	9:47	9:58	10:08	10:17
9:37	9:44	9:55	10:02	10:06	10:12	10:23	10:32	10:40
10:04	10:11	10:22	10:28	10:32	10:37	10:44	10:54	11:02
10:35	—	10:48	10:54	10:58	11:03	11:12	11:20	11:28
11:02	—	11:15	11:21	11:25	11:30	11:37	11:47	11:55
11:27	—	11:42	11:48	11:52	11:57	12:04A	12:14A	12:22A
11:51	—	12:12A	12:18A	12:22A	12:27A	12:34	12:44	12:52
12:27A	—	12:42	12:48	12:52	12:57	1:04	1:14	1:22
1:27	—	1:42	1:48	1:52	1:57	2:04	2:14	2:22
2:27	—	2:42	2:48	2:52	2:57	3:04	3:14	3:22
3:27	—	3:42	3:48	3:52	3:57	4:04	4:14	4:22

Monday through Friday

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Westbound *Al Oeste* (Approximate Times / Tiempos Aproximados)

UNIVERSAL CITY	STUDIO CITY	SHERMAN OAKS	ENCINO	TARZANA		RESEDA	NORTHRIDGE	
9	8	7	6	5	4	3	2	1
Universal/Studio City Station	Ventura & Laurel Cyn	Ventura & Van Nuys	Ventura & Balboa	Ventura & Reseda	Reseda G Line (Orange) Station	Reseda & Sherman Way	CSUN Transit Center	Reseda & Devonshire
5:00A	5:13A	5:21A	5:27A	5:34A	5:37A	5:44A	5:55A	6:05A
5:15	5:28	5:36	5:42	5:49	5:52	5:59	6:10	6:20
5:30	5:43	5:51	5:57	6:04	6:07	6:14	6:25	6:35
5:45	5:58	6:06	6:12	6:19	6:22	6:29	6:40	6:50
6:00	6:13	6:21	6:27	6:34	6:37	6:44	6:55	7:05
6:15	6:28	6:36	6:42	6:49	6:52	6:59	7:10	7:20
6:30	6:43	6:51	6:57	7:04	7:07	7:14	7:25	7:35
6:45	6:58	7:06	7:12	7:19	7:22	7:29	7:40	7:50
7:00	7:13	7:21	7:27	7:34	7:37	7:44	7:55	8:05
7:15	7:28	7:36	7:42	7:49	7:52	7:59	8:10	8:20
7:30	7:43	7:51	7:57	8:04	8:07	8:14	8:25	8:35
7:45	7:58	8:06	8:12	8:19	8:22	8:29	8:40	8:50
8:00	8:13	8:21	8:27	8:34	8:37	8:44	8:55	9:05
8:15	8:28	8:36	8:42	8:49	8:52	8:59	9:10	9:20
8:30	8:43	8:51	8:57	9:04	9:07	9:14	9:25	9:35
8:45	8:58	9:06	9:12	9:19	9:22	9:29	9:40	9:50
9:00	9:13	9:21	9:27	9:34	9:37	9:44	9:55	10:05
9:15	9:28	9:36	9:42	9:49	9:52	9:59	10:10	10:20
9:30	9:43	9:51	9:57	10:04	10:07	10:14	10:25	10:35
9:45	9:58	10:06	10:12	10:19	10:22	10:29	10:40	10:50
10:00	10:13	10:21	10:27	10:34	10:37	10:44	10:55	11:05
10:15	10:28	10:36	10:42	10:49	10:52	10:59	11:10	11:20
10:30	10:43	10:51	10:57	11:04	11:07	11:14	11:25	11:35
10:45	10:58	11:06	11:12	11:19	11:22	11:29	11:40	11:50
11:00	11:13	11:21	11:27	11:34	11:37	11:44	11:55	12:05P
11:15	11:28	11:36	11:42	11:49	11:52	11:59	12:10P	12:20
11:30	11:43	11:51	11:57	12:04P	12:07P	12:14	12:25	12:35
11:45	11:58	12:06P	12:12P	12:19	12:22	12:29	12:40	12:50
12:00P	12:13	12:21	12:27	12:34	12:37	12:44	12:55	1:05
12:15	12:28	12:36	12:42	12:49	12:52	12:59	1:10	1:20
12:30	12:43	12:51	12:57	1:04	1:07	1:14	1:25	1:35
12:45	12:58	1:06	1:12	1:19	1:22	1:29	1:40	1:50
1:00	1:13	1:21	1:27	1:34	1:37	1:44	1:55	2:05
1:15	1:28	1:36	1:42	1:49	1:52	1:59	2:10	2:20
1:30	1:43	1:51	1:57	2:04	2:07	2:14	2:25	2:35
1:45	1:58	2:06	2:12	2:19	2:22	2:29	2:40	2:50
2:00	2:13	2:21	2:27	2:34	2:37	2:44	2:55	3:05
2:15	2:28	2:36	2:42	2:49	2:52	2:59	3:10	3:20
2:30	2:43	2:51	2:57	3:04	3:07	3:14	3:25	3:35
2:45	2:58	3:06	3:12	3:19	3:22	3:29	3:40	3:50
3:00	3:13	3:21	3:27	3:34	3:37	3:44	3:55	4:05
3:15	3:28	3:36	3:42	3:49	3:52	3:59	4:10	4:20
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3:45	3:58	4:06	4:12	4:19	4:22	4:29	4:40	4:50
4:00	4:13	4:21	4:27	4:34	4:37	4:44	4:55	5:05
4:15	4:28	4:36	4:42	4:49	4:52	4:59	5:10	5:20
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5:00	5:13	5:21	5:27	5:34	5:37	5:44	5:55	6:05
5:15	5:28	5:36	5:42	5:49	5:52	5:59	6:10	6:20
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5:45	5:58	6:06	6:12	6:19	6:22	6:29	6:40	6:50
6:00	6:13	6:21	6:27	6:34	6:37	6:44	6:55	7:05
6:15	6:28	6:36	6:42	6:49	6:52	6:59	7:10	7:20
6:30	6:43	6:51	6:57	7:04	7:07	7:14	7:25	7:35
6:45	6:58	7:06	7:12	7:19	7:22	7:29	7:40	7:50
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8:45	8:58	9:06	9:12	9:19	9:22	9:29	9:40	9:50
9:00	9:13	9:21	9:27	9:34	9:37	9:44	9:55	10:05
9:15	9:28	9:36	9:42	9:49	9:52	9:59	10:10	10:20
9:30	9:43	9:51	9:57	10:04	10:07	10:14	10:25	10:35
9:45	9:58	10:06	10:12	10:19	10:22	10:29	10:40	10:50
10:00	10:13	10:21	10:27	10:34	10:37	10:44	10:55	11:05
10:30	10:38	10:47	11:00	11:04	11:07	11:10	11:15	11:32
11:02	11:10	11:21	11:31	11:37	11:40	11:45	—	12:01A
11:31	11:44	11:55	12:03A	12:08A	12:11A	12:14A	—	12:31
12:03A	12:15A	12:23A	12:31	12:34	12:37	12:44	—	12:51
1:03	1:15	1:23	1:31	1:34	1:37	1:44	—	1:51
2:03	2:15	2:23	2:31	2:34	2:37	2:44	—	2:51
3:03	3:15	3:23	3:31	3:34	3:37	3:44	—	3:51
4:03	4:15	4:23	4:31	4:34	4:37	4:44	—	4:51

Saturday, Sunday and Holidays

Effective Sep 12 2021

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Eastbound *Al Este* | Approximate Times / Tiempos Aproximados |

NORTHRIDGE		RESEDA	TARZANA		ENCINO	SHERMAN OAKS	STUDIO CITY	
1	2	3	4	5	6	7	8	9
Reseda & Devonshire	CSUN Transit Center	Reseda & Sherman Way	Reseda G Line (Orange) Station	Ventura & Reseda	Ventura & Balboa	Ventura & Van Nuys	Ventura & Laurel Cyn	Universal/Studio City Station
4:27 A	4:32 A	4:42 A	4:48 A	4:52 A	4:57 A	5:04 A	5:14 A	5:22 A
4:48	4:53	5:03	5:09	5:13	5:18	5:27	5:35	5:43
5:03	5:08	5:18	5:24	5:28	5:34	5:43	5:51	5:59
5:18	5:23	5:33	5:39	5:43	5:49	5:58	6:06	6:14
5:32	5:37	5:48	5:54	5:58	6:05	6:14	6:22	6:30
5:47	5:52	6:03	6:09	6:13	6:20	6:29	6:38	6:47
6:01	6:06	6:18	6:24	6:28	6:35	6:44	6:55	7:04
6:16	6:21	6:31	6:38	6:43	6:50	7:01	7:10	7:20
6:28	6:33	6:44	6:53	6:58	7:05	7:16	7:25	7:35
6:43	6:48	7:01	7:08	7:13	7:20	7:31	7:41	7:51
6:58	7:03	7:16	7:23	7:28	7:34	7:46	7:56	8:06
7:13	7:18	7:31	7:38	7:43	7:51	8:03	8:13	8:23
7:27	7:33	7:46	7:53	7:58	8:06	8:18	8:28	8:38
7:42	7:48	8:01	8:08	8:13	8:21	8:33	8:43	8:53
7:57	8:03	8:16	8:23	8:28	8:36	8:48	8:58	9:08
8:12	8:18	8:31	8:38	8:43	8:51	9:03	9:13	9:23
8:27	8:33	8:46	8:53	8:58	9:06	9:17	9:27	9:37
8:41	8:47	9:00	9:07	9:13	9:21	9:34	9:44	9:54
8:56	9:02	9:15	9:22	9:28	9:36	9:49	9:59	10:09
9:11	9:17	9:30	9:37	9:43	9:51	10:04	10:14	10:24
9:26	9:32	9:45	9:52	9:58	10:06	10:19	10:29	10:39
9:41	9:47	10:00	10:07	10:13	10:21	10:35	10:44	10:54
9:56	10:02	10:15	10:22	10:28	10:37	10:52	11:03	11:13
10:09	10:15	10:28	10:36	10:43	10:52	11:07	11:18	11:28
10:24	10:30	10:43	10:51	10:58	11:07	11:22	11:33	11:43
10:39	10:45	10:58	11:06	11:13	11:22	11:37	11:48	11:58
10:54	11:00	11:13	11:21	11:28	11:37	11:52	12:03 P	12:13 P
11:09	11:15	11:28	11:36	11:43	11:52	12:08 P	12:20	12:30
11:24	11:30	11:43	11:51	11:58	12:08 P	12:24	12:37	12:47
11:39	11:45	11:58	12:06 P	12:13 P	12:23	12:39	12:52	1:02
11:54	11:59	12:13 P	12:21	12:28	12:38	12:54	1:07	1:17
12:09 P	12:15 P	12:28	12:36	12:43	12:53	1:09	1:22	1:32
12:24	12:30	12:43	12:51	12:58	1:08	1:24	1:37	1:47
12:39	12:45	12:58	1:06	1:13	1:23	1:39	1:52	2:02
12:54	1:00	1:13	1:21	1:28	1:38	1:54	2:07	2:17
1:09	1:15	1:28	1:36	1:43	1:53	2:09	2:22	2:32
1:24	1:30	1:43	1:51	1:58	2:08	2:24	2:37	2:47
1:39	1:45	1:58	2:06	2:13	2:23	2:39	2:52	3:02
1:54	2:00	2:13	2:21	2:28	2:38	2:54	3:07	3:17
2:09	2:15	2:28	2:36	2:43	2:53	3:09	3:22	3:32
2:24	2:30	2:43	2:51	2:58	3:08	3:24	3:38	3:48
2:39	2:45	2:58	3:06	3:13	3:23	3:39	3:53	4:03
2:54	3:00	3:13	3:21	3:28	3:38	3:54	4:08	4:18
3:09	3:15	3:28	3:36	3:43	3:53	4:09	4:23	4:33
3:24	3:30	3:43	3:51	3:58	4:08	4:24	4:38	4:48
3:39	3:45	3:58	4:06	4:13	4:23	4:39	4:53	5:03
3:54	4:00	4:13	4:21	4:28	4:38	4:54	5:08	5:18
4:09	4:15	4:28	4:36	4:43	4:53	5:09	5:23	5:33
4:24	4:30	4:43	4:51	4:58	5:08	5:24	5:38	5:48
4:39	4:45	4:58	5:06	5:13	5:23	5:39	5:53	6:03
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6:42	6:48	7:01	7:08	7:13	7:21	7:35	7:46	7:56
6:57	7:03	7:16	7:23	7:28	7:36	7:49	8:00	8:10
7:12	7:18	7:31	7:38	7:43	7:51	8:04	8:14	8:24
7:28	7:34	7:46	7:53	7:58	8:05	8:18	8:28	8:38
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8:27	8:33	8:44	8:51	8:55	9:02	9:13	9:23	9:33
8:48	8:54	9:05	9:12	9:16	9:23	9:34	9:44	9:54
9:12	9:18	9:29	9:34	9:40	9:47	9:58	10:08	10:17
9:37	9:44	9:55	10:02	10:06	10:12	10:23	10:32	10:40
10:04	10:11	10:22	10:28	10:32	10:37	10:44	10:54	11:02
10:35	—	10:48	10:54	10:58	11:03	11:12	11:20	11:28
11:02	—	11:15	11:21	11:25	11:30	11:37	11:47	11:55
11:29	—	11:42	11:48	11:52	11:57	12:04 A	12:14 A	12:22 A
11:59	—	12:12 A	12:18 A	12:22 A	12:27 A	12:34	12:44	12:52
12:29 A	—	12:42	12:48	12:52	12:57	1:04	1:14	1:22
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2:29	—	2:42	2:48	2:52	2:57	3:04	3:14	3:22
3:29	—	3:42	3:48	3:52	3:57	4:04	4:14	4:22

Saturday, Sunday and Holiday

240

Westbound *Al Oeste* (Approximate Times / Tiempos Aproximados)

STUDIO CITY		SHERMAN OAKS	ENCINO	TARZANA		RESEDA	NORTHRIDGE	
9	8	7	6	5	4	3	2	1
Universal/Studio City Station	Ventura & Laurel Cyn	Ventura & Van Nuys	Ventura & Balboa	Ventura & Reseda	Reseda G Line (Orange) Station	Reseda & Sherman Way	CSUN Transit Center	Reseda & Devonshire
5:04A	5:13A	5:21A	5:27A	5:34A	5:37A	5:44A	5:55A	6:04A
5:11	5:21	5:35	5:44	5:51	5:54	5:51	6:10	6:17
5:32	5:40	5:47	5:58	6:04	6:10	6:16	6:27	6:34
5:48	5:54	6:03	6:13	6:21	6:25	6:31	6:42	6:51
6:01	6:07	6:18	6:28	6:34	6:40	6:46	6:57	7:07
6:16	6:24	6:33	6:43	6:51	6:55	7:01	7:13	7:23
6:30	6:38	6:48	6:58	7:04	7:10	7:16	7:28	7:38
6:45	6:53	7:03	7:13	7:21	7:25	7:31	7:43	7:53
6:51	7:07	7:18	7:28	7:34	7:40	7:46	7:58	8:08
7:14	7:22	7:33	7:43	7:51	7:55	8:01	8:13	8:23
7:28	7:34	7:47	7:57	8:04	8:10	8:17	8:27	8:37
7:41	7:47	8:00	8:12	8:21	8:25	8:32	8:44	8:54
7:54	8:02	8:14	8:23	8:34	8:41	8:48	9:00	9:10
8:07	8:14	8:28	8:41	8:51	8:54	9:03	9:15	9:25
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8:51	9:00	9:13	9:23	9:34	9:41	9:48	10:00	10:10
9:04	9:15	9:28	9:41	9:51	9:54	10:03	10:15	10:25
9:20	9:29	9:43	9:53	10:04	10:11	10:18	10:30	10:40
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9:48	9:57	10:12	10:23	10:34	10:41	10:48	11:00	11:10
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10:15	10:25	10:41	10:53	11:04	11:11	11:19	11:32	11:43
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10:45	10:55	11:11	11:24	11:34	11:42	11:50	12:03P	12:16P
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11:57	12:10P	12:24	12:41	12:51	12:57	1:05	1:18	1:27
12:14P	12:25	12:41	12:54	1:04	1:12	1:20	1:33	1:44
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2:27	2:40	2:54	3:11	3:21	3:27	3:35	3:48	3:57
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3:14	3:25	3:41	3:54	4:04	4:12	4:20	4:33	4:44
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4:00	4:10	4:24	4:41	4:51	4:57	5:05	5:18	5:27
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4:32	4:42	4:58	5:11	5:21	5:27	5:35	5:48	5:57
4:47	4:57	5:13	5:24	5:34	5:42	5:50	6:03	6:13
5:02	5:12	5:28	5:41	5:51	5:57	6:04	6:18	6:28
5:17	5:27	5:43	5:54	6:04	6:12	6:19	6:31	6:41
5:32	5:42	5:58	6:11	6:21	6:27	6:34	6:46	6:56
5:47	5:57	6:13	6:24	6:34	6:42	6:49	7:01	7:11
6:02	6:12	6:28	6:41	6:51	6:57	7:04	7:16	7:26
6:18	6:28	6:43	6:54	7:05	7:10	7:17	7:29	7:39
6:33	6:43	6:58	7:10	7:19	7:24	7:31	7:43	7:53
6:48	6:58	7:12	7:24	7:33	7:37	7:44	7:54	8:04
7:03	7:13	7:27	7:39	7:48	7:52	7:59	8:11	8:21
7:17	7:27	7:42	7:54	8:03	8:07	8:14	8:24	8:34
7:37	7:44	7:59	8:10	8:18	8:22	8:29	8:41	8:51
7:57	8:04	8:19	8:30	8:38	8:42	8:49	9:01	9:11
8:24	8:35	8:48	8:57	9:07	9:11	9:18	9:30	9:40
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9:28	9:37	9:49	10:00	10:07	10:11	10:17	10:28	10:38
9:57	10:07	10:18	10:27	10:34	10:40	10:46	—	11:05
10:30	10:38	10:49	11:00	11:04	11:10	11:15	—	11:32
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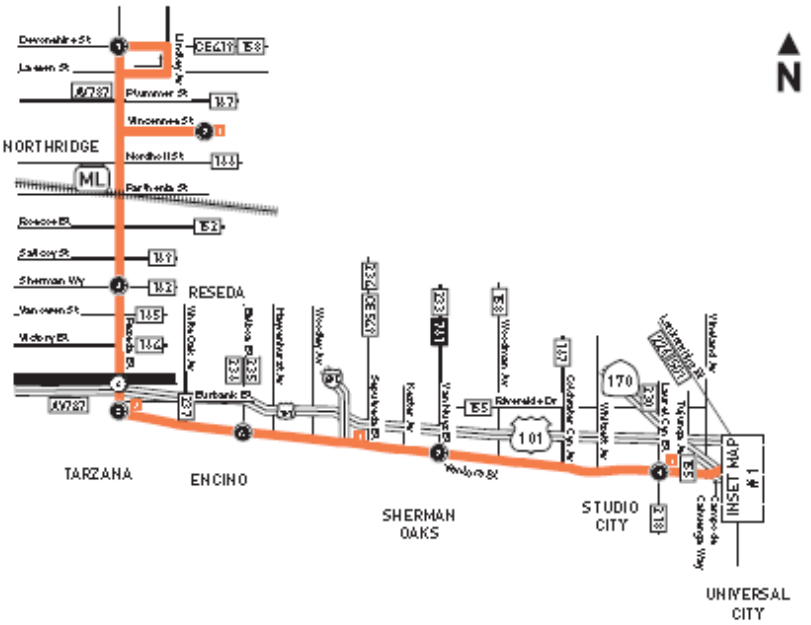
11:37	11:44	11:55	12:03A	12:08A	12:11A	12:14A	—	12:31
12:08A	12:15A	12:23A	12:31	12:36	12:37	12:44	—	12:57
1:08	1:15	1:23	1:31	1:36	1:37	1:44	—	1:57
2:08	2:15	2:23	2:31	2:36	2:37	2:44	—	2:57
3:08	3:15	3:23	3:31	3:36	3:37	3:44	—	3:57
4:08	4:15	4:23	4:31	4:36	4:37	4:44	—	4:57

ROUTE MAP



INSET 1 – UNIVERSAL CITY/STUDIO CITY STATION

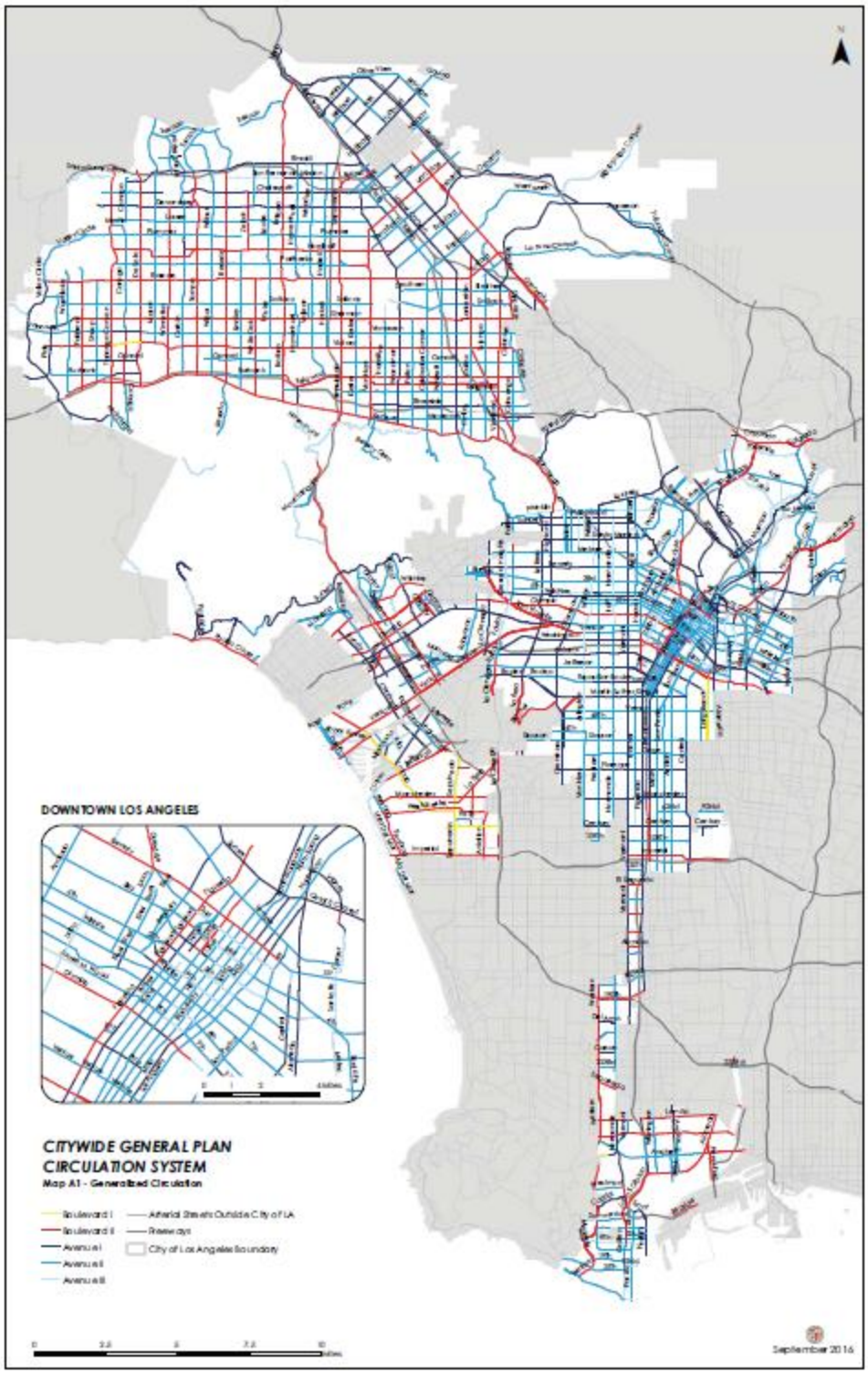
MAP NOTES

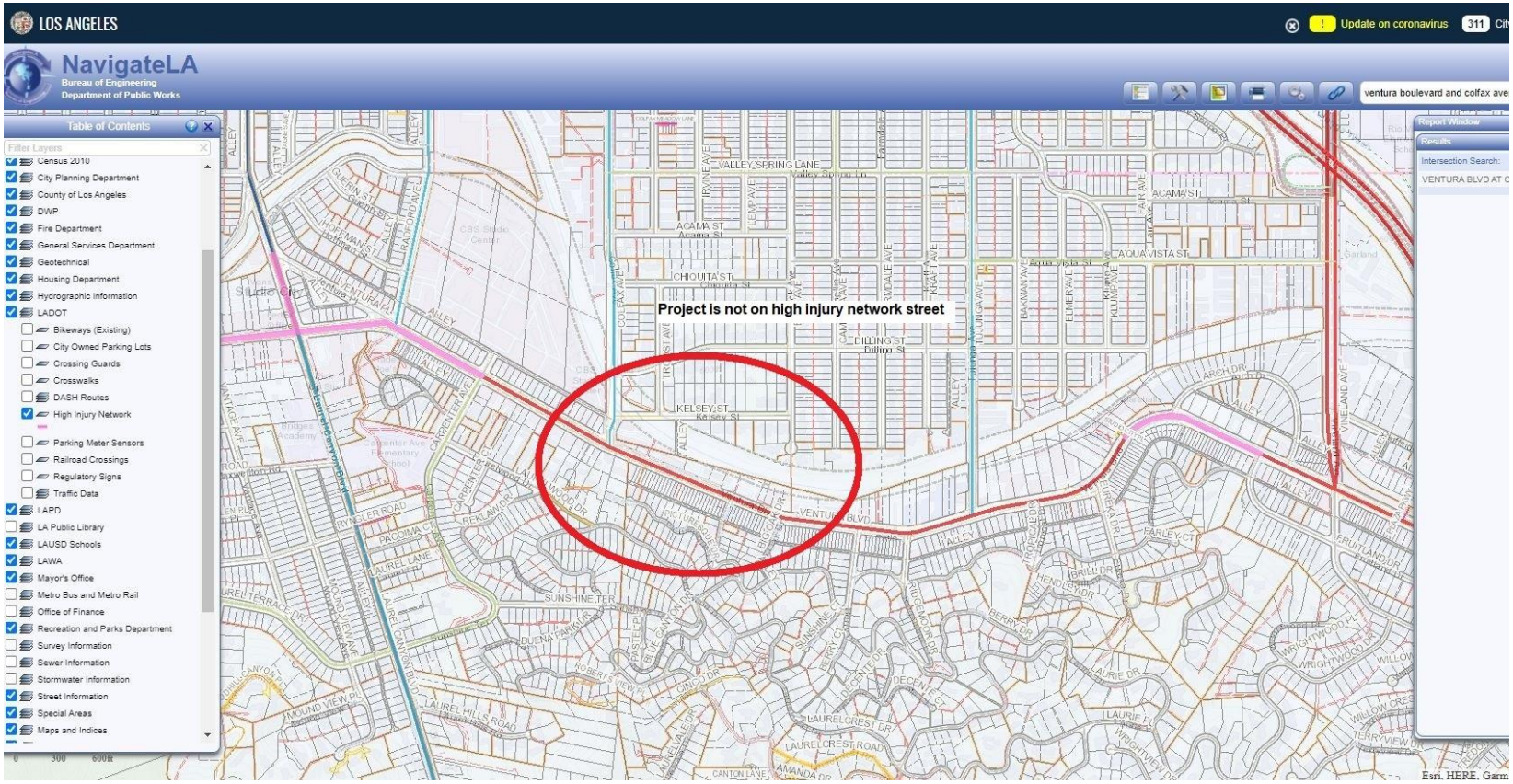
1. California State University, Northridge
2. Providence Tarzana Medical Center
3. Sherman Oaks Galleria
4. CBS Studio Center
5. Universal/Studio City Station
   Metro Bus Lines 155, 224, 240; Metro B Line (Red); Burbank Bus Pink Route; Universal Studios Shuttle
6. Universal Studios CityWalk
7. Campo de Cahuenga

LEGEND

- Route of Line 240
- Metro G Line (Orange)
- Metro B Line (Red)
- Local Stop Timepoint
- Local Stop Timepoint - Single Direction Only
- Metro Busway/Rail Station & Timepoint
- Metro Busway/Rail Station
- Transit Center
- ML Metrolink Station
- AV Antelope Valley Transit Authority
- CE LADOT Commuter Express

Appendix 4 - Street Designation & HIN Maps


DOWNTOWN LOS ANGELES
CITYWIDE GENERAL PLAN
CIRCULATION SYSTEM
Map A1 - Generalized Circulation
Boulevard I
Boulevard II
Avenue I
Avenue II
Avenue III
Arterial Streets Outside City of LA
Freeways
City of Los Angeles Boundary
September 2016


LOS ANGELES
NavigateLA
Bureau of Engineering
Department of Public Works
Update on coronavirus
311
ventura boulevard and colfax ave
Table of Contents
Filter Layers
Census 2010
City Planning Department
County of Los Angeles
DWP
Fire Department
General Services Department
Geotechnical
Housing Department
Hydrographic Information
LADOT
Bikeways (Existing)
City Owned Parking Lots
Crossing Guards
Crosswalks
DASH Routes
High Injury Network
Parking Meter Sensors
Railroad Crossings
Regulatory Signs
Traffic Data
LAPD
LA Public Library
LAUSD Schools
LAWA
Mayor's Office
Metro Bus and Metro Rail
Office of Finance
Recreation and Parks Department
Survey Information
Sewer Information
Stormwater Information
Street Information
Special Areas
Maps and Indices
Project is not on high injury network street
KELSEY ST
Kelsey St
ACAMA ST
Acama St
CHIQUITA ST
Chiquita St
DILLING ST
Dilling St
VENTURA BLVD
VALLEY SPRING LANE
AQUA VISTA ST
LAUREL CREST ROAD
LAUREL MILLS ROAD
Report Window
Results
Intersection Search:
VENTURA BLVD AT C
Esri, HERE, Garm

Appendix 5 – VMT Calculations

CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: SRM - Studio City

Scenario:

Address: 11611 W VENTURA BLVD, 91604

Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

● Yes ○ No

Existing Land Use

Land Use Type	Value	Unit
Housing | Single Family		DU

☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Housing | Single Family		DU
(custom) AL & IL | HBW- Attraction Split	13	Percent
(custom) AL & IL | HBO- Attraction Split	70	Percent
(custom) AL & IL | NHB- Attraction Split	8	Percent
(custom) AL & IL | HBW- Production Split	0	Percent
(custom) AL & IL | HBO- Production Split	0	Percent
(custom) AL & IL | NHB- Production Split	9	Percent
(custom) AL & IL | Daily	388	Residents
(custom) AL & IL | Daily	80	Employee:
(custom) AL & IL | Daily	Non-Retai	Retail/Non

☑ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
0 Daily Vehicle Trips	607 Daily Vehicle Trips
0 Daily VMT	4,070 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	607 Net Daily Trips
The net increase in daily VMT ≤ 0	4,070 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	0.000 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: SRM - Studio City

Scenario:

Address: 11611 W VENTURA BLVD, 91604

Proposed Project Land Use Type	Value	Unit
(custom) AL & IL | Retail/N		
(custom) AL & IL | Resider		
(custom) AL & IL | Employ		
(custom) AL & IL | Daily		
(custom) AL & IL | HBW-At		
(custom) AL & IL | HBO-At		

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	No	No
Max Work Based TDM Achieved?	No	No

A Parking

Reduce Parking Supply	☐ Proposed Pj ☐ Mitigation	100	city code parking provision for the project site
		74	actual parking provision for the project site
Unbundle Parking	☐ Proposed Pj ☐ Mitigation	100	monthly parking cost (dollar) for the project site
Parking Cash-Out	☐ Proposed Pj ☐ Mitigation	50	percent of employees eligible
Price Workplace Parking	☐ Proposed Pj ☐ Mitigation	6.0	daily parking charge (dollar)
		50	percent of employees subject to priced parking
Residential Area Parking Permits	☐ Proposed Pj ☐ Mitigation	200	cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
607 Daily Vehicle Trips	**607** Daily Vehicle Trips
4,070 Daily VMT	**4,070** Daily VMT
0.0 Household VMT per Capita	**0.0** Household VMT per Capita
8.3 Work VMT per Employee	**8.3** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

Appendix 5.1 - Plan Consistency Worksheet

LADOT

Plans, Policies and Programs Consistency Worksheet

The worksheet provides a structured approach to evaluate the threshold T-1 question below, that asks whether a project conflicts with a program, plan, ordinance or policy addressing the circulation system. The intention of the worksheet is to streamline the project review by highlighting the most relevant plans, policies and programs when assessing potential impacts to the City's circulation system.

> ***Threshold T-I***: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

This worksheet does not include an exhaustive list of City policies, and does not include community plans, specific plans, or any area-specific regulatory overlays. The Department of City Planning project planner will need to be consulted to determine if the project would obstruct the City from carrying out a policy or program in a community plan, specific plan, streetscape plan, or regulatory overlay that was adopted to support multimodal transportation options or public safety . LADOT staff should be consulted if a project would lead to a conflict with a mobility investment in the Public Right of Way (PROW) that is currently undergoing planning, design, or delivery. This worksheet must be completed for all projects that meet the Section I. Screening Criteria. For description of the relevant planning documents, **see Attachment D.1.**

For any response to the following questions that checks the box in **bold text** ((i.e. **Yes or NO**) further analysis is needed to demonstrate that the project does not conflict with a plan, policy, or program.

I. SCREENING CRITERIA FOR POLICY ANALYSIS

If the answer is 'yes' to any of the following questions, further analysis will be required:

Does the project require a discretionary action that requires the decision maker to find that the project would substantially conform to the purpose, intent and provisions of the General Plan?

☒yes ☐No

Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?

☐Yes ☒No

Is the project required to or proposing to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?

☒Yes ☐No

II. PLAN CONSISTENCY ANALYSIS

A. Mobility Plan 2035 PROW Classification Standards for Dedications and Improvements

These questions address potential conflict with:

Mobility Plan 2035 Policy 2.1 *- Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*

Mobility Plan 2035 Policy 2.3 *- Pedestrian Infrastructure. Recognize walking as a component of every trip and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*

Mobility Plan 2035 Policy 3.2 -*People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

A.1 Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone? ☒Yes ☐No

A.2 If **A.1 is yes**, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation. ☒Yes ☐No ☐N/A

A.3 If **A.2 is yes**, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?

☒Yes ☐No ☐N/A

If the answer is to **A.1 or A.2 is NO, or to A.1, A.2 and A.3. is YES**, then the project does not conflict with the dedication and improvement requirements that are needed to comply with the Mobility Plan 2035 Street Designations and Standard Roadway Dimensions.

A.4 If the answer to **A.3. is NO**, is the project applicant asking to waive from the dedication standards?

☐**Yes** ☐**No** ☒N/A

Lists any streets subject to dedications or voluntary dedications and include existing roadway and sidewalk widths, required roadway and sidewalk widths, and proposed roadway and sidewalk width or waivers.

Frontage 1 Existing PROW'/Curb':

Ventura Boulevard –
Existing - The existing half ROW is approximately 48 Feet, and half roadway is approximately 40 Feet.
Required - ROW is 110 Feet (55 FT half ROW from centerline), roadway width 80 Feet (40 FT half roadway from centerline).
Approximately a 7-foot dedication is required to achieve a 15-foot sidewalk.
Colfax Avenue –
Existing - From the curb return on the corner of Ventura & Colfax to approximately 70 FT northerly, the existing half ROW is approximately 45 Feet, and half roadway is approximately 35 Feet.
Required - ROW is 86 FT (43 FT half ROW from centerline), roadway width 56 FT (28 FT half roadway from centerline).
Existing condition exceed the requirement in this section.

If the answer to **A.4 is NO**, the project is inconsistent with Mobility Plan 2035 street designations and must file for a waiver of street dedication and improvement.

If the answer to **A.4 is YES**, additional analysis is necessary to determine if the dedication and/or improvements are necessary to meet the City's mobility needs for the next 20 years. The following factors may contribute to determine if the dedication or improvement is necessary:

Is the project site along any of the following networks identified in the City's Mobility Plan?

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network

To see the location of the above networks, see **Transportation Assessment Support Map**. [1]

Is the project within the service area of Metro Bike Share, or is there demonstrated demand for micro-mobility services?

If the project dedications and improvements asking to be waived are necessary to meet the City's mobility needs, the project may be found to conflict with a plan that is adopted to protect the environment.

B. Mobility Plan 2035 PROW Policy Alignment with Project-Initiated Changes

B.1 Project-Initiated Changes to the PROW Dimensions

These questions address potential conflict with:

> ***Mobility Plan 2035 Policy 2.I*** *- Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*
>
> ***Mobility Plan 2035 Policy 2.3*** *- Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*
>
> ***Mobility Plan 2035 Policy 3.2 -****People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*
>
> ***Mobility Plan 2035 Policy 2.I0*** *- Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*
>
> **Mobility Plan 2035 Street Designations and Standard Roadway Dimensions**

B.1 Does the project physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?

Examples of physical changes to the public right-of-way include:

[1] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

- widening the roadway,
- narrowing the sidewalk,
- adding space for vehicle turn outs or loading areas,
- removing bicycle lanes, bike share stations, or bicycle parking
- modifying existing bus stop, transit shelter, or other street furniture
- paving, narrowing, shifting, or removing an existing parkway or tree well

☐ **Yes** ☒ **No**

B.2 Driveway Access These questions address potential conflict with:

Mobility Plan 2035 Policy 2.l0 *- Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*

Mobility Plan 2035 Program PL.l. Driveway Access. *Require driveway access to buildings from non-arterial streets or alleys (where feasible) in order to minimize interference with pedestrian access and vehicular movement.*

Citywide Design Guidelines - Guideline 2*: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.*

Site Planning Best Practices:

- *Prioritize pedestrian access first and automobile access second. Orient parking and driveways toward the rear or side of buildings and away from the public right-of-way. On corner lots, parking should be oriented as far from the corner as possible.*
- *Minimize both the number of driveway entrances and overall driveway widths.*
- *Do not locate drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.*
- *Orient vehicular access as far from street intersections as possible.*
- *Place drive-thru elements away from intersections and avoid placing them so that they create a barrier between the sidewalk and building entrance(s).*
- *Ensure that loading areas do not interfere with on-site pedestrian and vehicular circulation by separating loading areas and larger commercial vehicles from areas that are used for public parking and public entrances.*

B.2 Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines (See Sec. 321 in the Manual of Policies and Procedures) by any of the following:

- locating new driveways for residential properties on an Avenue or Boulevard, and access is otherwise possible using an alley or a collector/local street, or
- locating new driveways for industrial or commercial properties on an Avenue or Boulevard and access is possible along a collector/local street, or
- the total number of new driveways exceeds 1 driveway per every 200 feet along on the Avenue or Boulevard frontage, or

[2] for a project frontage that exceeds 400 feet along an Avenue or Boulevard, the incremental additional driveway above 2 is more than 1 driveway for every 400 additional feet.

- locating new driveways on an Avenue or Boulevard within 150 feet from the intersecting street, or
- locating new driveways on a collector or local street within 75 feet from the intersecting street, or
- locating new driveways near mid-block crosswalks, requiring relocation of the mid-block crosswalk

☐ Yes ☒ No

If the answer to **B.1 and B.2 are both NO**, then the project would not conflict with a plan or policies that govern the PROW as a result of the project-initiated changes to the PROW.

Impact Analysis

If the answer to either **B.1 or B.2 are YES**, City plans and policies should be reviewed in light of the proposed physical changes to determine if the City would be obstructed from carrying out the plans and policies. The analysis should pay special consideration to substantial changes to the Public Right of Way that may either degrade existing facilities for people walking and bicycling (e.g., removing a bicycle lane), or preclude the City from completing complete street infrastructure as identified in the Mobility Plan 2035, especially if the physical changes are along streets that are on the High Injury Network (HIN). The analysis should also consider if the project is in a Transit Oriented Community (TOC) area, and would degrade or inhibit trips made by biking, walking and/ or transit ridership. The streets that need special consideration are those that are included on the following networks identified in the Mobility Plan 2035, or the HIN:

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network
- High Injury Network

To see the location of the above networks, see **Transportation Assessment Support Map**.[3]

Once the project is reviewed relevant to plans and policies, and existing facilities that may be impacted by the project, the analysis will need to answer the following two questions in concluding if there is an impact due to plan inconsistency.

B.2.1 Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?

☐ Yes ☒ No ☐ N/A

B.2.2 Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?

☐ Yes ☒ No ☐ N/A

[3] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

If either of the answers to either **B.2.1 or B.2.2 are YES**, the project may conflict with the Mobility Plan 2035, and therefore conflict with a plan that is adopted to protect the environment. If either of the answers to both **B.2.1. or B.2.2. are NO**, then the project would not be shown to conflict with plans or policies that govern the Public Right-of-Way.

C. Network Access

C. 1 Alley, Street and Stairway Access

These questions address potential conflict with:

Mobility Plan Policy 3.9 *Increased Network Access: Discourage the vacation of public rights-of-way.*

C.1.1 Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?

☐ Yes ☒ No

C.1.2 If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking and biking on the street, alley or stairway?

☐ Yes ☐ **No** ☒ N/A

C.2 New Cul-de-sacs

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.l0 *Cul-de-sacs: Discourage the use of cul-de-sacs that do not provide access for active transportation options.*

C.2.1 Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?

☐ Yes ☒ No

C.2.2 If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?

☐ Yes ☐ **No** ☒ N/A

If the answers to either C.1.2 or C.2.2 are YES, then the project would not conflict with a plan or policies that ensures access for all modes of travel. If the answer to either **C.1.2 or C.2.2 are NO**, the project may conflict with a plan or policies that governs multimodal access to a property. Further analysis must assess to the degree that pedestrians and bicyclists have sufficient public access to the transportation network.

D. Parking Supply and Transportation Demand Management

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.8 *-Bicycle Parking, Provide bicyclists with convenient, secure and well maintained bicycle parking facilities.*

Mobility Plan 2035 Policy 4.8 *-Transportation Demand Management Strategies. Encourage greater utilization of Transportation Demand Management Strategies to reduce dependence on single-occupancy vehicles.*

Mobility Plan 2035 Policy 4.l3 *-Parking and Land Use Management: Balance on-street and off-street parking supply with other transportation and land use objectives.*

D.1 Would the project proposed supply of onsite parking that exceeds the baseline amount[4] as required in the Los Angeles Municipal Code or a Specific plan, whichever requirement prevails?

☒Yes ☐No

D.2 If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g. parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?

☒Yes ☐**No** ☐N/A

If the answer to **D.2. is NO** the project may conflict with parking management policies. Further analysis is needed to demonstrate how the supply of parking above city requirements will not result in additional (induced) drive-alone trips as compared to an alternative that provided no more parking than the baseline required by the LAMC or Specific Plan. If there is potential for the supply of parking to result in induced demand for drive-alone trips, the project should further explore transportation demand management (TDM) measures to further off-set the induced demands of driving and vehicle miles travelled (VMT) that may result from higher amounts of on-site parking. The TDM measures should specifically focus on strategies that encourage dynamic and context-sensitive pricing solutions and ensure the parking is efficiently allocated, such as providing real time information. Research has demonstrated that charging a user cost for parking or providing a 'cash-out' option in return for not using it is the most effective strategy to reduce the instances of drive-alone trips and increase non-auto mode share to further reduce VMT. To ensure the parking is efficiently managed and reduce the need to build parking for future uses, further strategies should include sharing parking with other properties and/or the general public.

D.3. Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21A.16 of the LAMC?

Yes **No**

D.4. Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?

☐Yes ☒No

D.5 If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?

☐Yes ☐**No** ☒N/A

[4] The baseline parking is defined here as the default parking requirements in section 12.21 A.4 of the Los Angeles Municipal Code or any applicable Specific Plan, whichever prevails, for each applicable use not taking into consideration other parking incentives to reduce the amount of required parking.

If the answer to **D.3. or D.5. is NO** the project conflicts with LAMC code requirements of bicycle parking and TDM measures. If the project includes uses that require bicycle parking (Section 12.21 A.16) or TDM (Section 12.26 J), and the project does not comply with those Sections of the LAMC, further analysis is required to ensure that the project supports the intent of the two LAMC sections. To meet the intent of bicycle parking requirements, the analysis should identify how the project commits to providing safe access to those traveling by bicycle and accommodates storing their bicycle in locations that demonstrates priority over vehicle access.

Similarly, to meet the intent of the TDM requirements of Section 12.26 J of the LAMC, the analysis should identify how the project commits to providing effective strategies in either physical facilities or programs that encourage non-drive alone trips to and from the project site and changes in work schedule that move trips out of the peak period or eliminate them altogether (as in the case in telecommuting or compressed work weeks).

E. Consistency with Regional Plans

This section addresses potential inconsistencies with greenhouse gas (GHG) reduction targets forecasted in the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS).

E.1 Does the Project or Plan apply one the City's efficiency-based impact thresholds (i.e. VMT per capita, VMT per employee, or VMT per service population) as discussed in **Section 2.2.3** of the TAG?

☒ Yes ☐ No

E.2 If the Answer to **E.1 is YES**, does the Project or Plan result in a significant VMT impact?

☐ **Yes** ☒ No ☐ N/A

E.3 If the Answer to **E.1 is NO**, does the Project result in a net increase in VMT?

☐ **Yes** ☐ No ☒ N/A

If the Answer to **E.2 or E.3 is NO**, then the Project or Plan is shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

E.4 If the Answer to **E.2 or E.3 is YES**, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS. For the purpose of making a finding that a project is consistent with the GHG reduction targets forecasted in the SCAG RTP/SCS, the project analyst should consult **Section 2.2.4** of the Transportation Assessment Guidelines (TAG). **Section 2.2.4** provides the methodology for evaluating a land use project's cumulative impacts to VMT, and the appropriate reliance on SCAG's most recently adopted RTP/SCS in reaching that conclusion.

The analysis methods therein can further support findings that the project is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy for which the State Air Resources Board, pursuant to Section 65080(b)(2)(H) of the Government Code, has accepted a metropolitan planning organization's determination that the sustainable communities strategy or the alternative planning strategy would, if implemented, achieve the greenhouse gas emission reduction targets.

References

BOE Street Standard Dimensions S-470-1 http://eng2.lacity.org/techdocs/stdplans/s-400/S-470-1 20151021 150849.pdf

LADCP Citywide Design Guidelines. https://planning.lacity.org/odocument/f6608be7-d5fe-4187-bea6-20618eec5049/Citywide Design Guidelines.pdf

LADOT Transportation Assessment Support Map https://arcg.is/fubbD Mobility Plan 2035

https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility Plan 2035.pdf

SCAG. Connect SoCal, 2020-2045 RTP/SCS, https://www.connectsocal.org/Pages/default.aspx

CITY PLAN, POLICIES AND GUIDELINES

The Transportation Element of the City's General Plan, Mobility Plan 2035, established the "Complete Streets Design Guide" as the City's document to guide the operations and design of streets and other public rights-of-way. It lays out a vision for designing safer, more vibrant streets that are accessible to people, no matter what their mode choice. As a living document, it is intended to be frequently updated as City departments identify and implement street standards and experiment with different configurations to promote complete streets. The guide is meant to be a toolkit that provides numerous examples of what is possible in the public right-of-way and that provides guidance on context-sensitive design.

The Plan for A Healthy Los Angeles (March 2015) includes policies directing several City departments to develop plans that promote active transportation and safety.

The City of Los Angeles Community Plans, which make up the Land Use Element of the City's General Plan, guide the physical development of neighborhoods by establishing the goals and policies for land use. The 35 Community Plans provide specific, neighborhood-level detail for land uses and the transportation network, relevant policies, and implementation strategies necessary to achieve General Plan and community-specific objectives.

The stated goal of Vision Zero is to eliminate traffic-related deaths in Los Angeles by 2025 through a number of strategies, including modifying the design of streets to increase the safety of vulnerable road users. Extensive crash data analysis is conducted on an ongoing basis to prioritize intersections and corridors for implementation of projects that will have the greatest effect on overall fatality reduction. The City designs and deploys Vision Zero Corridor Plans as part of the implementation of Vision Zero. If a project is proposed whose site lies on the High Injury Network (HIN), the applicant should consult with LADOT to inform the project's site plan and to determine appropriate improvements, whether by funding their implementation in full or by making a contribution toward their implementation.

The Citywide Design Guidelines (October 24, 2019) includes sections relevant to development projects where improvements are proposed within the public realm. Specifically, Guidelines one through three provide building design strategies that support the pedestrian experience. The Guidelines provide best practices in designing that apply in three spatial categories of site planning, building design and public right of way. The Guidelines should be followed to ensure that the project design supports pedestrian safety, access and comfort as they access to and from the building and the immediate public right of way.

The City's Transportation Demand Management (TDM) Ordinance (LA Municipal Code 12.26.J) requires certain projects to incorporate strategies that reduce drive-alone vehicle trips and improve access to destinations and services. The ordinance is revised and updated periodically and should be reviewed for application to specific projects as they are reviewed.

The City's LAMC Section 12.37 (Waivers of Dedication and Improvement) requires certain projects to dedicate and/or implement improvements within the public right-of-way to meet the street designation standards of the Mobility Plan 2035.

The Bureau of Engineering (BOE) Street Standard Dimensions S-470-1 provides the specific street widths and public right of way dimensions associated with the City's street standards.

Appendix 6 – Traffic Volume Counts

CITY TRAFFIC COUNTERS

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File Name : Colfax_Ventura
Site Code : 00000000
Start Date : 10/19/2021
Page No : 1

Groups Printed- Passenger - 2+ Axles - Buses

	Colfax Avenue Southbound			Ventura Blvd Westbound			Business Driveway Northbound			Ventura Blvd Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	16	0	66	0	100	14	0	0	0	13	39	0	248
07:15 AM	29	0	90	0	118	18	0	0	0	18	49	0	322
07:30 AM	42	0	143	0	164	29	0	0	0	39	71	0	488
07:45 AM	35	0	159	0	215	48	0	0	0	48	86	0	591
Total	122	0	458	0	597	109	0	0	0	118	245	0	1649
08:00 AM	43	0	98	0	174	36	0	0	0	47	146	0	544
08:15 AM	43	0	88	0	171	30	0	0	0	33	130	0	495
08:30 AM	54	0	114	0	141	24	0	0	0	49	125	0	507
08:45 AM	48	0	116	0	169	32	0	0	0	46	117	2	530
Total	188	0	416	0	655	122	0	0	0	175	518	2	2076
09:00 AM	44	0	89	0	204	27	0	0	0	32	102	0	498
09:15 AM	44	0	84	0	147	32	0	0	0	45	128	0	480
09:30 AM	35	0	89	0	150	31	0	0	0	34	109	0	448
09:45 AM	38	0	91	0	175	32	0	0	0	39	114	0	489
Total	161	0	353	0	676	122	0	0	0	150	453	0	1915
03:00 PM	53	0	66	0	198	48	0	0	0	60	230	0	655
03:15 PM	50	0	75	0	164	48	0	1	0	85	196	0	619
03:30 PM	36	0	61	0	179	49	0	0	0	84	197	0	606
03:45 PM	60	0	66	0	189	49	0	0	0	88	202	0	654
Total	199	0	268	0	730	194	0	1	0	317	825	0	2534
04:00 PM	42	0	56	0	169	48	0	0	0	74	214	0	603
04:15 PM	54	0	62	0	181	52	0	0	0	98	222	0	669
04:30 PM	55	0	52	0	151	67	0	0	0	92	217	0	634
04:45 PM	46	0	64	0	186	61	0	0	0	80	198	0	635
Total	197	0	234	0	687	228	0	0	0	344	851	0	2541
05:00 PM	37	0	69	0	204	44	0	0	0	96	218	0	668
05:15 PM	48	0	75	0	175	58	0	0	0	70	216	0	642
05:30 PM	56	0	71	0	156	55	0	0	0	83	195	0	616
05:45 PM	54	0	75	0	178	47	0	0	1	85	192	0	632
Total	195	0	290	0	713	204	0	0	1	334	821	0	2558
Grand Total	1062	0	2019	0	4058	979	0	1	1	1438	3713	2	13273
Apprch %	34.5	0	65.5	0	80.6	19.4	0	50	50	27.9	72.1	0	
Total %	8	0	15.2	0	30.6	7.4	0	0	0	10.8	28	0	
Passenger	1037	0	1987	0	3994	971	0	1	1	1403	3655	2	13051
% Passenger	97.6	0	98.4	0	98.4	99.2	0	100	100	97.6	98.4	100	98.3
2+ Axles	25	0	32	0	29	8	0	0	0	33	19	0	146
% 2+ Axles	2.4	0	1.6	0	0.7	0.8	0	0	0	2.3	0.5	0	1.1
Buses	0	0	0	0	35	0	0	0	0	2	39	0	76
% Buses	0	0	0	0	0.9	0	0	0	0	0.1	1.1	0	0.6

CITY TRAFFIC COUNTERS

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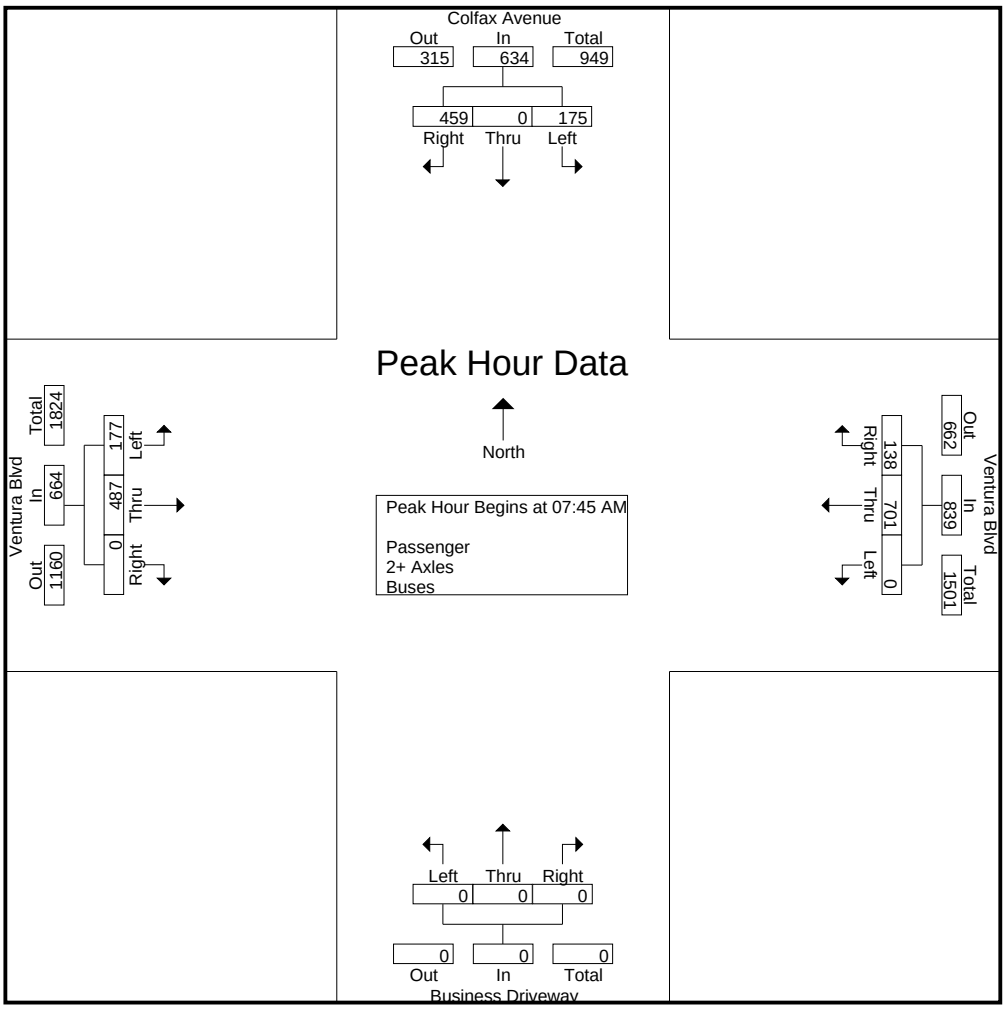
File Name : Colfax_Ventura
Site Code : 00000000
Start Date : 10/19/2021
Page No : 2

	Colfax Avenue Southbound				Ventura Blvd Westbound				Business Driveway Northbound				Ventura Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	35	0	**159**	**194**	0	**215**	**48**	**263**	0	0	0	0	48	86	0	134	**591**
08:00 AM	43	0	98	141	0	174	36	210	0	0	0	0	47	**146**	0	**193**	544
08:15 AM	43	0	88	131	0	171	30	201	0	0	0	0	33	130	0	163	495
08:30 AM	**54**	0	114	168	0	141	24	165	0	0	0	0	**49**	125	0	174	507
Total Volume	175	0	459	634	0	701	138	839	0	0	0	0	177	487	0	664	2137
% App. Total	27.6	0	72.4		0	83.6	16.4		0	0	0		26.7	73.3	0		
PHF	.810	.000	.722	.817	.000	.815	.719	.798	.000	.000	.000	.000	.903	.834	.000	.860	.904



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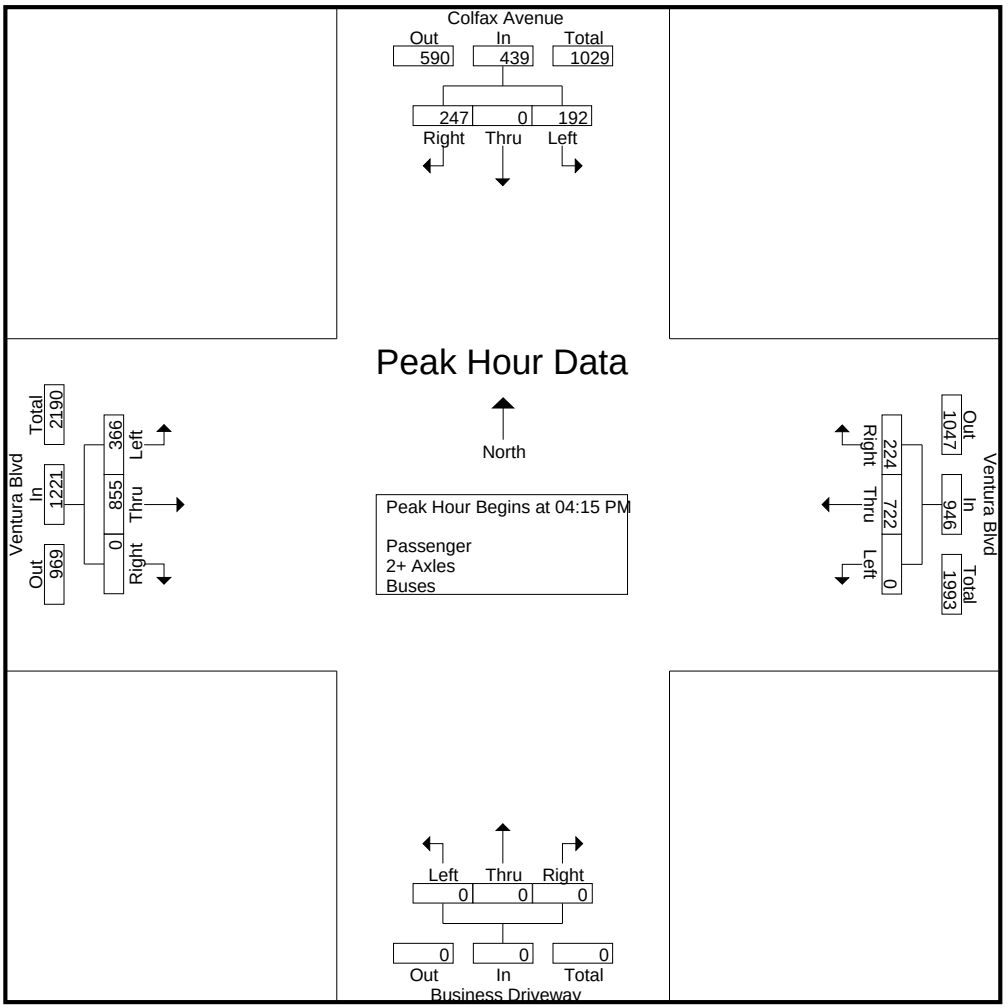
	Colfax Avenue Southbound				Ventura Blvd Westbound				Business Driveway Northbound				Ventura Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	54	0	62	**116**	0	181	52	233	0	0	0	0	**98**	**222**	0	**320**	**669**
04:30 PM	**55**	0	52	107	0	151	**67**	218	0	0	0	0	92	217	0	309	634
04:45 PM	46	0	64	110	0	186	61	247	0	0	0	0	80	198	0	278	635
05:00 PM	37	0	**69**	106	0	**204**	44	**248**	0	0	0	0	96	218	0	314	668
Total Volume	192	0	247	439	0	722	224	946	0	0	0	0	366	855	0	1221	2606
% App. Total	43.7	0	56.3		0	76.3	23.7		0	0	0		30	70	0		
PHF	.873	.000	.895	.946	.000	.885	.836	.954	.000	.000	.000	.000	.934	.963	.000	.954	.974



CITY TRAFFIC COUNTERS

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File Name : Colfax_Moorpark
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Groups Printed- Passenger - 2+ Axles/Trucks - Buses

	Colfax Avenue Southbound			Moorpark Street Westbound			Colfax Avenue Northbound			Moorpark Street Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	15	65	28	15	38	13	16	19	11	13	39	5	277
07:15 AM	19	102	25	21	67	42	12	23	11	16	57	11	406
07:30 AM	46	137	22	30	139	82	26	43	14	34	106	21	700
07:45 AM	50	114	19	34	176	69	22	45	13	26	122	27	717
Total	130	418	94	100	420	206	76	130	49	89	324	64	2100
08:00 AM	39	113	29	15	143	31	29	46	16	14	136	18	629
08:15 AM	39	101	44	25	121	22	19	35	14	25	126	14	585
08:30 AM	29	131	42	19	97	10	10	48	19	29	115	31	580
08:45 AM	35	137	39	29	99	15	19	51	16	14	104	24	582
Total	142	482	154	88	460	78	77	180	65	82	481	87	2376
09:00 AM	35	101	29	29	79	9	20	37	9	22	100	27	497
09:15 AM	21	103	39	21	79	14	17	46	12	16	85	22	475
09:30 AM	17	90	37	13	73	11	15	39	20	18	73	21	427
09:45 AM	20	84	43	17	85	13	28	43	17	13	87	24	474
Total	93	378	148	80	316	47	80	165	58	69	345	94	1873
03:00 PM	33	87	25	17	128	13	32	77	18	41	137	32	640
03:15 PM	30	101	30	18	97	17	38	85	26	35	119	26	622
03:30 PM	19	69	29	13	93	11	25	101	27	36	114	16	553
03:45 PM	29	87	30	20	88	14	33	88	18	31	124	23	585
Total	111	344	114	68	406	55	128	351	89	143	494	97	2400
04:00 PM	17	86	19	4	87	21	28	94	38	27	118	34	573
04:15 PM	29	85	22	16	89	14	34	103	23	41	136	21	613
04:30 PM	28	77	22	15	100	22	36	115	35	43	134	26	653
04:45 PM	39	90	25	21	108	26	33	103	19	38	138	28	668
Total	113	338	88	56	384	83	131	415	115	149	526	109	2507
05:00 PM	28	75	19	13	106	16	43	108	19	46	120	19	612
05:15 PM	18	94	27	17	120	21	33	97	28	37	150	22	664
05:30 PM	21	65	24	15	93	16	35	110	19	36	130	21	585
05:45 PM	36	77	28	15	108	20	17	93	34	38	116	18	600
Total	103	311	98	60	427	73	128	408	100	157	516	80	2461
Grand Total	692	2271	696	452	2413	542	620	1649	476	689	2686	531	13717
Apprch %	18.9	62.1	19	13.3	70.8	15.9	22.6	60.1	17.3	17.6	68.8	13.6	
Total %	5	16.6	5.1	3.3	17.6	4	4.5	12	3.5	5	19.6	3.9	
Passenger	680	2236	676	440	2380	536	609	1622	459	673	2654	519	13484
% Passenger	98.3	98.5	97.1	97.3	98.6	98.9	98.2	98.4	96.4	97.7	98.8	97.7	98.3
2+ Axles/Trucks	11	35	18	12	24	6	10	27	16	14	23	12	208
% 2+ Axles/Trucks	1.6	1.5	2.6	2.7	1	1.1	1.6	1.6	3.4	2	0.9	2.3	1.5
Buses	1	0	2	0	9	0	1	0	1	2	9	0	25
% Buses	0.1	0	0.3	0	0.4	0	0.2	0	0.2	0.3	0.3	0	0.2

CITY TRAFFIC COUNTERS

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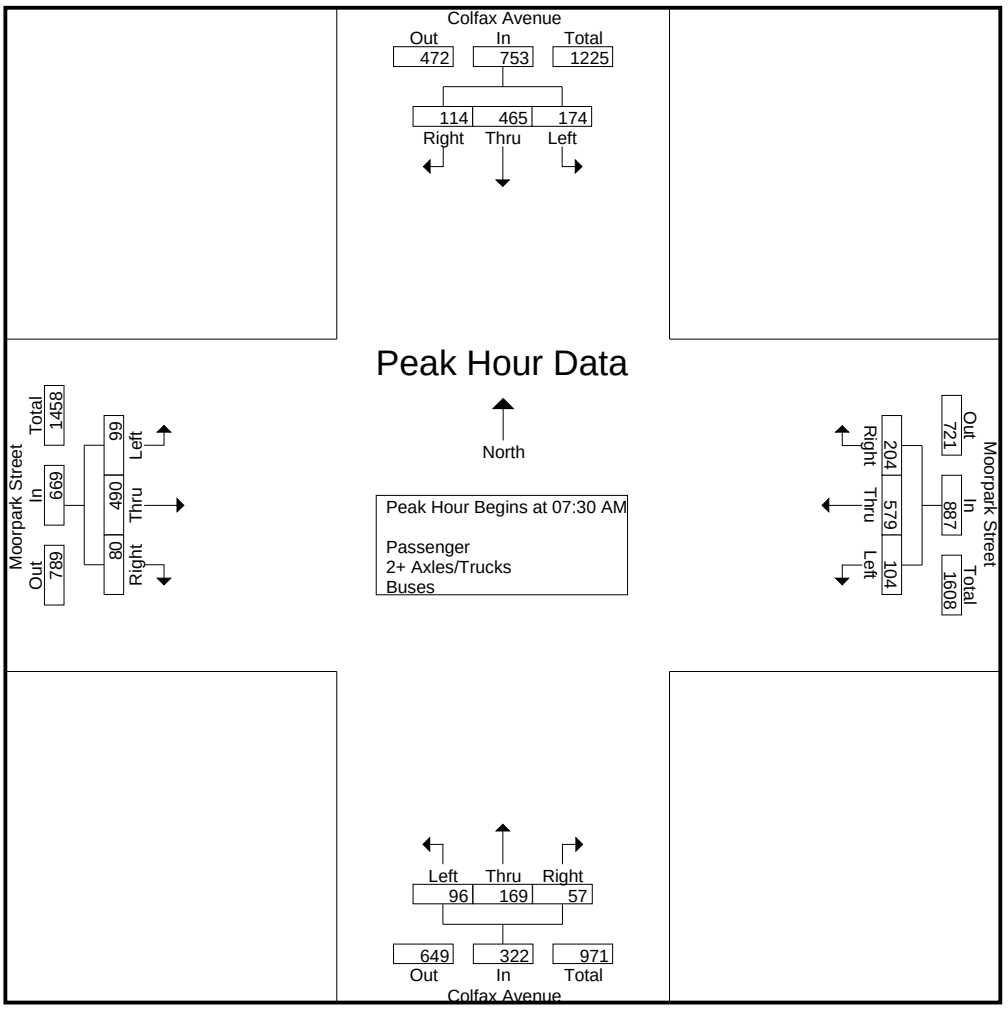
	Colfax Avenue Southbound				Moorpark Street Westbound				Colfax Avenue Northbound				Moorpark Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	46	**137**	22	**205**	30	139	**82**	251	26	43	14	83	**34**	106	21	161	700
07:45 AM	**50**	114	19	183	**34**	**176**	69	**279**	22	45	13	80	26	122	**27**	**175**	**717**
08:00 AM	39	113	29	181	15	143	31	189	**29**	**46**	**16**	**91**	14	**136**	18	168	629
08:15 AM	39	101	**44**	184	25	121	22	168	19	35	14	68	25	126	14	165	585
Total Volume	174	465	114	753	104	579	204	887	96	169	57	322	99	490	80	669	2631
% App. Total	23.1	61.8	15.1		11.7	65.3	23		29.8	52.5	17.7		14.8	73.2	12		
PHF	.870	.849	.648	.918	.765	.822	.622	.795	.828	.918	.891	.885	.728	.901	.741	.956	.917



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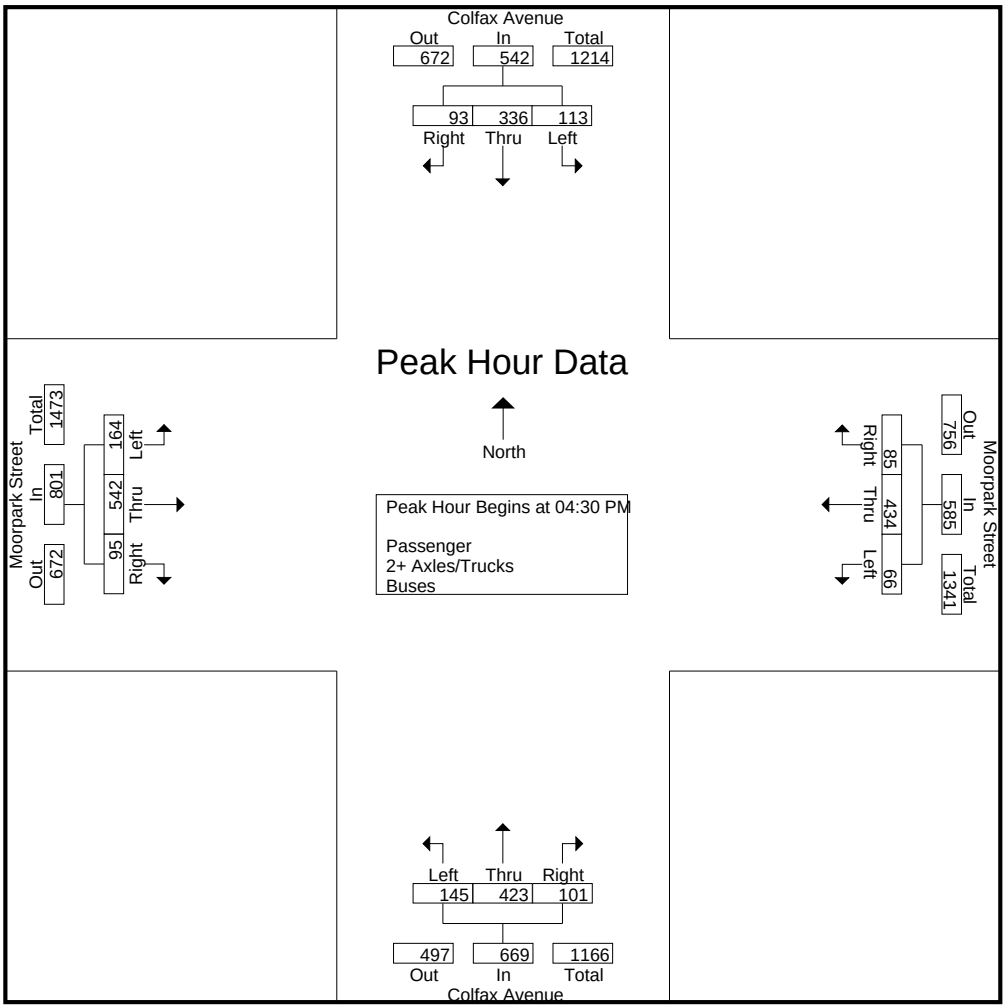
	Colfax Avenue Southbound				Moorpark Street Westbound				Colfax Avenue Northbound				Moorpark Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	28	77	22	127	15	100	22	137	36	**115**	**35**	**186**	43	134	26	203	653
04:45 PM	**39**	90	25	**154**	**21**	108	**26**	155	33	103	19	155	38	138	**28**	204	**668**
05:00 PM	28	75	19	122	13	106	16	135	**43**	108	19	170	**46**	120	19	185	612
05:15 PM	18	**94**	**27**	139	17	**120**	21	**158**	33	97	28	158	37	**150**	22	**209**	664
Total Volume	113	336	93	542	66	434	85	585	145	423	101	669	164	542	95	801	2597
% App. Total	20.8	62	17.2		11.3	74.2	14.5		21.7	63.2	15.1		20.5	67.7	11.9		
PHF	.724	.894	.861	.880	.786	.904	.817	.926	.843	.920	.721	.899	.891	.903	.848	.958	.972



CITY TRAFFIC COUNTERS

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Groups Printed- Passenger - 2+ Axles / Trucks - Buses

	Tujunga Avenue Southbound			Ventura Blvd Westbound			Northbound			Ventura Blvd Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	13	0	30	0	88	14	0	0	0	6	49	0	200
07:15 AM	18	0	39	0	98	12	0	0	0	10	75	0	252
07:30 AM	36	0	72	0	139	22	0	0	0	16	85	0	370
07:45 AM	42	0	75	0	192	20	0	0	0	30	103	0	462
Total	109	0	216	0	517	68	0	0	0	62	312	0	1284
08:00 AM	39	0	66	0	160	8	0	0	0	36	145	0	454
08:15 AM	31	0	64	0	156	26	0	0	0	43	114	0	434
08:30 AM	22	0	40	0	145	12	0	0	0	29	137	0	385
08:45 AM	29	0	44	0	159	22	0	0	0	24	114	0	392
Total	121	0	214	0	620	68	0	0	0	132	510	0	1665
09:00 AM	36	0	50	0	165	20	0	0	0	33	134	0	438
09:15 AM	38	0	54	0	130	23	0	0	0	32	126	0	403
09:30 AM	23	0	42	0	134	23	0	0	0	22	140	0	384
09:45 AM	26	0	38	0	158	23	0	0	0	35	136	0	416
Total	123	0	184	0	587	89	0	0	0	122	536	0	1641
03:00 PM	50	0	41	0	199	35	0	0	0	56	219	0	600
03:15 PM	39	0	39	0	162	37	0	0	0	46	248	0	571
03:30 PM	32	0	53	0	189	51	0	0	0	51	207	0	583
03:45 PM	56	0	44	0	204	53	0	0	0	67	223	0	647
Total	177	0	177	0	754	176	0	0	0	220	897	0	2401
04:00 PM	26	0	49	0	181	40	0	0	0	49	237	0	582
04:15 PM	33	0	44	0	167	38	0	0	0	68	243	0	593
04:30 PM	28	0	29	0	169	41	0	0	0	71	224	0	562
04:45 PM	37	0	29	0	195	49	0	0	0	63	197	0	570
Total	124	0	151	0	712	168	0	0	0	251	901	0	2307
05:00 PM	30	0	41	0	184	49	0	0	0	66	230	0	600
05:15 PM	31	0	35	0	228	47	0	0	0	49	239	0	629
05:30 PM	34	0	35	0	171	41	0	0	0	47	224	0	552
05:45 PM	33	0	46	0	199	53	0	0	0	58	234	0	623
Total	128	0	157	0	782	190	0	0	0	220	927	0	2404
Grand Total	782	0	1099	0	3972	759	0	0	0	1007	4083	0	11702
Apprch %	41.6	0	58.4	0	84	16	0	0	0	19.8	80.2	0	
Total %	6.7	0	9.4	0	33.9	6.5	0	0	0	8.6	34.9	0	
Passenger	771	0	1093	0	3901	746	0	0	0	1001	4007	0	11519
% Passenger	98.6	0	99.5	0	98.2	98.3	0	0	0	99.4	98.1	0	98.4
2+ Axles / Trucks	6	0	6	0	36	7	0	0	0	5	38	0	98
% 2+ Axles / Trucks	0.8	0	0.5	0	0.9	0.9	0	0	0	0.5	0.9	0	0.8
Buses	5	0	0	0	35	6	0	0	0	1	38	0	85
% Buses	0.6	0	0	0	0.9	0.8	0	0	0	0.1	0.9	0	0.7

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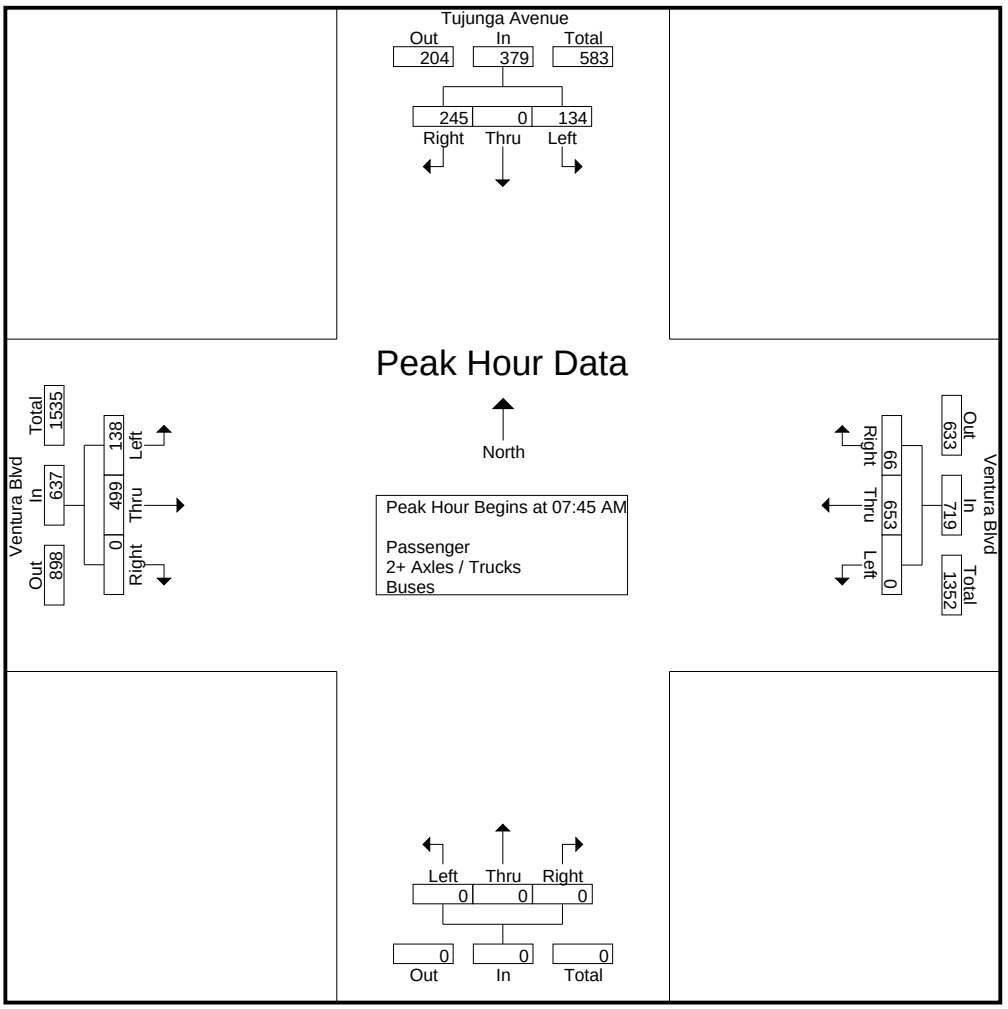
	Tujunga Avenue Southbound				Ventura Blvd Westbound				Northbound				Ventura Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**42**	0	**75**	**117**	0	**192**	20	**212**	0	0	0	0	30	103	0	133	**462**
08:00 AM	39	0	66	105	0	160	8	168	0	0	0	0	36	**145**	0	**181**	454
08:15 AM	31	0	64	95	0	156	**26**	182	0	0	0	0	**43**	114	0	157	434
08:30 AM	22	0	40	62	0	145	12	157	0	0	0	0	29	137	0	166	385
Total Volume	134	0	245	379	0	653	66	719	0	0	0	0	138	499	0	637	1735
% App. Total	35.4	0	64.6		0	90.8	9.2		0	0	0		21.7	78.3	0		
PHF	.798	.000	.817	.810	.000	.850	.635	.848	.000	.000	.000	.000	.802	.860	.000	.880	.939



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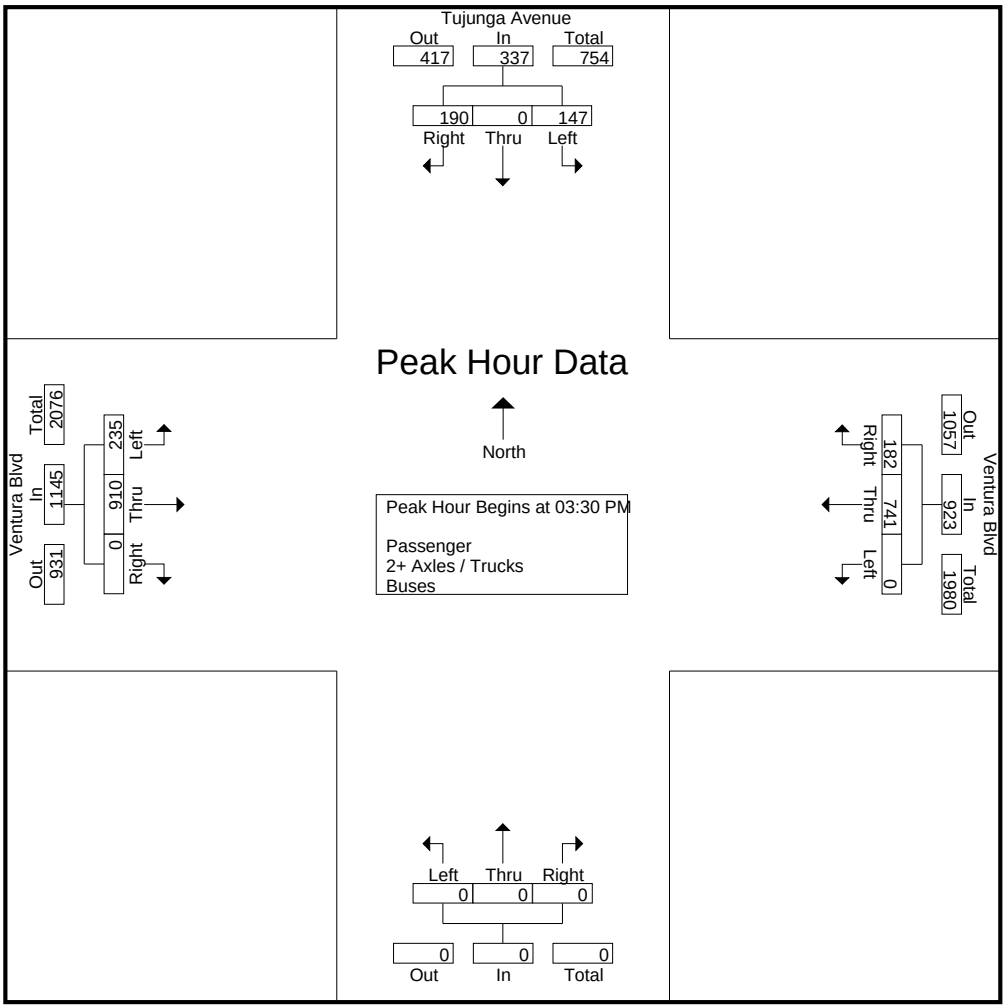
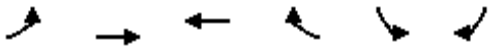
	Tujunga Avenue Southbound				Ventura Blvd Westbound				Northbound				Ventura Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	32	0	**53**	85	0	189	51	240	0	0	0	0	51	207	0	258	583
03:45 PM	**56**	0	44	**100**	0	**204**	**53**	**257**	0	0	0	0	67	223	0	290	**647**
04:00 PM	26	0	49	75	0	181	40	221	0	0	0	0	49	237	0	286	582
04:15 PM	33	0	44	77	0	167	38	205	0	0	0	0	**68**	**243**	0	**311**	593
Total Volume	147	0	190	337	0	741	182	923	0	0	0	0	235	910	0	1145	2405
% App. Total	43.6	0	56.4		0	80.3	19.7		0	0	0		20.5	79.5	0		
PHF	.656	.000	.896	.843	.000	.908	.858	.898	.000	.000	.000	.000	.864	.936	.000	.920	.929



Appendix 7 – HCM Analysis Worksheets

HCM 6th Signalized Intersection Summary
3: Ventura Boulevard & Tujunga Avenue

08/22/2022



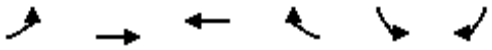
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	138	499	653	66	134	245
Future Volume (veh/h)	138	499	653	66	134	245
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	150	542	710	72	146	266
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	382	1920	1166	118	1198	514
Arrive On Green	0.11	0.54	0.38	0.38	0.35	0.35
Sat Flow, veh/h	1781	3647	3184	313	3456	1484
Grp Volume(v), veh/h	150	542	408	374	146	266
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1627	1728	1484
Q Serve(g_s), s	0.0	8.1	18.2	18.2	2.8	14.0
Cycle Q Clear(g_c), s	0.0	8.1	18.2	18.2	2.8	14.0
Prop In Lane	1.00			0.19	1.00	1.00
Lane Grp Cap(c), veh/h	382	1920	670	614	1198	514
V/C Ratio(X)	0.39	0.28	0.61	0.61	0.12	0.52
Avail Cap(c_a), veh/h	382	1920	670	614	1198	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	12.2	24.7	24.7	21.9	25.5
Incr Delay (d2), s/veh	3.0	0.4	4.1	4.5	0.2	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.1	8.1	7.5	1.2	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	12.6	28.8	29.2	22.1	29.2
LnGrp LOS	D	B	C	C	C	C
Approach Vol, veh/h		692	782		412	
Approach Delay, s/veh		17.6	29.0		26.7	
Approach LOS		B	C		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	42.5		39.5		58.6
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 10	37.0		* 34		* 53
Max Q Clear Time (g_c+I1), s	2.0	20.2		16.0		10.1
Green Ext Time (p_c), s	0.2	4.4		1.3		4.0

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



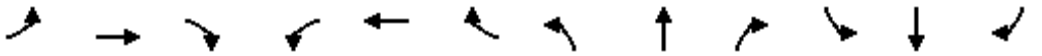
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	177	487	701	138	175	459
Future Volume (veh/h)	177	487	701	138	175	459
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	192	529	762	150	190	499
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	612	2225	822	162	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2902	553	1781	1484
Grp Volume(v), veh/h	192	529	482	430	190	499
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1584	1781	1484
Q Serve(g_s), s	5.8	8.0	32.4	32.4	10.3	24.8
Cycle Q Clear(g_c), s	5.8	8.0	32.4	32.4	10.3	24.8
Prop In Lane	1.00			0.35	1.00	1.00
Lane Grp Cap(c), veh/h	612	2225	520	464	536	893
V/C Ratio(X)	0.31	0.24	0.93	0.93	0.35	0.56
Avail Cap(c_a), veh/h	612	2225	520	464	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	10.1	42.2	42.2	33.7	14.7
Incr Delay (d2), s/veh	1.3	0.3	25.0	27.1	1.8	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.1	17.7	16.0	4.7	24.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.5	10.4	67.2	69.3	35.5	17.2
LnGrp LOS	B	B	E	E	D	B
Approach Vol, veh/h		721	912		689	
Approach Delay, s/veh		12.3	68.2		22.3	
Approach LOS		B	E		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		10.0		26.8	7.8	34.4
Green Ext Time (p_c), s		4.0		1.9	0.5	0.9

Intersection Summary	
HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D

Notes

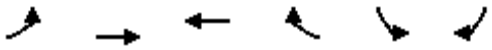
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	490	80	204	579	104	96	169	57	174	465	114
Future Volume (veh/h)	99	490	80	204	579	104	96	169	57	174	465	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	533	87	222	629	113	104	184	62	189	505	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	351	1363	222	313	872	156	272	542	459	509	833	706
Arrive On Green	0.11	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29	0.11	0.45	0.45
Sat Flow, veh/h	1781	3060	498	804	3010	540	797	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	108	309	311	222	371	371	104	184	62	189	505	124
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	804	1777	1773	797	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.3	10.5	10.6	24.3	16.8	16.9	10.2	7.0	2.6	6.2	18.4	4.2
Cycle Q Clear(g_c), s	3.3	10.5	10.6	24.3	16.8	16.9	14.7	7.0	2.6	6.2	18.4	4.2
Prop In Lane	1.00		0.28	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	351	791	793	313	514	513	272	542	459	509	833	706
V/C Ratio(X)	0.31	0.39	0.39	0.71	0.72	0.72	0.38	0.34	0.14	0.37	0.61	0.18
Avail Cap(c_a), veh/h	351	791	793	313	514	513	272	542	459	509	833	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	16.7	16.7	31.3	28.6	28.7	29.8	25.1	23.6	17.6	18.9	15.0
Incr Delay (d2), s/veh	2.3	1.4	1.5	12.8	8.5	8.6	4.0	1.7	0.6	2.1	3.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	4.4	4.5	5.7	8.2	8.2	2.1	3.1	1.0	2.6	7.9	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	18.2	18.2	44.1	37.1	37.2	33.8	26.8	24.2	19.6	22.2	15.5
LnGrp LOS	C	B	B	D	D	D	C	C	C	B	C	B
Approach Vol, veh/h		728			964			350			818	
Approach Delay, s/veh		18.5			38.8			28.5			20.6	
Approach LOS		B			D			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	14.0	30.9		44.9		44.9	14.0	30.9				
Change Period (Y+Rc), s	4.0	4.9		4.9		4.9	4.5	4.9				
Max Green Setting (Gmax), s	10.0	26.0		40.0		40.0	9.5	26.0				
Max Q Clear Time (g_c+I1), s	5.3	26.3		20.4		12.6	8.2	16.7				
Green Ext Time (p_c), s	0.1	0.0		3.2		4.1	0.1	1.2				

Intersection Summary												
HCM 6th Ctrl Delay			27.2									
HCM 6th LOS			C									



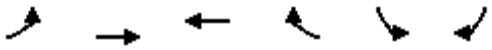
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	139	508	669	66	134	248
Future Volume (veh/h)	139	508	669	66	134	248
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	151	552	727	72	146	270
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	377	1920	1169	116	1198	514
Arrive On Green	0.11	0.54	0.38	0.38	0.35	0.35
Sat Flow, veh/h	1781	3647	3192	307	3456	1484
Grp Volume(v), veh/h	151	552	417	382	146	270
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1628	1728	1484
Q Serve(g_s), s	0.0	8.3	18.7	18.7	2.8	14.3
Cycle Q Clear(g_c), s	0.0	8.3	18.7	18.7	2.8	14.3
Prop In Lane	1.00			0.19	1.00	1.00
Lane Grp Cap(c), veh/h	377	1920	670	614	1198	514
V/C Ratio(X)	0.40	0.29	0.62	0.62	0.12	0.53
Avail Cap(c_a), veh/h	377	1920	670	614	1198	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	12.3	24.9	24.9	21.9	25.6
Incr Delay (d2), s/veh	3.2	0.4	4.3	4.7	0.2	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.2	8.3	7.7	1.2	5.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.2	12.7	29.2	29.6	22.1	29.4
LnGrp LOS	D	B	C	C	C	C
Approach Vol, veh/h		703	799		416	
Approach Delay, s/veh		17.7	29.4		26.8	
Approach LOS		B	C		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	42.5		39.5		58.6
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 10	37.0		* 34		* 53
Max Q Clear Time (g_c+I1), s	2.0	20.7		16.3		10.3
Green Ext Time (p_c), s	0.2	4.5		1.3		4.1

Intersection Summary	
HCM 6th Ctrl Delay	24.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



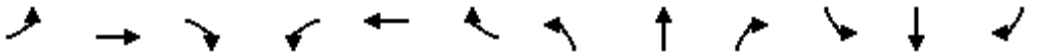
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	180	505	711	138	175	460
Future Volume (veh/h)	180	505	711	138	175	460
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	196	549	773	150	190	500
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	609	2225	824	160	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2909	546	1781	1484
Grp Volume(v), veh/h	196	549	488	435	190	500
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1484
Q Serve(g_s), s	5.9	8.4	32.9	32.9	10.3	24.9
Cycle Q Clear(g_c), s	5.9	8.4	32.9	32.9	10.3	24.9
Prop In Lane	1.00			0.34	1.00	1.00
Lane Grp Cap(c), veh/h	609	2225	520	464	536	893
V/C Ratio(X)	0.32	0.25	0.94	0.94	0.35	0.56
Avail Cap(c_a), veh/h	609	2225	520	464	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	10.2	42.4	42.4	33.7	14.7
Incr Delay (d2), s/veh	1.4	0.3	26.7	28.9	1.8	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.3	18.2	16.5	4.7	24.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	10.4	69.1	71.3	35.5	17.3
LnGrp LOS	B	B	E	E	D	B
Approach Vol, veh/h		745	923		690	
Approach Delay, s/veh		12.3	70.2		22.3	
Approach LOS		B	E		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		10.4		26.9	7.9	34.9
Green Ext Time (p_c), s		4.2		1.9	0.6	0.6

Intersection Summary	
HCM 6th Ctrl Delay	37.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



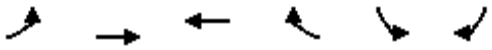
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	490	83	207	579	104	97	173	58	174	473	114
Future Volume (veh/h)	99	490	83	207	579	104	97	173	58	174	473	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	533	90	225	629	113	105	188	63	189	514	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	1356	228	312	872	156	266	542	459	506	833	706
Arrive On Green	0.11	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29	0.11	0.45	0.45
Sat Flow, veh/h	1781	3043	512	801	3010	540	790	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	108	310	313	225	371	371	105	188	63	189	514	124
Grp Sat Flow(s),veh/h/ln	1781	1777	1778	801	1777	1773	790	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.4	10.5	10.6	24.9	16.8	16.9	10.5	7.1	2.6	6.2	18.9	4.2
Cycle Q Clear(g_c), s	3.4	10.5	10.6	24.9	16.8	16.9	15.4	7.1	2.6	6.2	18.9	4.2
Prop In Lane	1.00		0.29	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	791	792	312	514	513	266	542	459	506	833	706
V/C Ratio(X)	0.32	0.39	0.39	0.72	0.72	0.72	0.39	0.35	0.14	0.37	0.62	0.18
Avail Cap(c_a), veh/h	341	791	792	312	514	513	266	542	459	506	833	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	16.7	16.8	31.5	28.6	28.7	30.3	25.2	23.6	17.6	19.0	15.0
Incr Delay (d2), s/veh	2.4	1.5	1.5	13.4	8.5	8.6	4.3	1.8	0.6	2.1	3.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.4	4.5	5.8	8.2	8.2	2.2	3.2	1.0	2.6	8.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	18.2	18.2	44.9	37.1	37.2	34.6	27.0	24.2	19.7	22.5	15.5
LnGrp LOS	C	B	B	D	D	D	C	C	C	B	C	B
Approach Vol, veh/h		731			967			356			827	
Approach Delay, s/veh		18.6			39.0			28.7			20.8	
Approach LOS		B			D			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	14.0	30.9		44.9		44.9	14.0	30.9				
Change Period (Y+Rc), s	4.5	4.9		4.9		4.9	4.5	4.9				
Max Green Setting (Gmax), s	9.5	26.0		40.0		40.0	9.5	26.0				
Max Q Clear Time (g_c+I1), s	5.4	26.9		20.9		12.6	8.2	17.4				
Green Ext Time (p_c), s	0.1	0.0		3.2		4.1	0.1	1.2				

Intersection Summary												
HCM 6th Ctrl Delay			27.3									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
3: Ventura Boulevard & Tujunga Avenue

08/22/2022



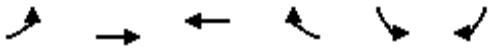
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	143	535	700	94	156	253
Future Volume (veh/h)	143	535	700	94	156	253
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	155	582	761	102	170	275
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	356	1920	1127	151	1198	514
Arrive On Green	0.11	0.54	0.38	0.38	0.35	0.35
Sat Flow, veh/h	1781	3647	3081	400	3456	1484
Grp Volume(v), veh/h	155	582	452	411	170	275
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1611	1728	1484
Q Serve(g_s), s	0.0	8.8	20.9	20.9	3.3	14.6
Cycle Q Clear(g_c), s	0.0	8.8	20.9	20.9	3.3	14.6
Prop In Lane	1.00			0.25	1.00	1.00
Lane Grp Cap(c), veh/h	356	1920	670	608	1198	514
V/C Ratio(X)	0.44	0.30	0.68	0.68	0.14	0.53
Avail Cap(c_a), veh/h	356	1920	670	608	1198	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	12.4	25.5	25.5	22.0	25.7
Incr Delay (d2), s/veh	3.8	0.4	5.4	5.9	0.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.4	9.4	8.6	1.4	5.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.8	12.8	30.9	31.5	22.3	29.7
LnGrp LOS	D	B	C	C	C	C
Approach Vol, veh/h		737	863		445	
Approach Delay, s/veh		18.3	31.2		26.8	
Approach LOS		B	C		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	42.5		39.5		58.6
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 10	37.0		* 34		* 53
Max Q Clear Time (g_c+I1), s	2.0	22.9		16.6		10.8
Green Ext Time (p_c), s	0.2	4.6		1.4		4.3

Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



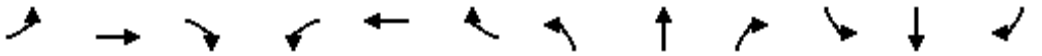
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	186	523	750	143	181	474
Future Volume (veh/h)	186	523	750	143	181	474
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	202	568	815	155	197	515
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	598	2225	827	157	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2919	537	1781	1484
Grp Volume(v), veh/h	202	568	512	458	197	515
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1587	1781	1484
Q Serve(g_s), s	6.2	8.8	35.3	35.3	10.7	26.1
Cycle Q Clear(g_c), s	6.2	8.8	35.3	35.3	10.7	26.1
Prop In Lane	1.00			0.34	1.00	1.00
Lane Grp Cap(c), veh/h	598	2225	520	464	536	893
V/C Ratio(X)	0.34	0.26	0.99	0.99	0.37	0.58
Avail Cap(c_a), veh/h	598	2225	520	464	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	10.2	43.2	43.2	33.8	14.9
Incr Delay (d2), s/veh	1.5	0.3	36.0	38.3	1.9	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.4	20.5	18.6	4.9	25.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.1	10.5	79.3	81.5	35.7	17.7
LnGrp LOS	B	B	E	F	D	B
Approach Vol, veh/h		770	970		712	
Approach Delay, s/veh		12.5	80.3		22.7	
Approach LOS		B	F		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		10.8		28.1	8.2	37.3
Green Ext Time (p_c), s		4.4		1.9	0.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



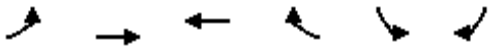
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	505	83	211	597	108	99	178	59	180	480	118
Future Volume (veh/h)	102	505	83	211	597	108	99	178	59	180	480	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	549	90	229	649	117	108	193	64	196	522	128
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	1362	223	309	871	157	261	542	459	502	833	706
Arrive On Green	0.11	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29	0.11	0.45	0.45
Sat Flow, veh/h	1781	3058	500	790	3008	542	782	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	111	318	321	229	383	383	108	193	64	196	522	128
Grp Sat Flow(s),veh/h/ln	1781	1777	1780	790	1777	1773	782	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.4	10.9	10.9	26.0	17.5	17.6	11.1	7.3	2.7	6.5	19.3	4.4
Cycle Q Clear(g_c), s	3.4	10.9	10.9	26.0	17.5	17.6	16.4	7.3	2.7	6.5	19.3	4.4
Prop In Lane	1.00		0.28	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	791	793	309	514	513	261	542	459	502	833	706
V/C Ratio(X)	0.32	0.40	0.40	0.74	0.74	0.75	0.41	0.36	0.14	0.39	0.63	0.18
Avail Cap(c_a), veh/h	344	791	793	309	514	513	261	542	459	502	833	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	16.8	16.8	31.9	28.9	28.9	30.8	25.3	23.6	17.7	19.2	15.0
Incr Delay (d2), s/veh	2.5	1.5	1.5	14.8	9.4	9.5	4.8	1.8	0.6	2.3	3.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.6	4.6	6.1	8.6	8.6	2.3	3.3	1.0	2.7	8.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	18.3	18.4	46.8	38.3	38.4	35.6	27.1	24.3	20.0	22.7	15.6
LnGrp LOS	C	B	B	D	D	D	D	C	C	B	C	B
Approach Vol, veh/h		750			995			365			846	
Approach Delay, s/veh		18.7			40.3			29.1			21.0	
Approach LOS		B			D			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	14.0	30.9		44.9		44.9	14.0	30.9				
Change Period (Y+Rc), s	4.0	4.9		4.9		4.9	4.5	4.9				
Max Green Setting (Gmax), s	10.0	26.0		40.0		40.0	9.5	26.0				
Max Q Clear Time (g_c+I1), s	5.4	28.0		21.3		12.9	8.5	18.4				
Green Ext Time (p_c), s	0.1	0.0		3.3		4.3	0.1	1.1				

Intersection Summary												
HCM 6th Ctrl Delay			27.9									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
3: Ventura Boulevard & Tujunga Avenue

08/22/2022



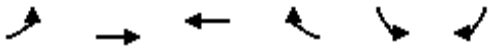
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	144	544	716	94	156	256
Future Volume (veh/h)	144	544	716	94	156	256
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	157	591	778	102	170	278
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	351	1920	1130	148	1198	514
Arrive On Green	0.11	0.54	0.38	0.38	0.35	0.35
Sat Flow, veh/h	1781	3647	3090	393	3456	1484
Grp Volume(v), veh/h	157	591	461	419	170	278
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1613	1728	1484
Q Serve(g_s), s	0.0	9.0	21.4	21.4	3.3	14.8
Cycle Q Clear(g_c), s	0.0	9.0	21.4	21.4	3.3	14.8
Prop In Lane	1.00			0.24	1.00	1.00
Lane Grp Cap(c), veh/h	351	1920	670	608	1198	514
V/C Ratio(X)	0.45	0.31	0.69	0.69	0.14	0.54
Avail Cap(c_a), veh/h	351	1920	670	608	1198	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	12.4	25.7	25.7	22.0	25.8
Incr Delay (d2), s/veh	4.1	0.4	5.7	6.3	0.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.4	9.7	8.9	1.4	5.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.4	12.9	31.4	32.0	22.3	29.8
LnGrp LOS	D	B	C	C	C	C
Approach Vol, veh/h		748	880		448	
Approach Delay, s/veh		18.4	31.7		27.0	
Approach LOS		B	C		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	42.5		39.5		58.6
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 10	37.0		* 34		* 53
Max Q Clear Time (g_c+I1), s	2.0	23.4		16.8		11.0
Green Ext Time (p_c), s	0.2	4.6		1.5		4.4

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



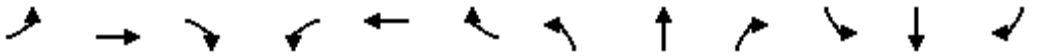
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	189	541	760	143	181	475
Future Volume (veh/h)	189	541	760	143	181	475
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	205	588	826	155	197	516
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	595	2225	829	156	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2926	532	1781	1484
Grp Volume(v), veh/h	205	588	518	463	197	516
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1588	1781	1484
Q Serve(g_s), s	6.5	9.1	35.8	35.8	10.7	26.1
Cycle Q Clear(g_c), s	6.5	9.1	35.8	35.8	10.7	26.1
Prop In Lane	1.00			0.33	1.00	1.00
Lane Grp Cap(c), veh/h	595	2225	520	465	536	893
V/C Ratio(X)	0.34	0.26	1.00	1.00	0.37	0.58
Avail Cap(c_a), veh/h	595	2225	520	465	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	10.3	43.4	43.4	33.8	15.0
Incr Delay (d2), s/veh	1.6	0.3	38.5	40.8	1.9	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.6	21.1	19.2	4.9	25.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.1	10.6	82.0	84.3	35.7	17.7
LnGrp LOS	B	B	F	F	D	B
Approach Vol, veh/h		793	981		713	
Approach Delay, s/veh		12.8	83.1		22.7	
Approach LOS		B	F		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		11.1		28.1	8.5	37.8
Green Ext Time (p_c), s		4.6		1.9	0.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

Notes

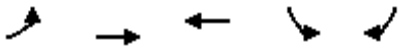
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	505	86	214	597	108	100	182	60	180	488	118
Future Volume (veh/h)	102	505	86	214	597	108	100	182	60	180	488	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	549	93	233	649	117	109	198	65	196	530	128
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	334	1355	229	308	871	157	256	542	459	498	833	706
Arrive On Green	0.11	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29	0.11	0.45	0.45
Sat Flow, veh/h	1781	3041	513	787	3008	542	776	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	111	320	322	233	383	383	109	198	65	196	530	128
Grp Sat Flow(s),veh/h/ln	1781	1777	1778	787	1777	1773	776	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.5	10.9	11.0	26.0	17.5	17.6	11.4	7.6	2.7	6.5	19.7	4.4
Cycle Q Clear(g_c), s	3.5	10.9	11.0	26.0	17.5	17.6	17.1	7.6	2.7	6.5	19.7	4.4
Prop In Lane	1.00		0.29	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	791	792	308	514	513	256	542	459	498	833	706
V/C Ratio(X)	0.33	0.40	0.41	0.76	0.74	0.75	0.43	0.37	0.14	0.39	0.64	0.18
Avail Cap(c_a), veh/h	334	791	792	308	514	513	256	542	459	498	833	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	16.8	16.9	32.2	28.9	28.9	31.3	25.3	23.6	17.7	19.3	15.0
Incr Delay (d2), s/veh	2.7	1.5	1.5	15.8	9.4	9.5	5.1	1.9	0.6	2.3	3.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.6	4.7	6.3	8.6	8.6	2.4	3.4	1.0	2.7	8.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	18.4	18.4	48.0	38.3	38.4	36.4	27.3	24.3	20.1	23.0	15.6
LnGrp LOS	C	B	B	D	D	D	D	C	C	C	C	B
Approach Vol, veh/h		753			999			372			854	
Approach Delay, s/veh		18.8			40.6			29.4			21.2	
Approach LOS		B			D			C			C	

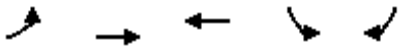
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	14.0	30.9		44.9		44.9	14.0	30.9				
Change Period (Y+Rc), s	4.5	4.9		4.9		4.9	4.5	4.9				
Max Green Setting (Gmax), s	9.5	26.0		40.0		40.0	9.5	26.0				
Max Q Clear Time (g_c+I1), s	5.5	28.0		21.7		13.0	8.5	19.1				
Green Ext Time (p_c), s	0.1	0.0		3.3		4.3	0.1	1.1				

Intersection Summary												
HCM 6th Ctrl Delay			28.1									
HCM 6th LOS			C									



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	150	542	782	146	266
v/c Ratio	0.39	0.29	0.59	0.12	0.36
Control Delay	20.2	12.2	26.0	22.0	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	12.2	26.0	22.0	4.3
Queue Length 50th (ft)	45	88	197	31	0
Queue Length 95th (ft)	77	121	258	53	51
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	388	1856	1331	1195	745
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.29	0.59	0.12	0.36

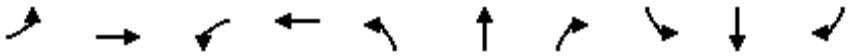
Intersection Summary



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	192	529	912	190	499
v/c Ratio	0.32	0.25	0.89	0.36	0.48
Control Delay	14.8	10.6	52.8	36.1	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.8	10.6	52.8	36.1	12.9
Queue Length 50th (ft)	60	91	358	118	181
Queue Length 95th (ft)	125	120	#474	186	262
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1023	532	1035
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.25	0.89	0.36	0.48

Intersection Summary

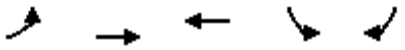
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	620	222	742	104	184	62	189	505	124
v/c Ratio	0.36	0.40	0.99	0.73	0.41	0.34	0.11	0.37	0.61	0.16
Control Delay	17.7	17.0	93.0	32.8	31.8	27.4	0.4	17.7	22.8	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.7	17.0	93.0	32.8	31.8	27.4	0.4	17.7	22.8	3.4
Queue Length 50th (ft)	34	115	125	192	47	82	0	64	211	0
Queue Length 95th (ft)	65	157	#270	258	97	140	2	109	315	30
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	301	1557	224	1017	252	539	547	505	829	773
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.40	0.99	0.73	0.41	0.34	0.11	0.37	0.61	0.16

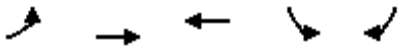
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	151	552	799	146	270
v/c Ratio	0.40	0.30	0.60	0.12	0.37
Control Delay	20.8	12.2	26.3	22.0	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.8	12.2	26.3	22.0	4.4
Queue Length 50th (ft)	45	91	203	31	0
Queue Length 95th (ft)	78	123	265	53	52
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	380	1856	1330	1195	738
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.40	0.30	0.60	0.12	0.37

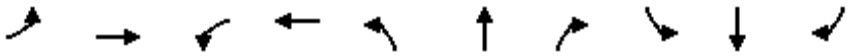
Intersection Summary



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	196	549	923	190	500
v/c Ratio	0.33	0.26	0.90	0.36	0.48
Control Delay	15.1	10.7	54.0	36.1	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.1	10.7	54.0	36.1	12.9
Queue Length 50th (ft)	63	95	365	118	182
Queue Length 95th (ft)	129	125	#484	186	263
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1023	532	1035
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.33	0.26	0.90	0.36	0.48

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

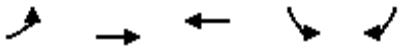


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	623	225	742	105	188	63	189	514	124
v/c Ratio	0.37	0.40	1.00	0.73	0.43	0.35	0.11	0.38	0.62	0.16
Control Delay	18.4	17.0	96.4	32.8	32.5	27.5	0.4	17.7	23.1	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.4	17.0	96.4	32.8	32.5	27.5	0.4	17.7	23.1	3.4
Queue Length 50th (ft)	35	115	~128	192	48	84	0	64	216	0
Queue Length 95th (ft)	66	158	#275	258	99	142	0	109	322	30
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	289	1556	224	1017	245	539	552	502	829	773
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.40	1.00	0.73	0.43	0.35	0.11	0.38	0.62	0.16

Intersection Summary

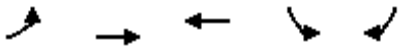
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	155	582	863	170	275
v/c Ratio	0.44	0.31	0.65	0.14	0.37
Control Delay	23.5	12.4	27.2	22.2	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.5	12.4	27.2	22.2	4.4
Queue Length 50th (ft)	46	97	224	37	0
Queue Length 95th (ft)	79	131	291	60	53
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	356	1856	1328	1195	741
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.44	0.31	0.65	0.14	0.37

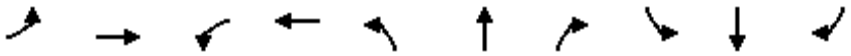
Intersection Summary



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	202	568	970	197	515
v/c Ratio	0.34	0.27	0.95	0.37	0.50
Control Delay	15.6	10.8	60.2	36.3	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.6	10.8	60.2	36.3	13.4
Queue Length 50th (ft)	67	100	391	123	193
Queue Length 95th (ft)	133	129	#526	193	278
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1023	532	1033
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.27	0.95	0.37	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	111	639	229	766	108	193	64	196	522	128
v/c Ratio	0.38	0.41	1.04	0.75	0.45	0.36	0.12	0.39	0.63	0.16
Control Delay	18.2	17.1	106.3	33.6	33.4	27.6	0.6	18.0	23.4	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.2	17.1	106.3	33.6	33.4	27.6	0.6	18.0	23.4	3.4
Queue Length 50th (ft)	35	120	~142	201	50	86	0	67	221	0
Queue Length 95th (ft)	67	163	#283	268	102	146	2	113	329	30
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	293	1557	220	1017	239	539	547	497	829	776
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.41	1.04	0.75	0.45	0.36	0.12	0.39	0.63	0.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
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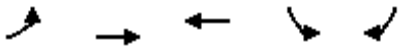
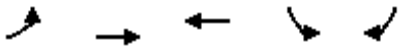
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	157	591	880	170	278
v/c Ratio	0.45	0.32	0.66	0.14	0.37
Control Delay	24.4	12.5	27.5	22.2	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	24.4	12.5	27.5	22.2	4.4
Queue Length 50th (ft)	47	98	230	37	0
Queue Length 95th (ft)	81	133	297	60	53
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	350	1856	1329	1195	743
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.45	0.32	0.66	0.14	0.37

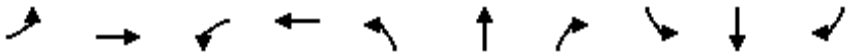
Intersection Summary



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	205	588	981	197	516
v/c Ratio	0.35	0.28	0.96	0.37	0.50
Control Delay	15.8	10.8	62.1	36.3	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.8	10.8	62.1	36.3	13.4
Queue Length 50th (ft)	69	104	397	123	194
Queue Length 95th (ft)	136	135	#537	193	279
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1023	532	1032
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.28	0.96	0.37	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	111	642	233	766	109	198	65	196	530	128
v/c Ratio	0.39	0.41	1.06	0.75	0.47	0.37	0.12	0.40	0.64	0.16
Control Delay	18.9	17.1	111.3	33.6	34.1	27.8	0.4	18.0	23.7	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.9	17.1	111.3	33.6	34.1	27.8	0.4	18.0	23.7	3.4
Queue Length 50th (ft)	36	120	~147	201	51	89	0	67	225	0
Queue Length 95th (ft)	68	164	#290	268	104	150	1	113	336	30
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	282	1556	220	1017	233	539	552	493	829	776
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.41	1.06	0.75	0.47	0.37	0.12	0.40	0.64	0.16

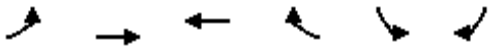
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
3: Ventura Boulevard & Tujunga Avenue

08/22/2022



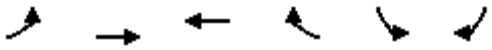
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	235	910	741	182	147	190
Future Volume (veh/h)	235	910	741	182	147	190
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	255	989	805	198	160	207
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	317	1923	1009	248	1195	513
Arrive On Green	0.11	0.54	0.38	0.38	0.35	0.35
Sat Flow, veh/h	1781	3647	2775	660	3456	1484
Grp Volume(v), veh/h	255	989	533	470	160	207
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1565	1728	1484
Q Serve(g_s), s	6.7	17.4	26.3	26.3	3.1	10.4
Cycle Q Clear(g_c), s	6.7	17.4	26.3	26.3	3.1	10.4
Prop In Lane	1.00			0.42	1.00	1.00
Lane Grp Cap(c), veh/h	317	1923	669	589	1195	513
V/C Ratio(X)	0.80	0.51	0.80	0.80	0.13	0.40
Avail Cap(c_a), veh/h	317	1923	669	589	1195	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	14.3	27.3	27.3	22.1	24.4
Incr Delay (d2), s/veh	19.2	1.0	9.6	10.8	0.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	6.7	12.4	11.1	1.3	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.8	15.3	36.9	38.1	22.3	26.8
LnGrp LOS	E	B	D	D	C	C
Approach Vol, veh/h		1244	1003		367	
Approach Delay, s/veh		24.2	37.5		24.8	
Approach LOS		C	D		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.3	42.5		39.5		58.8
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 10	37.0		* 34		* 53
Max Q Clear Time (g_c+I1), s	8.7	28.3		12.4		19.4
Green Ext Time (p_c), s	0.1	4.1		1.2		8.2

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



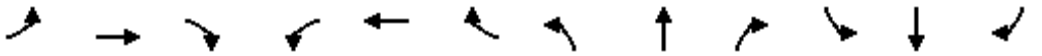
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	366	855	722	224	192	247
Future Volume (veh/h)	366	855	722	224	192	247
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	398	929	785	243	209	268
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	594	2225	742	230	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2628	784	1781	1484
Grp Volume(v), veh/h	398	929	550	478	209	268
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1542	1781	1484
Q Serve(g_s), s	19.5	16.3	36.0	36.0	11.4	10.8
Cycle Q Clear(g_c), s	19.5	16.3	36.0	36.0	11.4	10.8
Prop In Lane	1.00			0.51	1.00	1.00
Lane Grp Cap(c), veh/h	594	2225	520	451	536	893
V/C Ratio(X)	0.67	0.42	1.06	1.06	0.39	0.30
Avail Cap(c_a), veh/h	594	2225	520	451	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	11.6	43.5	43.5	34.1	11.9
Incr Delay (d2), s/veh	5.9	0.6	55.7	58.7	2.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.4	23.7	20.9	5.3	13.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.3	12.2	99.2	102.2	36.2	12.8
LnGrp LOS	C	B	F	F	D	B
Approach Vol, veh/h		1327	1028		477	
Approach Delay, s/veh		18.8	100.6		23.0	
Approach LOS		B	F		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		18.3		13.4	21.5	38.0
Green Ext Time (p_c), s		7.8		1.5	1.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



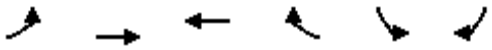
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	542	95	85	434	66	145	423	101	113	336	93
Future Volume (veh/h)	164	542	95	85	434	66	145	423	101	113	336	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	589	103	92	472	72	158	460	110	123	365	101
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	417	1347	235	298	896	136	348	542	459	317	833	706
Arrive On Green	0.11	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29	0.11	0.45	0.45
Sat Flow, veh/h	1781	3025	528	752	3093	469	927	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	178	345	347	92	270	274	158	460	110	123	365	101
Grp Sat Flow(s),veh/h/ln	1781	1777	1775	752	1777	1786	927	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.8	12.0	12.1	8.9	11.4	11.6	13.1	20.8	4.8	3.9	12.1	3.4
Cycle Q Clear(g_c), s	5.8	12.0	12.1	8.9	11.4	11.6	13.1	20.8	4.8	3.9	12.1	3.4
Prop In Lane	1.00		0.30	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	417	791	791	298	514	517	348	542	459	317	833	706
V/C Ratio(X)	0.43	0.44	0.44	0.31	0.53	0.53	0.45	0.85	0.24	0.39	0.44	0.14
Avail Cap(c_a), veh/h	417	791	791	298	514	517	348	542	459	317	833	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	17.1	17.2	25.8	26.7	26.8	27.3	30.1	24.4	19.8	17.2	14.7
Incr Delay (d2), s/veh	3.2	1.7	1.8	2.7	3.8	3.9	4.2	15.3	1.2	3.5	1.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.1	5.1	1.8	5.3	5.4	3.1	10.9	1.8	1.8	5.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	18.9	18.9	28.5	30.5	30.6	31.5	45.4	25.6	23.3	18.8	15.2
LnGrp LOS	C	B	B	C	C	C	C	D	C	C	B	B
Approach Vol, veh/h		870			636			728			589	
Approach Delay, s/veh		19.3			30.3			39.4			19.1	
Approach LOS		B			C			D			B	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	14.0	30.9		44.9		44.9	14.0	30.9				
Change Period (Y+Rc), s	4.0	4.9		4.9		4.9	4.5	4.9				
Max Green Setting (Gmax), s	10.0	26.0		40.0		40.0	9.5	26.0				
Max Q Clear Time (g_c+I1), s	7.8	13.6		14.1		14.1	5.9	22.8				
Green Ext Time (p_c), s	0.1	3.2		2.3		4.7	0.1	1.2				

Intersection Summary												
HCM 6th Ctrl Delay			26.9									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
3: Ventura Boulevard & Tujunga Avenue

08/22/2022



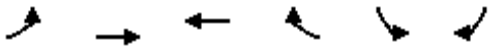
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	238	927	753	182	147	192
Future Volume (veh/h)	238	927	753	182	147	192
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	259	1008	818	198	160	209
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	311	1920	1015	246	1198	514
Arrive On Green	0.11	0.54	0.38	0.38	0.35	0.35
Sat Flow, veh/h	1781	3647	2785	651	3456	1484
Grp Volume(v), veh/h	259	1008	540	476	160	209
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1566	1728	1484
Q Serve(g_s), s	7.1	17.9	26.7	26.7	3.1	10.5
Cycle Q Clear(g_c), s	7.1	17.9	26.7	26.7	3.1	10.5
Prop In Lane	1.00			0.42	1.00	1.00
Lane Grp Cap(c), veh/h	311	1920	670	591	1198	514
V/C Ratio(X)	0.83	0.53	0.81	0.81	0.13	0.41
Avail Cap(c_a), veh/h	311	1920	670	591	1198	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	14.5	27.3	27.3	22.0	24.4
Incr Delay (d2), s/veh	22.2	1.0	10.0	11.2	0.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	6.9	12.6	11.3	1.3	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.1	15.5	37.3	38.5	22.2	26.8
LnGrp LOS	E	B	D	D	C	C
Approach Vol, veh/h		1267	1016		369	
Approach Delay, s/veh		25.0	37.9		24.8	
Approach LOS		C	D		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	42.5		39.5		58.6
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 10	37.0		* 34		* 53
Max Q Clear Time (g_c+I1), s	9.1	28.7		12.5		19.9
Green Ext Time (p_c), s	0.1	4.0		1.2		8.4

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



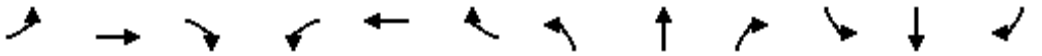
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	368	869	741	224	192	250
Future Volume (veh/h)	368	869	741	224	192	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	400	945	805	243	209	272
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	594	2225	747	225	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2645	770	1781	1484
Grp Volume(v), veh/h	400	945	560	488	209	272
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1545	1781	1484
Q Serve(g_s), s	19.7	16.7	36.0	36.0	11.4	11.0
Cycle Q Clear(g_c), s	19.7	16.7	36.0	36.0	11.4	11.0
Prop In Lane	1.00			0.50	1.00	1.00
Lane Grp Cap(c), veh/h	594	2225	520	452	536	893
V/C Ratio(X)	0.67	0.42	1.08	1.08	0.39	0.30
Avail Cap(c_a), veh/h	594	2225	520	452	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	11.7	43.5	43.5	34.1	12.0
Incr Delay (d2), s/veh	6.0	0.6	62.0	65.0	2.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.5	24.6	21.7	5.3	13.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.5	12.3	105.5	108.5	36.2	12.8
LnGrp LOS	C	B	F	F	D	B
Approach Vol, veh/h		1345	1048		481	
Approach Delay, s/veh		18.9	106.9		23.0	
Approach LOS		B	F		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		18.7		13.4	21.7	38.0
Green Ext Time (p_c), s		8.0		1.6	1.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	51.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



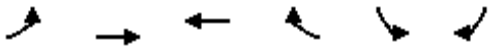
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	542	97	87	434	66	148	431	104	113	339	93
Future Volume (veh/h)	164	542	97	87	434	66	148	431	104	113	339	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	589	105	95	472	72	161	468	113	123	368	101
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	1343	239	297	896	136	348	542	459	312	833	706
Arrive On Green	0.11	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29	0.11	0.45	0.45
Sat Flow, veh/h	1781	3015	536	750	3093	469	924	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	178	347	347	95	270	274	161	468	113	123	368	101
Grp Sat Flow(s),veh/h/ln	1781	1777	1774	750	1777	1786	924	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.8	12.1	12.1	9.2	11.4	11.6	13.5	21.3	4.9	3.9	12.2	3.4
Cycle Q Clear(g_c), s	5.8	12.1	12.1	9.2	11.4	11.6	13.5	21.3	4.9	3.9	12.2	3.4
Prop In Lane	1.00		0.30	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	407	791	790	297	514	517	348	542	459	312	833	706
V/C Ratio(X)	0.44	0.44	0.44	0.32	0.53	0.53	0.46	0.86	0.25	0.39	0.44	0.14
Avail Cap(c_a), veh/h	407	791	790	297	514	517	348	542	459	312	833	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	17.2	17.2	25.9	26.7	26.8	27.4	30.2	24.4	19.9	17.2	14.7
Incr Delay (d2), s/veh	3.4	1.8	1.8	2.8	3.8	3.9	4.4	16.6	1.3	3.7	1.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	5.1	5.1	1.8	5.3	5.4	3.2	11.3	1.9	1.8	5.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	18.9	18.9	28.8	30.5	30.6	31.8	46.9	25.7	23.6	18.9	15.2
LnGrp LOS	C	B	B	C	C	C	C	D	C	C	B	B
Approach Vol, veh/h		872			639			742			592	
Approach Delay, s/veh		19.5			30.3			40.4			19.2	
Approach LOS		B			C			D			B	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	14.0	30.9		44.9		44.9	14.0	30.9				
Change Period (Y+Rc), s	4.5	4.9		4.9		4.9	4.5	4.9				
Max Green Setting (Gmax), s	9.5	26.0		40.0		40.0	9.5	26.0				
Max Q Clear Time (g_c+I1), s	7.8	13.6		14.2		14.1	5.9	23.3				
Green Ext Time (p_c), s	0.1	3.2		2.3		4.7	0.1	1.1				

Intersection Summary												
HCM 6th Ctrl Delay			27.3									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
3: Ventura Boulevard & Tujunga Avenue

08/22/2022



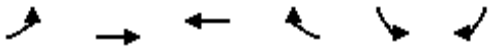
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	243	971	787	203	177	196
Future Volume (veh/h)	243	971	787	203	177	196
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	264	1055	855	221	192	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	296	1920	1000	258	1198	514
Arrive On Green	0.11	0.54	0.38	0.38	0.35	0.35
Sat Flow, veh/h	1781	3647	2745	685	3456	1484
Grp Volume(v), veh/h	264	1055	573	503	192	213
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1560	1728	1484
Q Serve(g_s), s	8.5	19.0	29.1	29.1	3.8	10.7
Cycle Q Clear(g_c), s	8.5	19.0	29.1	29.1	3.8	10.7
Prop In Lane	1.00			0.44	1.00	1.00
Lane Grp Cap(c), veh/h	296	1920	670	588	1198	514
V/C Ratio(X)	0.89	0.55	0.85	0.86	0.16	0.41
Avail Cap(c_a), veh/h	296	1920	670	588	1198	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	14.7	28.1	28.1	22.2	24.5
Incr Delay (d2), s/veh	31.0	1.1	13.1	14.7	0.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	7.4	14.2	12.7	1.6	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	71.8	15.9	41.2	42.8	22.5	26.9
LnGrp LOS	E	B	D	D	C	C
Approach Vol, veh/h		1319	1076		405	
Approach Delay, s/veh		27.1	42.0		24.8	
Approach LOS		C	D		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	42.5		39.5		58.6
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 10	37.0		* 34		* 53
Max Q Clear Time (g_c+I1), s	10.5	31.1		12.7		21.0
Green Ext Time (p_c), s	0.0	3.3		1.4		8.9

Intersection Summary	
HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



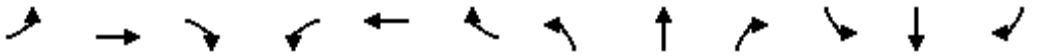
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	379	914	767	231	198	258
Future Volume (veh/h)	379	914	767	231	198	258
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	412	993	834	251	215	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	594	2225	747	225	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2647	768	1781	1484
Grp Volume(v), veh/h	412	993	580	505	215	280
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1545	1781	1484
Q Serve(g_s), s	20.6	17.8	36.0	36.0	11.8	11.4
Cycle Q Clear(g_c), s	20.6	17.8	36.0	36.0	11.8	11.4
Prop In Lane	1.00			0.50	1.00	1.00
Lane Grp Cap(c), veh/h	594	2225	520	452	536	893
V/C Ratio(X)	0.69	0.45	1.12	1.12	0.40	0.31
Avail Cap(c_a), veh/h	594	2225	520	452	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	11.9	43.5	43.5	34.2	12.0
Incr Delay (d2), s/veh	6.5	0.7	75.1	78.1	2.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	7.0	26.5	23.4	5.5	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	12.6	118.6	121.6	36.4	12.9
LnGrp LOS	D	B	F	F	D	B
Approach Vol, veh/h		1405	1085		495	
Approach Delay, s/veh		19.3	120.0		23.1	
Approach LOS		B	F		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		19.8		13.8	22.6	38.0
Green Ext Time (p_c), s		8.4		1.6	1.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	56.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



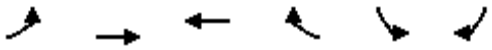
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	559	98	88	448	68	150	436	105	117	347	96
Future Volume (veh/h)	169	559	98	88	448	68	150	436	105	117	347	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	184	608	107	96	487	74	163	474	114	127	377	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	1346	236	293	896	136	345	542	459	309	833	706
Arrive On Green	0.11	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29	0.11	0.45	0.45
Sat Flow, veh/h	1781	3021	531	736	3095	468	914	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	184	357	358	96	279	282	163	474	114	127	377	104
Grp Sat Flow(s),veh/h/ln	1781	1777	1775	736	1777	1786	914	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.0	12.5	12.6	9.6	11.9	12.0	13.8	21.7	4.9	4.0	12.6	3.5
Cycle Q Clear(g_c), s	6.0	12.5	12.6	9.6	11.9	12.0	13.8	21.7	4.9	4.0	12.6	3.5
Prop In Lane	1.00		0.30	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	411	791	791	293	514	517	345	542	459	309	833	706
V/C Ratio(X)	0.45	0.45	0.45	0.33	0.54	0.55	0.47	0.88	0.25	0.41	0.45	0.15
Avail Cap(c_a), veh/h	411	791	791	293	514	517	345	542	459	309	833	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	17.3	17.3	26.1	26.9	26.9	27.6	30.4	24.4	20.1	17.3	14.8
Incr Delay (d2), s/veh	3.5	1.9	1.9	3.0	4.1	4.1	4.6	17.7	1.3	4.0	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	5.3	5.3	1.9	5.5	5.6	3.3	11.7	1.9	1.8	5.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	19.1	19.2	29.0	30.9	31.0	32.2	48.1	25.7	24.1	19.1	15.2
LnGrp LOS	C	B	B	C	C	C	C	D	C	C	B	B
Approach Vol, veh/h		899			657			751			608	
Approach Delay, s/veh		19.6			30.7			41.2			19.5	
Approach LOS		B			C			D			B	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	14.0	30.9		44.9		44.9	14.0	30.9				
Change Period (Y+Rc), s	4.0	4.9		4.9		4.9	4.5	4.9				
Max Green Setting (Gmax), s	10.0	26.0		40.0		40.0	9.5	26.0				
Max Q Clear Time (g_c+I1), s	8.0	14.0		14.6		14.6	6.0	23.7				
Green Ext Time (p_c), s	0.1	3.3		2.4		4.8	0.1	1.0				

Intersection Summary												
HCM 6th Ctrl Delay			27.7									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
3: Ventura Boulevard & Tujunga Avenue

08/22/2022



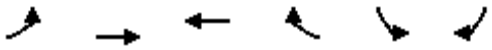
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	246	988	799	203	177	198
Future Volume (veh/h)	246	988	799	203	177	198
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	267	1074	868	221	192	215
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	306	1916	952	242	1157	497
Arrive On Green	0.12	0.54	0.36	0.36	0.33	0.33
Sat Flow, veh/h	1781	3647	2755	677	3456	1484
Grp Volume(v), veh/h	267	1074	579	510	192	215
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1561	1728	1484
Q Serve(g_s), s	8.2	17.6	27.4	27.4	3.4	9.9
Cycle Q Clear(g_c), s	8.2	17.6	27.4	27.4	3.4	9.9
Prop In Lane	1.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	306	1916	635	558	1157	497
V/C Ratio(X)	0.87	0.56	0.91	0.91	0.17	0.43
Avail Cap(c_a), veh/h	306	1916	635	558	1157	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	13.4	27.0	27.0	20.6	22.8
Incr Delay (d2), s/veh	27.2	1.2	19.6	21.7	0.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	6.6	14.3	12.9	1.4	3.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	63.5	14.6	46.6	48.7	20.9	25.5
LnGrp LOS	E	B	D	D	C	C
Approach Vol, veh/h		1341	1089		407	
Approach Delay, s/veh		24.3	47.6		23.4	
Approach LOS		C	D		C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	37.0		35.0		53.1
Change Period (Y+Rc), s	* 5.6	5.5		* 5.5		* 5.6
Max Green Setting (Gmax), s	* 4.4	31.5		* 30		* 48
Max Q Clear Time (g_c+I1), s	10.2	29.4		11.9		19.6
Green Ext Time (p_c), s	0.0	1.3		1.3		8.7

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



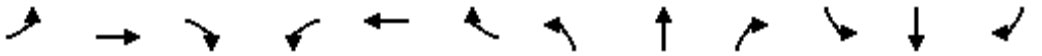
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	381	928	786	231	198	261
Future Volume (veh/h)	381	928	786	231	198	261
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	0.90	1.00	0.90
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1945
Adj Flow Rate, veh/h	414	1009	854	251	215	284
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	594	2225	752	221	536	893
Arrive On Green	0.30	0.63	0.29	0.29	0.30	0.30
Sat Flow, veh/h	1781	3647	2663	755	1781	1484
Grp Volume(v), veh/h	414	1009	590	515	215	284
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1548	1781	1484
Q Serve(g_s), s	20.8	18.2	36.0	36.0	11.8	11.6
Cycle Q Clear(g_c), s	20.8	18.2	36.0	36.0	11.8	11.6
Prop In Lane	1.00			0.49	1.00	1.00
Lane Grp Cap(c), veh/h	594	2225	520	453	536	893
V/C Ratio(X)	0.70	0.45	1.13	1.14	0.40	0.32
Avail Cap(c_a), veh/h	594	2225	520	453	536	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	12.0	43.5	43.5	34.2	12.1
Incr Delay (d2), s/veh	6.6	0.7	82.2	85.3	2.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	7.2	27.5	24.3	5.5	13.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.7	12.7	125.7	128.8	36.4	13.0
LnGrp LOS	D	B	F	F	D	B
Approach Vol, veh/h		1423	1105		499	
Approach Delay, s/veh		19.4	127.1		23.1	
Approach LOS		B	F		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		41.0	41.0	41.0
Change Period (Y+Rc), s		* 5		4.0	4.0	* 5
Max Green Setting (Gmax), s		* 50		37.0	37.0	* 36
Max Q Clear Time (g_c+I1), s		20.2		13.8	22.8	38.0
Green Ext Time (p_c), s		8.6		1.6	1.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.3
HCM 6th LOS	E

Notes

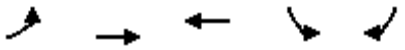
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	559	100	90	448	68	153	444	108	117	353	96
Future Volume (veh/h)	169	559	100	90	448	68	153	444	108	117	353	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	184	608	109	98	487	74	166	483	117	127	384	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	1523	272	348	1270	192	292	554	469	229	750	636
Arrive On Green	0.06	0.51	0.51	0.41	0.41	0.41	0.30	0.30	0.30	0.07	0.40	0.40
Sat Flow, veh/h	1781	3011	539	734	3095	468	908	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	184	358	359	98	279	282	166	483	117	127	384	104
Grp Sat Flow(s),veh/h/ln	1781	1777	1773	734	1777	1786	908	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.0	13.1	13.2	10.0	11.5	11.6	17.7	25.7	5.9	5.0	16.3	4.4
Cycle Q Clear(g_c), s	6.0	13.1	13.2	13.2	11.5	11.6	23.0	25.7	5.9	5.0	16.3	4.4
Prop In Lane	1.00		0.30	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	425	899	897	348	729	733	292	554	469	229	750	636
V/C Ratio(X)	0.43	0.40	0.40	0.28	0.38	0.39	0.57	0.87	0.25	0.55	0.51	0.16
Avail Cap(c_a), veh/h	425	899	897	348	729	733	292	554	469	229	750	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	16.1	16.1	23.3	21.6	21.7	36.5	35.1	28.1	25.9	23.7	20.2
Incr Delay (d2), s/veh	3.2	1.3	1.3	2.0	1.5	1.5	7.8	17.1	1.3	9.3	2.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	5.5	5.5	1.9	5.0	5.1	4.4	13.7	2.3	2.6	7.2	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	17.4	17.4	25.3	23.2	23.2	44.3	52.1	29.3	35.3	26.2	20.7
LnGrp LOS	C	B	B	C	C	C	D	D	C	D	C	C
Approach Vol, veh/h		901			659			766			615	
Approach Delay, s/veh		17.9			23.5			46.9			27.1	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	10.0	48.0		47.0		58.0	11.0	36.0				
Change Period (Y+Rc), s	4.0	4.9		4.9		4.9	4.0	4.9				
Max Green Setting (Gmax), s	6.0	43.1		42.1		35.1	7.0	31.1				
Max Q Clear Time (g_c+I1), s	8.0	15.2		18.3		15.2	7.0	27.7				
Green Ext Time (p_c), s	0.0	4.5		2.4		4.5	0.0	1.4				

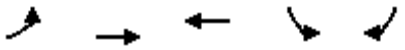
Intersection Summary												
HCM 6th Ctrl Delay			28.7									
HCM 6th LOS			C									



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	255	989	1003	160	207
v/c Ratio	0.83	0.53	0.76	0.13	0.30
Control Delay	52.9	15.0	29.9	22.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	15.0	29.9	22.1	4.5
Queue Length 50th (ft)	81	192	272	34	0
Queue Length 95th (ft)	#200	247	350	57	47
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	309	1863	1323	1195	697
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.83	0.53	0.76	0.13	0.30

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	398	929	1028	209	268
v/c Ratio	0.67	0.44	1.00	0.39	0.26
Control Delay	31.8	12.7	71.4	36.8	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	12.7	71.4	36.8	9.4
Queue Length 50th (ft)	217	187	~423	132	76
Queue Length 95th (ft)	332	232	#574	204	120
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1023	532	1034
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.67	0.44	1.00	0.39	0.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
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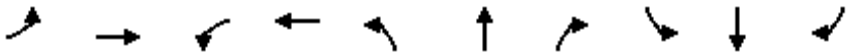

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	178	692	92	544	158	460	110	123	365	101
v/c Ratio	0.47	0.44	0.44	0.53	0.54	0.85	0.20	0.44	0.44	0.13
Control Delay	19.3	17.5	34.0	28.1	35.0	47.2	4.6	19.8	19.3	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	17.5	34.0	28.1	35.0	47.2	4.6	19.8	19.3	3.7
Queue Length 50th (ft)	59	132	42	131	75	245	0	40	138	0
Queue Length 95th (ft)	101	178	91	182	141	#412	30	74	213	27
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	377	1557	209	1017	293	539	547	281	829	761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.44	0.44	0.53	0.54	0.85	0.20	0.44	0.44	0.13

Intersection Summary

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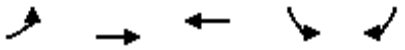

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	259	1008	1016	160	209
v/c Ratio	0.85	0.54	0.77	0.13	0.30
Control Delay	56.4	15.4	30.3	22.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	15.4	30.3	22.1	4.5
Queue Length 50th (ft)	83	198	276	34	0
Queue Length 95th (ft)	#211	254	356	57	47
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	305	1856	1324	1195	698
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.85	0.54	0.77	0.13	0.30

Intersection Summary

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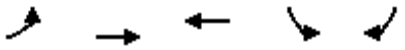

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	400	945	1048	209	272
v/c Ratio	0.67	0.45	1.03	0.39	0.26
Control Delay	32.0	12.8	76.4	36.8	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	12.8	76.4	36.8	9.6
Queue Length 50th (ft)	219	192	~456	132	79
Queue Length 95th (ft)	334	238	#593	204	123
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1022	532	1033
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.67	0.45	1.03	0.39	0.26

Intersection Summary

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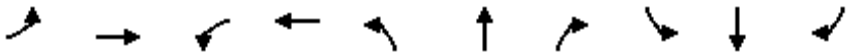

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	178	694	95	544	161	468	113	123	368	101
v/c Ratio	0.49	0.45	0.45	0.53	0.55	0.87	0.20	0.45	0.44	0.13
Control Delay	20.1	17.6	34.5	28.1	35.4	48.8	4.3	20.1	19.4	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	17.6	34.5	28.1	35.4	48.8	4.3	20.1	19.4	3.7
Queue Length 50th (ft)	60	132	44	131	77	251	0	40	140	0
Queue Length 95th (ft)	102	179	94	182	143	#423	29	74	214	27
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	364	1556	209	1017	292	539	552	275	829	761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.45	0.45	0.53	0.55	0.87	0.20	0.45	0.44	0.13

Intersection Summary

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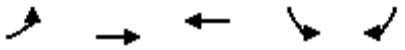

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	264	1055	1076	192	213
v/c Ratio	0.92	0.57	0.81	0.16	0.30
Control Delay	70.6	15.8	32.2	22.4	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	70.6	15.8	32.2	22.4	4.5
Queue Length 50th (ft)	91	212	301	41	0
Queue Length 95th (ft)	#242	271	386	67	47
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	287	1856	1323	1195	701
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.92	0.57	0.81	0.16	0.30

Intersection Summary

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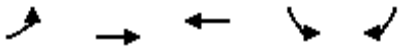

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	412	993	1085	215	280
v/c Ratio	0.69	0.47	1.06	0.40	0.27
Control Delay	33.1	13.1	86.7	37.1	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	13.1	86.7	37.1	9.8
Queue Length 50th (ft)	229	205	~490	136	83
Queue Length 95th (ft)	349	254	#627	210	128
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1022	532	1032
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	0.47	1.06	0.40	0.27

Intersection Summary

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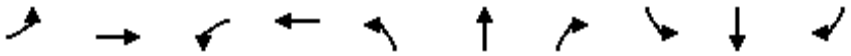

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	184	715	96	561	163	474	114	127	377	104
v/c Ratio	0.50	0.46	0.47	0.55	0.56	0.88	0.21	0.47	0.45	0.14
Control Delay	19.9	17.8	35.4	28.5	35.9	50.1	4.9	20.6	19.6	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	17.8	35.4	28.5	35.9	50.1	4.9	20.6	19.6	3.6
Queue Length 50th (ft)	61	137	45	136	78	255	0	41	144	0
Queue Length 95th (ft)	105	186	96	188	145	#431	33	76	220	27
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	370	1557	204	1017	290	539	547	271	829	762
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.46	0.47	0.55	0.56	0.88	0.21	0.47	0.45	0.14

Intersection Summary

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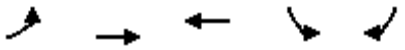

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	267	1074	1089	192	215
v/c Ratio	0.89	0.59	0.87	0.17	0.31
Control Delay	63.1	15.4	34.4	21.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	63.1	15.4	34.4	21.1	4.5
Queue Length 50th (ft)	92	199	282	38	0
Queue Length 95th (ft)	#234	260	#400	62	46
Internal Link Dist (ft)		2627	638	1527	
Turn Bay Length (ft)	200			250	130
Base Capacity (vph)	299	1814	1254	1150	684
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.89	0.59	0.87	0.17	0.31

Intersection Summary

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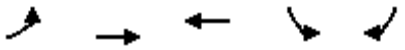

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	414	1009	1105	215	284
v/c Ratio	0.70	0.48	1.08	0.40	0.28
Control Delay	33.3	13.2	93.1	37.1	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.3	13.2	93.1	37.1	10.0
Queue Length 50th (ft)	231	210	~507	136	85
Queue Length 95th (ft)	351	260	#645	210	131
Internal Link Dist (ft)		603	2627	3037	
Turn Bay Length (ft)	210			550	550
Base Capacity (vph)	594	2104	1022	532	1031
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.70	0.48	1.08	0.40	0.28

Intersection Summary

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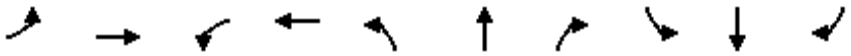

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	184	717	98	561	166	483	117	127	384	104
v/c Ratio	0.48	0.41	0.34	0.39	0.59	0.88	0.21	0.64	0.51	0.15
Control Delay	18.6	16.3	25.4	21.9	41.4	53.8	6.2	36.4	26.8	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.6	16.3	25.4	21.9	41.4	53.8	6.2	36.4	26.8	4.5
Queue Length 50th (ft)	64	144	44	131	95	307	0	53	191	0
Queue Length 95th (ft)	106	190	90	177	169	#491	41	#102	282	33
Internal Link Dist (ft)		628		760		3037			421	
Turn Bay Length (ft)	220		140		100		250	130		180
Base Capacity (vph)	387	1762	289	1434	283	551	551	197	746	697
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.41	0.34	0.39	0.59	0.88	0.21	0.64	0.51	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
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CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

11611-11695 W. Ventura Bl
4010-4028 Colfax Av
LADOT Case No. VEN22-113678

Date: March 14, 2023

To: Jojo Pewsawang, Senior City Planner
Department of City Planning

From: Vicente Cordero, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION IMPACT ASSESSMENT FOR THE ELDERCARE FACILITY AT 11611-11695 WEST VENTURA BOULEVARD/4010-4028 COLFAX AVENUE (ZA-2021-9477-ELD-CUB-SPP-SPR/ENV-2021-9478-EAF)**

The Department of Transportation (LADOT) has reviewed the revised transportation assessment prepared by Armen Hovanessian Transportation Consulting, dated February 12, 2023, for the proposed eldercare facility located at 11611-11695 West Ventura Boulevard/4010-4028 Colfax Avenue in the Sherman Oaks- Studio City - Toluca Lake - Cahuenga Pass Community Plan Area of the City of Los Angeles. On July 30, 2019, pursuant to Senate Bill (SB) 743 and the recent changes to Section 15064.3 of the State's California Environmental Quality Act (CEQA) Guidelines, the City of Los Angeles adopted vehicle miles traveled (VMT) as the criteria by which to determine transportation impacts under CEQA. Based on the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), the proposed project would not result in a significant transportation impact on VMT as described below.

DISCUSSION AND FINDINGS

A. Project Description

The Project proposes to construct one five-story building composed of 140 Assisted Living Care/Senior Independent Housing Dwelling Units, one three-story building composed of 62 Senior Independent Housing Dwelling Units, and an approximately 2,997 square-foot publicly accessible, privately owned and maintained, local-serving pocket park. All existing buildings would be removed and replaced as part of the Project design. The Project would provide 149 on-site automobile parking spaces in addition to 45 long-term and 21 short-term bicycle parking spaces. Access to the Project would be provided via one two-way driveway on Ventura Boulevard and one two-way driveway on Colfax Avenue. The Project is anticipated to be completed in the Year 2025.

B. CEQA Screening Threshold

A trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool Version 1.3, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable. This

trip generation adjustment is based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project does exceed the net 250 daily vehicle trips threshold. A copy of the VMT calculator-screening pages is provided in **Attachment A**. Additionally, the analysis included further discussion of the CEQA transportation impact thresholds.

1. **Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies**
   The transportation assessment evaluated the proposed Project for conformance with the adopted City's transportation plans and policies for all travel modes. According to the analysis, the Project does not obstruct or conflict with the City's development policies and standards for the transportation system. Therefore, no Project or cumulative significant transportation impact was identified for this threshold.

2. **Threshold T-2.1: Causing Substantial Vehicle Miles Traveled**
   Using the VMT Calculator, the assessment determined that the Project would generate a 607 net increase in DVT and a 4,070 net increase in daily VMT, therefore further analysis was required. The analysis concluded that the project would not result in a significant VMT impact as discussed below under Section C, CEQA Transportation Analysis.

3. **Threshold T-3: Substantially Increasing Hazards Due To a Geometric Design Feature or Incompatible Use**
   The Project does not involve any design features that are unusual for the area or any incompatible use.

C. CEQA Transportation Analysis

The new LADOT Transportation Assessment Guidelines (TAG) provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds. The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita, and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven Area Planning Commission (APC) areas in the City. For the South Valley APC area, in which the project is located, the following threshold has been established:

- Daily Household VMT per Capita: 9.4
- Daily Work VMT per Employee: 11.6

As cited in the VMT analysis report prepared by Armen Hovanessian Transportation Consulting, the VMT generated by the project results in 0.0 Household VMT per Capita and 8.3 Work VMT per Employee which is acceptable for the South Valley APC. Therefore, it is concluded that the implementation of the proposed project will not result in a significant VMT impact.

D. Access and Circulation

The access and circulation analysis included a delay study of the following intersections using the Highway Capacity Manual (HCM) methodology, which calculates the amount of delay per vehicle based on the intersection traffic volumes, lane configurations, and signal timing:

- Ventura Boulevard and Colfax Avenue
- Ventura Boulevard and Tujunga Avenue
- Colfax Avenue and Moorpark Street

Existing and Cumulative Traffic Conditions

To account for the future ambient traffic growth from the intensification of existing developments, and other projects that are located further than a half-mile from the project site, the existing traffic volumes were increased by an ambient growth rate of 1% per year to the anticipated year of completion 2025.

Under the HCM methodology, level of service (LOS) at signalized and unsignalized intersections is defined based on the delay experienced per vehicle. LADOT finds that the transportation assessment adequately evaluated potential project-related delays and level of service at the studied intersections. The summary of findings at the study intersections is shown in **Attachment B**.

PROJECT REQUIREMENTS

A. CEQA-Related Requirement

There are no CEQA-related mitigation measures required for this Project.

B. Corrective Measures (Non-CEQA Analysis)

As required per the adopted TAG and pursuant to the City's Site Plan Review Authority (L.A.M.C. 16.05 and relevant code sections), the analysis included a review of current deficiencies and potential future deficiencies that may result from this project. There are no required corrective measures that would result from the construction of this Project.

C. Project Impact Assessment (PIA) Fee

Pursuant to Section 11 of the Specific Plan, the applicant shall pay or guarantee to pay an Application for Consideration Fee in addition to a PIA Fee to LADOT before the issuance of any building permit. The Application for Consideration Fee is $400.00 for this Project. The gross PIA Fee for this project is calculated below and can be paid in either a single payment or through a deferred payment plan. The PIA Fee shall be indexed annually; therefore, the PIA Fee may change depending on the actual date when payment is made.

Land Use	Category	Community	Floor Area (sq.ft.)	PIA Fee Rate ($ per sq.ft.)	Total PIA Fee (Floor Area x PIA Fee Rate)
Proposed Project					
Assisted Living/ Memory Care	A	Studio City	202,974	$1.85	$375,501.90
Existing Use					
Office	B	Studio City	2,563	$3.46	$8,867.98
Retail	C	Studio City	6,720	$6.32	$42,470.40
Restaurant	C	Studio City	960	$6.32	$6,067.20
Auto Sales	C	Studio City	10,160	$6.32	$64,211.20
Auto Repair	C	Studio City	4085	$6.32	$25,817.20
Net PIA Fee (proposed - existing)					**$228,067.92**

D. Parking Requirements

The traffic study indicated that the Project would provide a total of 149 automobile parking spaces in addition to 45 long-term and 21 short-term bicycle parking spaces. The applicant should check with the Department of Building and Safety on the number of Code-required parking spaces needed for this Project.

E. Highway Dedication and Street Widening Requirement

Ventura Boulevard is designated a Boulevard II, which requires a 40-foot half-width roadway within a 55-foot half-width right-of-way. The north side of Ventura Boulevard west of Colfax Avenue currently consists of a 35-foot half-width roadway and a 5-foot sidewalk width within a 42-foot half-width right-of-way. **Colfax Avenue** is designated Avenue II which requires a 28-foot half-width roadway within a 43-foot half-width right-of-way. The east side of Colfax Avenue currently consists of a 33-foot half-width roadway and a 10-foot sidewalk width within a 43-foot half-width right-of-way. The applicant should check with the Bureau of Engineering's Land Development Group to determine whether there are any applicable highway dedication, street widening, and/or sidewalk requirements for this Project.

F. Project Access and Circulation

The proposed circulation plan for the Project includes one full-access driveway on Ventura Boulevard providing access to the elder care facility and independent living facility. A full-access driveway on Colfax Avenue would also provide access to the elder care facility and the park. Pedestrian access points would be provided on Ventura Boulevard and Colfax Avenue. Four existing driveways on Ventura Boulevard would will be closed. A copy of the Project site plan is provided in **Attachment C**. The ultimate design of the driveways and internal circulation will meet the standards of the building code and will be subject to review by LADOT and the Department of Building and Safety. The review of this study does not constitute approval for any new proposed driveway. Review and approval of the driveways should be coordinated with LADOT's Citywide Planning Coordination Section (6262 Van Nuys Boulevard, 3rd Floor, Room 320, 818-374-4699). To minimize and prevent last-minute building design changes, the applicant should contact LADOT for driveway width and internal circulation requirements prior to the commencement of building or parking layout design. The applicant should check with the Department of City Planning regarding the Project's vehicular access and design.

G. Worksite Traffic Control Plan

LADOT recommends that a construction worksite traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of any construction work. Refer to http://ladot.lacity.org/what-we- do/plan-review to determine which section to coordinate review of the work site traffic control plan. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs, and access to abutting properties. LADOT also recommends that all construction-related truck traffic be restricted to off-peak hours.

H. TDM Ordinance Requirements

The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance,

which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods.
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance. The updated ordinance is expected to be completed prior to the anticipated construction of this Project.

I. Development Review Fees

Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

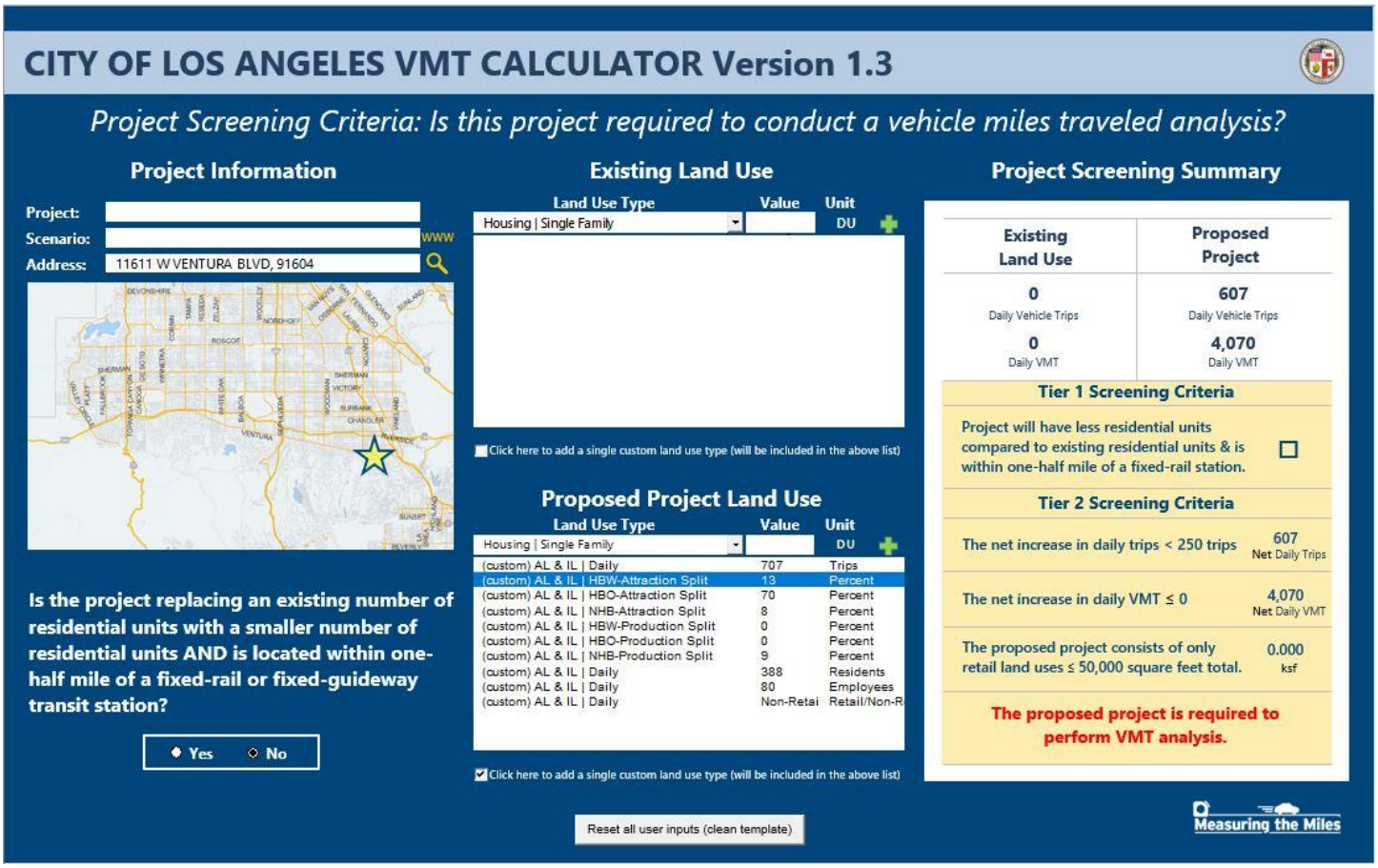
If you have any questions, please contact Brandon Wilson of my staff at brandon.wilson@lacity.org.

Attachments

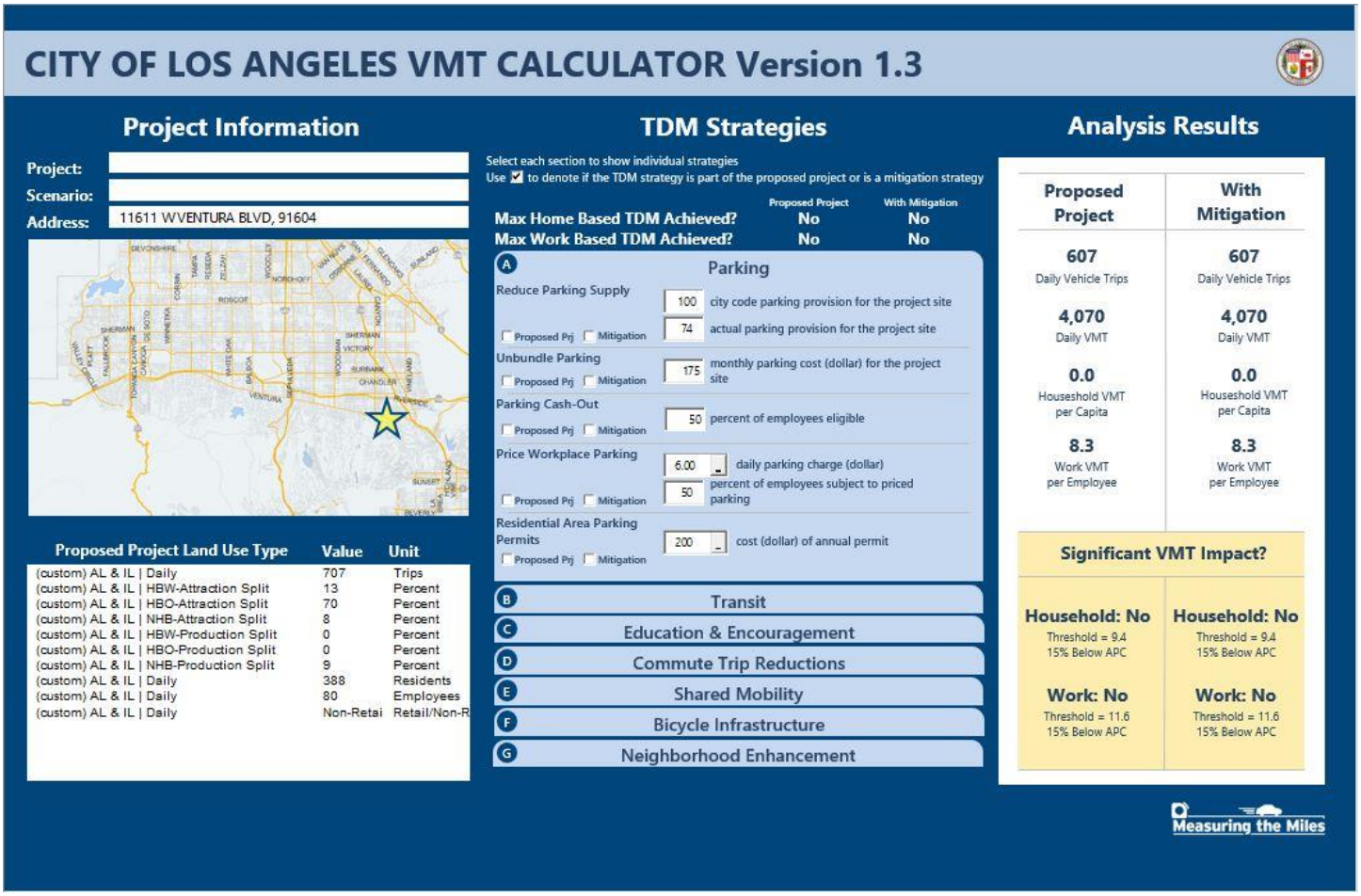
J:\Projects\VEN\VEN22-113678_11611-11695 Ventura Bl _Ltr

c: Mashael Majid, Council District 4
Steve Rostam, LADOT East Valley District
Vincent Chan, LADOT B-Permit
Nikolas Osborne, LADOT Geometric Design
Ali Nahass, BOE Valley District
Quyen Phan, BOE Land Development Group
Armen Hovanessian, Armen Hovanessian Transportation Consulting

Attachment A
City of LA VMT Calculator Results



Attachment A (cont'd)
City of LA VMT Calculator Results



CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project:
Scenario:
Address: 11611 WVENTURA BLVD, 91604

Proposed Project Land Use Type	Value	Unit
(custom) AL & IL | Daily	707	Trips
(custom) AL & IL | HBW-Attraction Split	13	Percent
(custom) AL & IL | HBO-Attraction Split	70	Percent
(custom) AL & IL | NHB-Attraction Split	8	Percent
(custom) AL & IL | HBW-Production Split	0	Percent
(custom) AL & IL | HBO-Production Split	0	Percent
(custom) AL & IL | NHB-Production Split	9	Percent
(custom) AL & IL | Daily	388	Residents
(custom) AL & IL | Daily	80	Employees
(custom) AL & IL | Daily	Non-Retai	Retail/Non-R

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	No	No
Max Work Based TDM Achieved?	No	No

A Parking

Reduce Parking Supply	100	city code parking provision for the project site
☐ Proposed Prj ☐ Mitigation	74	actual parking provision for the project site
Unbundle Parking	175	monthly parking cost (dollar) for the project site
☐ Proposed Prj ☐ Mitigation		
Parking Cash-Out	50	percent of employees eligible
☐ Proposed Prj ☐ Mitigation		
Price Workplace Parking	6.00	daily parking charge (dollar)
☐ Proposed Prj ☐ Mitigation	50	percent of employees subject to priced parking
Residential Area Parking Permits	200	cost (dollar) of annual permit
☐ Proposed Prj ☐ Mitigation		

B Transit
C Education & Encouragement
D Commute Trip Reductions
E Shared Mobility
F Bicycle Infrastructure
G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
607 Daily Vehicle Trips	607 Daily Vehicle Trips
4,070 Daily VMT	4,070 Daily VMT
0.0 Household VMT per Capita	0.0 Household VMT per Capita
8.3 Work VMT per Employee	8.3 Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 9.4 15% Below APC	Household: No Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	Work: No Threshold = 11.6 15% Below APC

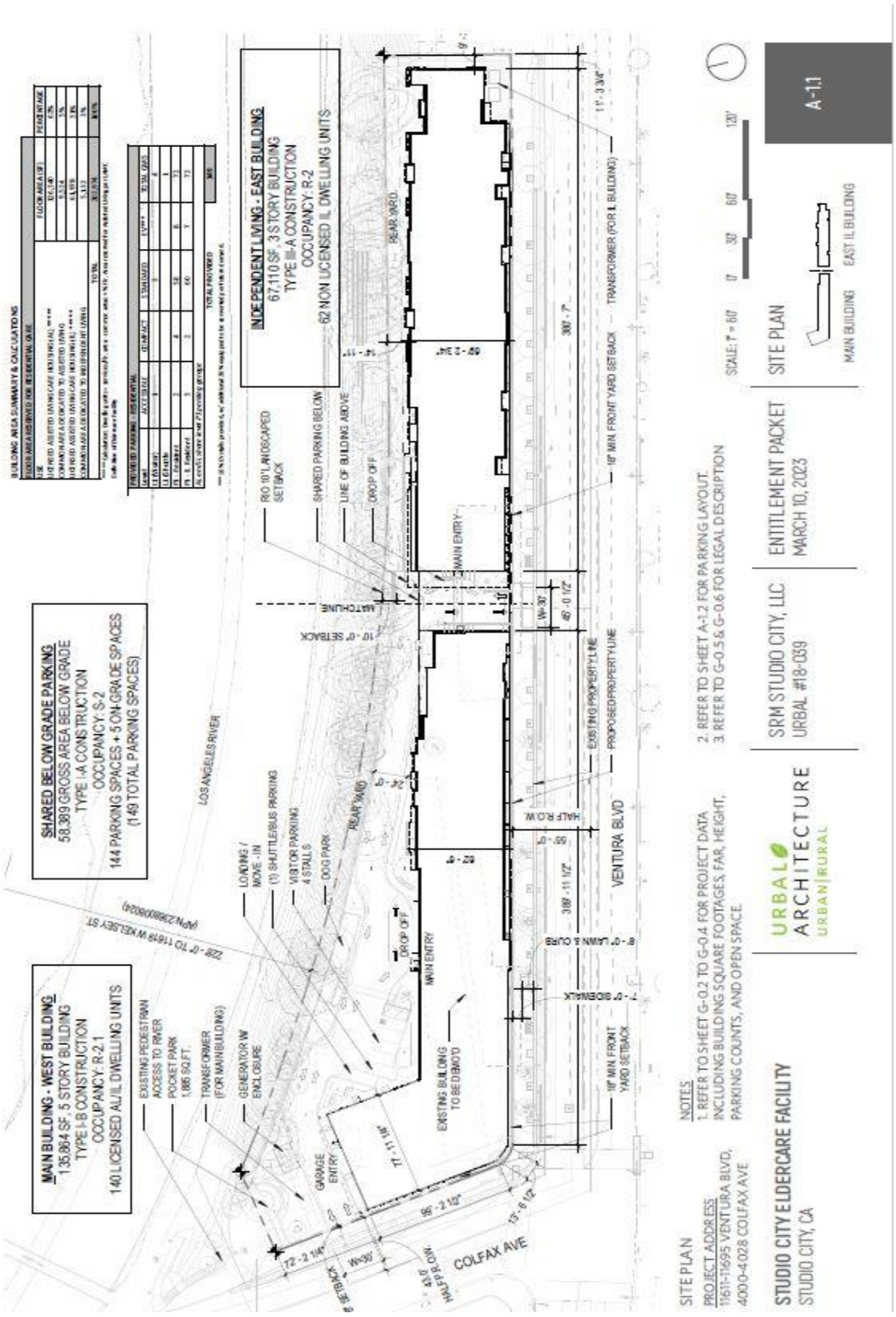
Measuring the Miles

Attachment B
Summary of Delay and Levels of Service

Summary of Delay and Level of Service									
Intersection	Peak Hour	Existing		Existing + Project		Future		Future + Project	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Ventura Boulevard & Colfax Avenue	AM	37.3	D	37.9	D	42.3	D	43.3	D
	PM	49.2	D	51.7	D	56.5	E	59.3	E
Ventura Boulevard & Tujunga Avenue	AM	24.3	C	24.5	C	25.6	C	25.9	C
	PM	29.4	C	29.9	C	32.5	C	33.1	C
Colfax Avenue & Moorpark Street	AM	27.2	C	27.3	C	27.9	C	28.1	C
	PM	26.9	C	27.3	C	27.7	C	28.7	C

1% annual growth rate was applied

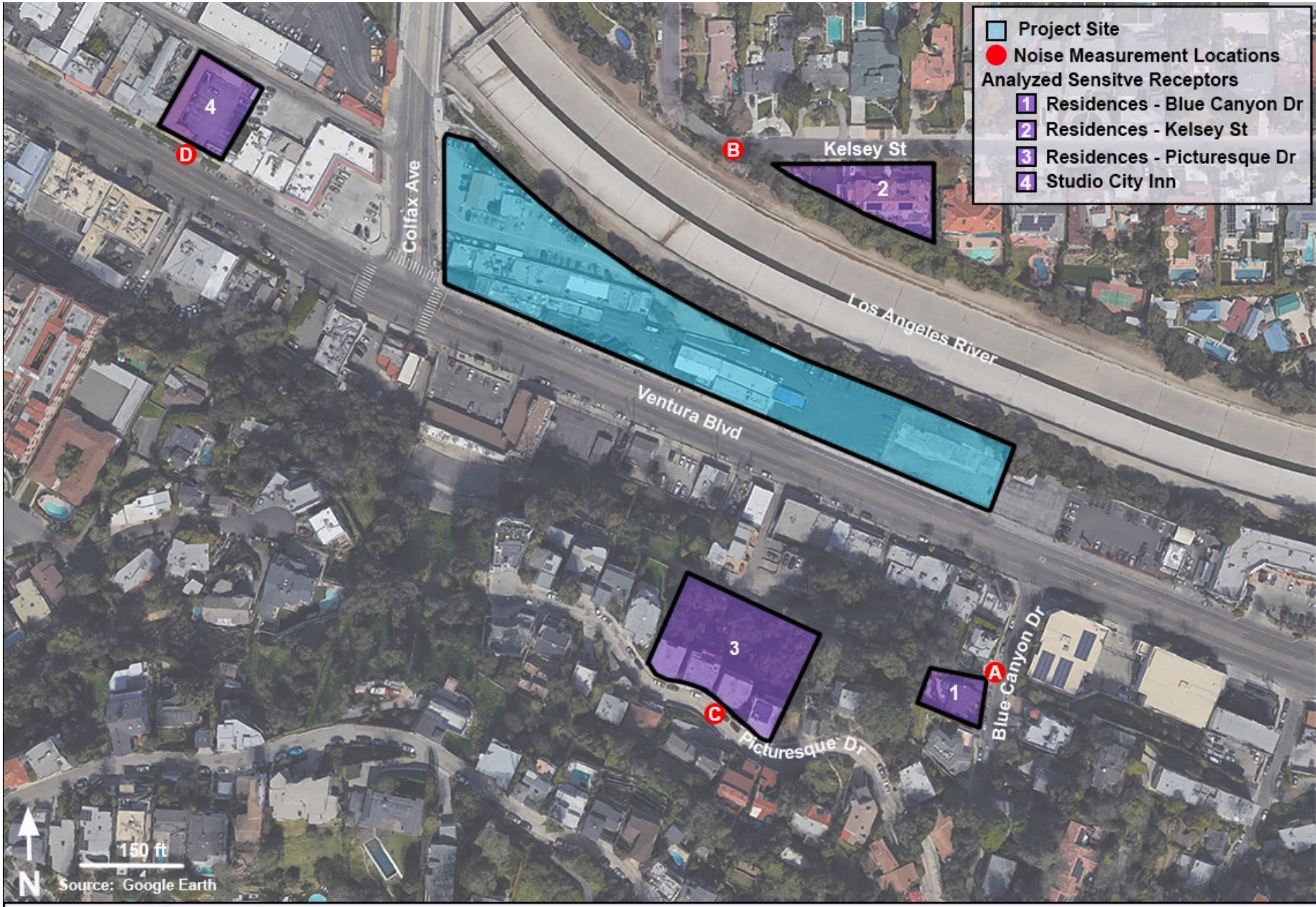
Attachment C
Project Site Plan



APPENDIX D – NOISE MODELING RESULTS

DouglasKim+Associates,LLC

AMBIENT NOISE MEASUREMENTS



DouglasKim+Associates,LLC

Figure 1
Noise Measurement Locations

Session Report

2/23/2023

Information Panel

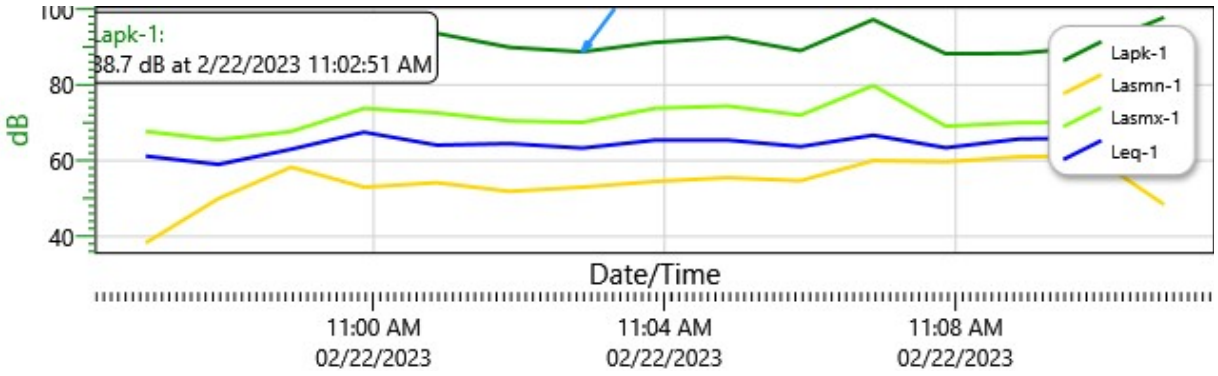
Name	3931 Blue Canyon Drive
Comments	
Start Time	2/22/2023 10:55:52 AM
Stop Time	2/22/2023 11:10:54 AM
Run Time	00:15:02
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	64.5 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Logged Data Chart

3931 Blue Canyon Drive: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1
2/22/2023 10:56:52 AM	87.1	38.3	67.7	61.2
10:57:52 AM	81.4	50	65.5	59
10:58:52 AM	88	58.3	67.7	63
10:59:52 AM	87.5	53	73.8	67.5
11:00:52 AM	93.6	54.2	72.6	64.1
11:01:52 AM	89.9	51.9	70.5	64.5
11:02:52 AM	88.7	53	70.1	63.3
11:03:52 AM	91.2	54.5	73.8	65.4
11:04:52 AM	92.5	55.5	74.4	65.4
11:05:52 AM	89	54.7	72	63.7
11:06:52 AM	97.2	60	79.8	66.7
11:07:52 AM	88.2	59.7	69.1	63.4
11:08:52 AM	88.3	61	70	65.7
11:09:52 AM	90	61.3	70.1	66
11:10:52 AM	97.8	48.4	69.3	62.5

Session Report

2/23/2023

Information Panel

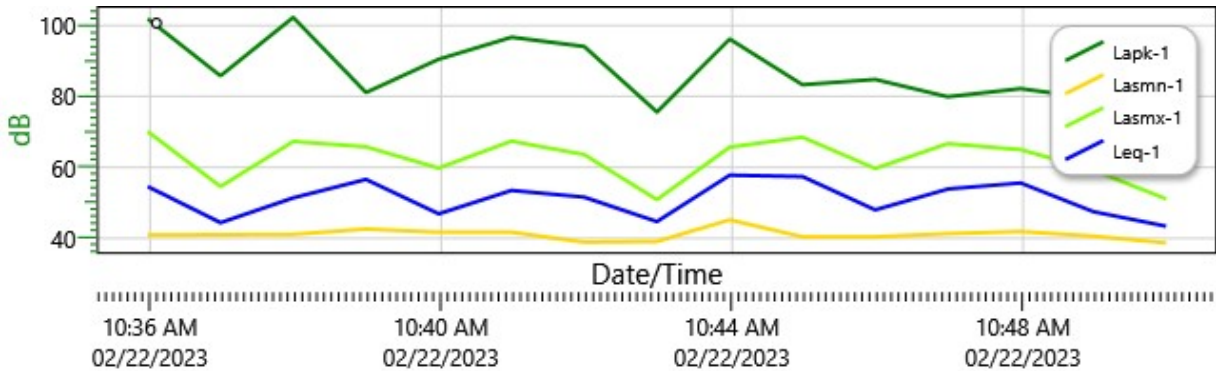
Name	11554 Kelsey Street
Comments	
Start Time	2/22/2023 10:34:58 AM
Stop Time	2/22/2023 10:50:04 AM
Run Time	00:15:06
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	53.3 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Logged Data Chart

11554 Kelsey Street: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1
2/22/2023 10:35:58 AM	101.9	40.9	70.1	54.6
10:36:58 AM	85.8	41	54.6	44.4
10:37:58 AM	102.3	41.1	67.3	51.4
10:38:58 AM	81.1	42.6	65.8	56.6
10:39:58 AM	90.5	41.7	59.8	46.9
10:40:58 AM	96.7	41.7	67.4	53.5
10:41:58 AM	94.1	38.9	63.6	51.6
10:42:58 AM	75.6	39.1	50.9	44.7
10:43:58 AM	96.2	45.2	65.7	57.8
10:44:58 AM	83.3	40.4	68.5	57.4
10:45:58 AM	84.8	40.4	59.7	48
10:46:58 AM	79.9	41.3	66.7	53.9
10:47:58 AM	82.2	41.9	65	55.6
10:48:58 AM	79.4	40.6	59.2	47.5
10:49:58 AM	72.8	38.7	51.1	43.4

Session Report

2/23/2023

Information Panel

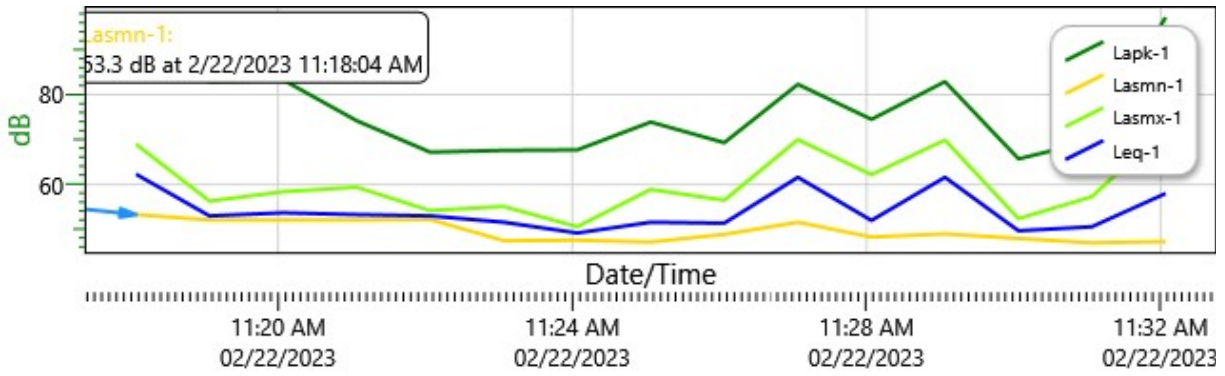
Name	11651 Picturesque
Comments	
Start Time	2/22/2023 11:17:04 AM
Stop Time	2/22/2023 11:32:32 AM
Run Time	00:15:28
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	57.2 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Logged Data Chart

11651 Picturesque: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1
2/22/2023 11:18:04 AM	95.5	53.3	69	62.3
11:19:04 AM	82.8	52.1	56.3	53
11:20:04 AM	83.3	52.1	58.4	53.7
11:21:04 AM	74.2	52.1	59.4	53.3
11:22:04 AM	67.2	52.2	54.2	53
11:23:04 AM	67.6	47.5	55.1	51.6
11:24:04 AM	67.7	47.6	50.6	49.2
11:25:04 AM	73.9	47.2	58.9	51.6
11:26:04 AM	69.3	48.9	56.5	51.4
11:27:04 AM	82.3	51.6	70	61.6
11:28:04 AM	74.5	48.3	62.2	52
11:29:04 AM	82.9	49	69.9	61.6
11:30:04 AM	65.7	48	52.4	49.7
11:31:04 AM	69.7	47	57.3	50.6
11:32:04 AM	97.2	47.3	72.6	58

Session Report

2/23/2023

Information Panel

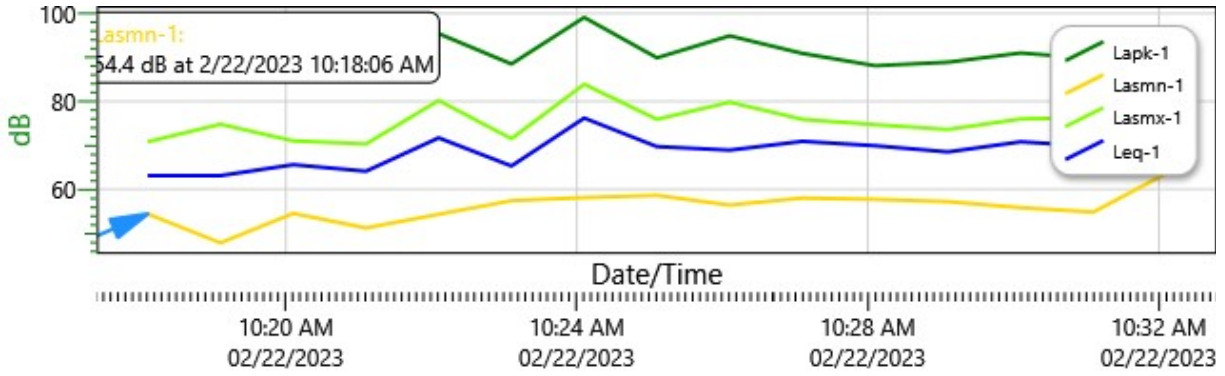
Name	Studio City Inn
Comments	
Start Time	2/22/2023 10:17:06 AM
Stop Time	2/22/2023 10:32:08 AM
Run Time	00:15:02
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	
Description	
Location	
User Name	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	69.9 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Logged Data Chart

Studio City Inn: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1

Date/Time	Lapk-1	Lasmn-1	Lasmx-1	Leq-1
2/22/2023 10:18:06 AM	88.9	54.4	70.8	63.1
10:19:06 AM	91.3	47.8	74.8	63.1
10:20:06 AM	86.8	54.5	71	65.6
10:21:06 AM	85	51.2	70.3	64.1
10:22:06 AM	95.4	54.3	80.2	71.7
10:23:06 AM	88.5	57.4	71.5	65.3
10:24:06 AM	99.1	58.1	83.9	76.2
10:25:06 AM	89.9	58.6	75.9	69.7
10:26:06 AM	94.9	56.4	79.8	68.9
10:27:06 AM	90.9	58	75.9	70.9
10:28:06 AM	88.1	57.7	74.7	69.9
10:29:06 AM	88.9	57.2	73.6	68.5
10:30:06 AM	91	55.8	76	70.8
10:31:06 AM	89.7	54.8	76.3	69.8
10:32:06 AM	96.9	63.6	73.4	69.7

DouglasKim+Associates,LLC

CONSTRUCTION NOISE CALCULATIONS

Noise emissions of industry sources

Source name	Size m/m²	Reference	Level Day dB(A)	Corrections Cwall dB	 CI dB	 CT dB
Construction Site	11613 m²	Lw/unit	109.7	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Level Day dB(A)	Conflict Day dB
1	Residences - Blue Canyon Drive	11372302.82 3778546.61	North east	GF	198.38	-	53.5	-
2	Residences - Kelsey Street	11372243.21 3778743.93	West	GF	179.03	-	56.0	-
3	Residences - Picturesque Drive	11372185.38 3778522.06	South west	GF	211.97	-	35.2	-
4	Studio City Inn	11371960.22 3778764.59	South west	GF	186.84	-	40.6	-

Contribution levels of the receivers

Source name		Level Day dB(A)
Residences - Blue Canyon Drive	GF	53.5
Construction Site		53.5
Residences - Kelsey Street	GF	56.0
Construction Site		56.0
Residences - Picturesque Drive	GF	35.2
Construction Site		35.2
Studio City Inn	GF	40.6
Construction Site		40.6

Mean propagation

Source	Source type	Time slice	L'w dB(A)	Lw dB(A)	KI dB	KT dB	DΩ dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Amisc dB	ADI dB	dLrefl dB	Ls dB(A)	Cmet dB	dLw dB	ZR dB	Lr dB(A)
Residences - Blue Canyon Drive , GF																				
Construction S	Area	Day	69.0	109.7	0.0	0.0	3.0	139.3(	-53.9	-2.7	-2.4	-0.3	0.0	0.0	0.1	53.5	0.0	0.0	0.0	53.5
		Night	69.0	109.7	0.0	0.0	3.0	139.3(	-53.9	-2.7	-2.4	-0.3	0.0	0.0	0.1	53.5	0.0	0.0	0.0	0.0
Residences - Kelsey Street , GF																				
Construction S	Area	Day	69.0	109.7	0.0	0.0	3.0	112.65	-52.0	-3.3	-1.1	-0.2	0.0	0.0	0.0	56.1	0.0	0.0	0.0	56.0
		Night	69.0	109.7	0.0	0.0	3.0	112.65	-52.0	-3.3	-1.1	-0.2	0.0	0.0	0.0	56.1	0.0	0.0	0.0	0.0
Residences - Picturesque Drive , GF																				
Construction S	Area	Day	69.0	109.7	0.0	0.0	3.0	164.55	-55.3	-3.7	-19.2	-0.3	0.0	0.0	1.1	35.2	0.0	0.0	0.0	35.2
		Night	69.0	109.7	0.0	0.0	3.0	164.55	-55.3	-3.7	-19.2	-0.3	0.0	0.0	1.1	35.2	0.0	0.0	0.0	0.0
Studio City Inn , GF																				
Construction S	Area	Day	69.0	109.7	0.0	0.0	3.0	196.05	-56.8	-4.6	-12.9	-0.4	0.0	0.0	2.5	40.6	0.0	0.0	0.0	40.6
		Night	69.0	109.7	0.0	0.0	3.0	196.05	-56.8	-4.6	-12.9	-0.4	0.0	0.0	2.5	40.6	0.0	0.0	0.0	0.0


11611 Ventura Boulevard
Kelsey St
Kelsey St
Kelsey St
Los Angeles River
Colfax Ave
Ventura Blvd
Ventura Blvd
Ventura Blvd
Ventura Blvd
Ventura Blvd
Buena Park Dr
Laurelwood Dr
Picturesque Dr
Blue Canyon Dr
1 40.6
1 56.0
1 35.2
1 53.5
Signs and symbols
Building
Analyzed Sensitive Receptor
Construction Site
1 : 136
0 25 50 100 150 200
feet
DouglasKim+Associates,LLC

11611 Ventura Boulevard

Signs and symbols

Building

Construction Site

Levels in dB(A)

< 24
24 - 28
28 - 32
32 - 36
36 - 40
40 - 44
44 - 48
48 - 52
52 - 56
56 - 60
60 - 64
64 - 68
68 - 72
>= 72

1 : 136

0 25 50 100 150 200 feet

DouglasKim+Associates,LLC

Construction Noise Impacts

Reference	15.24	meter
Sound Pressure Level (Lp)	75.0	dBA
Sound Power Level (Lw)	109.7	dB

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
Residences - Blue Canyon Rd.	64.5	53.5	64.8	0.3	**No**
Residences - Kelsey St.	53.3	56.0	57.9	4.6	**No**
Residences - Picturesque Dr.	57.2	35.2	57.2	0.0	**No**
Studio City Inn	69.9	40.6	69.9	0.0	**No**

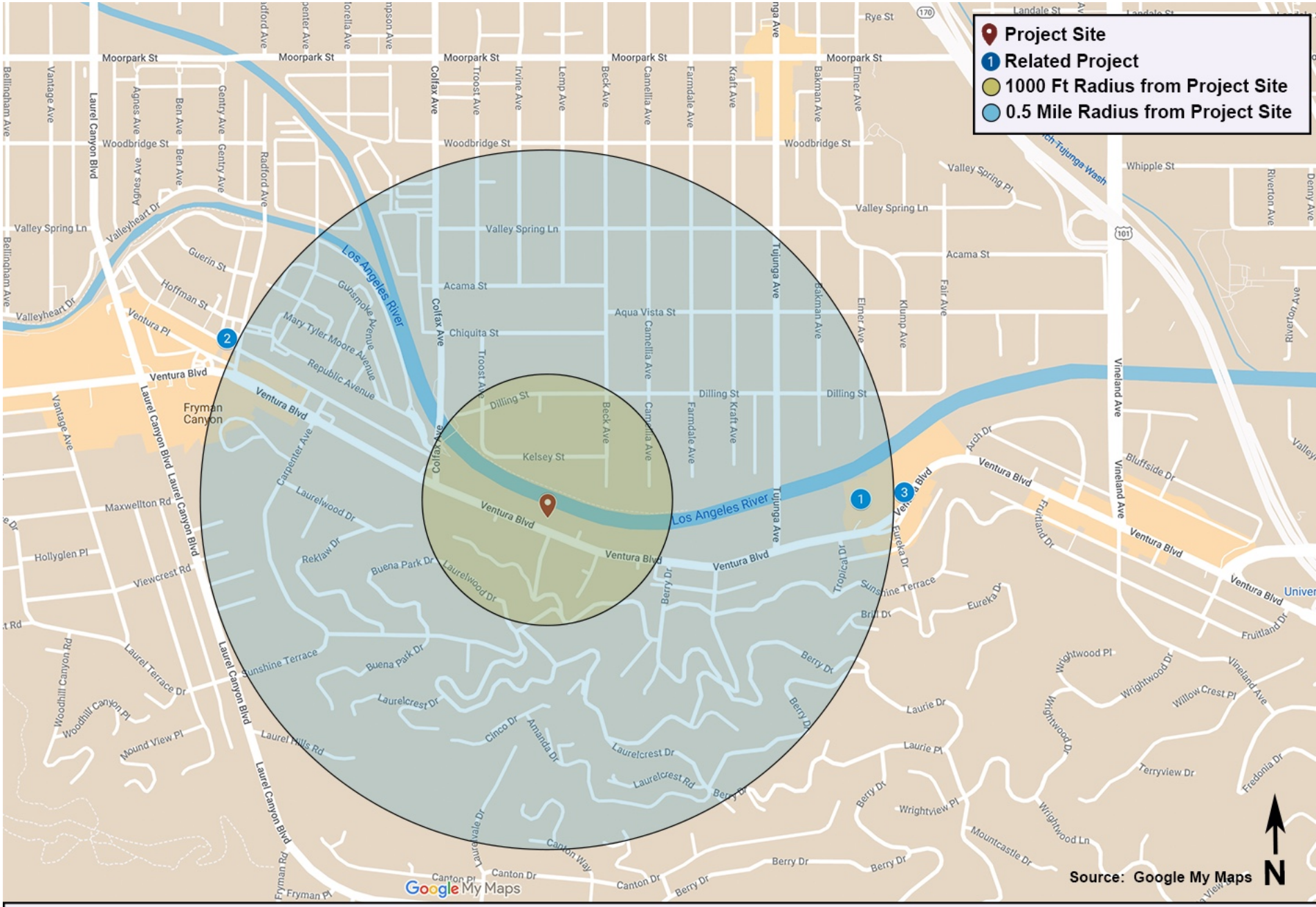
OFF-SITE CONSTRUCTION-RELATED TRAVEL VOLUMES

Construction Phase	Worker Trips	Vendor Trips	Haul Trips	Total	% of Traffic Volumes
Demolition	12.5	0.0	43.9	56.4	2.6%
Site Preparation	7.5	0.0	3.2	10.7	0.5%
Grading	10.0	0.0	302.4	312.4	14.6%
Trenching	2.5	0.0		2.5	0.1%
Building Construction	168.0	115.3		283.3	13.3%
Paving	15.0	0.0		15.0	0.7%
Architectural Coatings	33.6	0.0		33.6	1.6%
Haul trips represent heavy-duty truck trips with a 19.1 Passenger Car Equivalent applied; Vendor trips are an even split of medium- and heav					

2,137 Traffic Volumes on Ventura Boulevard at Colfax Avenue in the peak A.M. hour

DouglasKim+Associates,LLC

CUMULATIVE PROJECTS



DouglasKim+Associates,LLC

DouglasKim+Associates,LLC

CUMULATIVE CONSTRUCTION NOISE IMPACTS

Noise emissions of industry sources

Source name	Size m/m²	Reference	Level Day dB(A)	Corrections Cwall dB	 CI dB	 CT dB
Construction Site	11613 m²	Lw/unit	109.7	-	-	-
Related Project - 4021 Radford Ave.	1661 m²	Lw/unit	109.7	-	-	-
Related Project - 11331 Ventura Bl.	11878 m²	Lw/unit	109.7	-	-	-
Related Project - 11263 Ventura Bl.	8689 m²	Lw/unit	109.7	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Level Day dB(A)	Conflict Day dB
1	Residences - Blue Canyon Drive	11372302.82	3778546.61	North east	GF	198.38	-	53.8	-
2	Residences - Kelsey Street	11372243.21	3778743.93	West	GF	179.03	-	56.1	-
3	Residences - Picturesque Drive	11372185.38	3778522.06	South west	GF	211.97	-	35.5	-
4	Studio City Inn	11371960.22	3778764.59	South west	GF	186.84	-	40.8	-

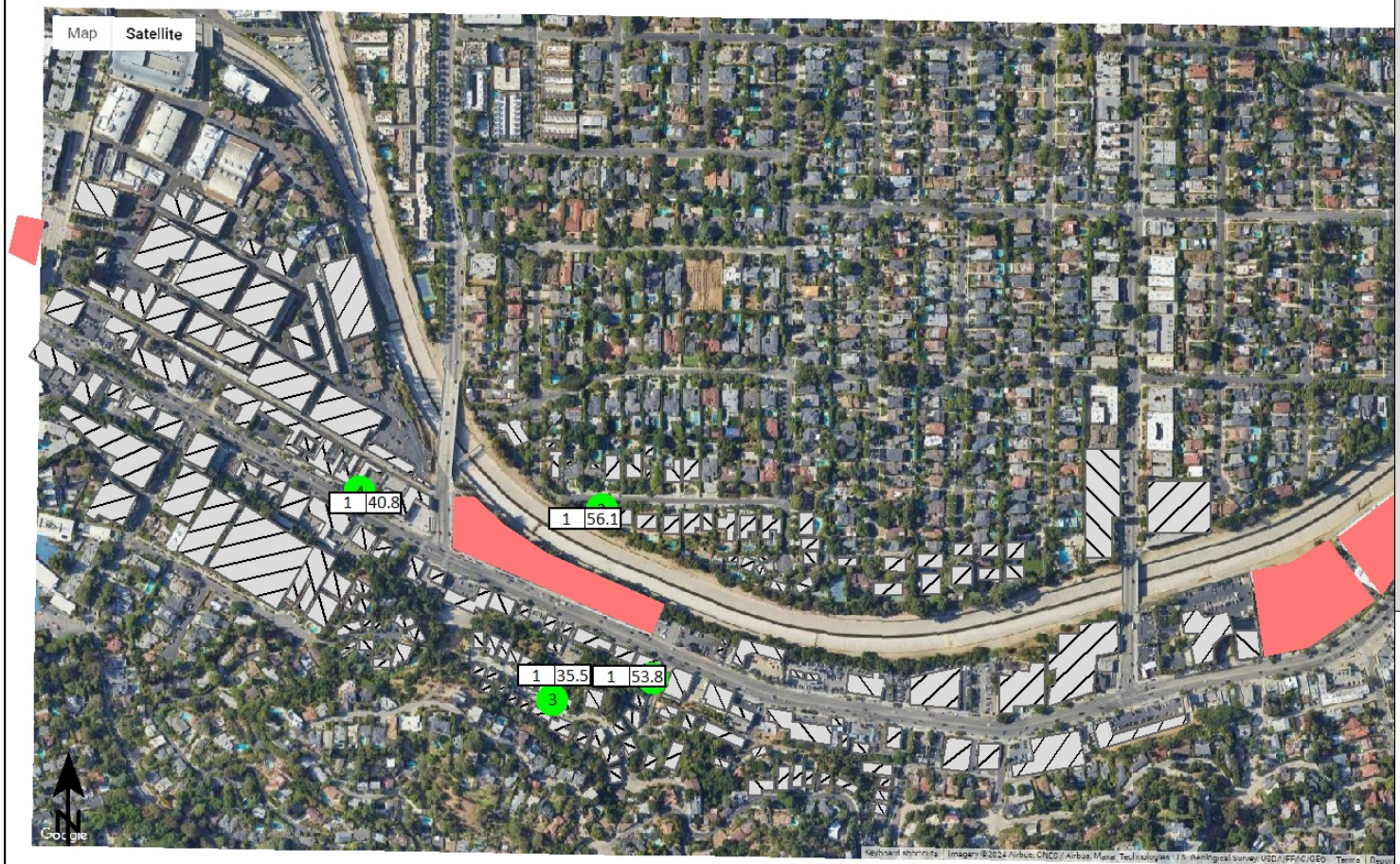
Contribution levels of the receivers

Source name		Level Day dB(A)
Residences - Blue Canyon Drive	GF	53.8
Construction Site		53.5
Related Project - 4021 Radford Ave.		36.0
Related Project - 11263 Ventura Bl.		36.7
Related Project - 11331 Ventura Bl.		37.7
Residences - Kelsey Street	GF	56.1
Construction Site		56.0
Related Project - 4021 Radford Ave.		36.1
Related Project - 11263 Ventura Bl.		16.2
Related Project - 11331 Ventura Bl.		17.2
Residences - Picturesque Drive	GF	35.5
Construction Site		34.9
Related Project - 4021 Radford Ave.		21.9
Related Project - 11263 Ventura Bl.		21.2
Related Project - 11331 Ventura Bl.		21.7
Studio City Inn	GF	40.8
Construction Site		40.5
Related Project - 4021 Radford Ave.		27.9
Related Project - 11263 Ventura Bl.		19.9
Related Project - 11331 Ventura Bl.		20.4

Mean propagation

Source	Source type	Time slice	L'w	Lw	KI	KT	DΩ	S	Adiv	Agr	Abar	Aatm	Amisc	ADI	dLrefl	Ls	Cmet	dLother/dE	dLw	ZR	Lr
			dB(A)	dB(A)	dB	dB	dB	m	dB	dB	dB	dB	dB	dB	dB	dB(A)	dB		dB	dB	dB(A)
Residences - Kelsey Street , GF																					
1	Area	Day	69.0	109.7	0.0	0.0	3.0	112.66	-52.0	-3.3	-1.2	-0.2	0.0	0.0	0.0	56.0	0.0	-1.0	0.0	0.0	56.0
1		Night	69.0	109.7	0.0	0.0	3.0	112.66	-52.0	-3.3	-1.2	-0.2	0.0	0.0	0.0	56.0	0.0	-1057.0	0.0	0.0	0.0
4		Day	77.5	109.7	0.0	0.0	3.0	742.73	-68.4	-4.8	-2.0	-1.4	0.0	0.0	0.0	36.1	0.0	-1.0	0.0	0.0	36.1
4		Night	77.5	109.7	0.0	0.0	3.0	742.73	-68.4	-4.8	-2.0	-1.4	0.0	0.0	0.0	36.1	0.0	-1037.1	0.0	0.0	0.0
2		Day	70.3	109.7	0.0	0.0	3.0	926.93	-70.3	-4.8	-19.6	-1.8	0.0	0.0	0.0	16.2	0.0	-1.0	0.0	0.0	16.2
2		Night	70.3	109.7	0.0	0.0	3.0	926.93	-70.3	-4.8	-19.6	-1.8	0.0	0.0	0.0	16.2	0.0	-1017.2	0.0	0.0	0.0
3		Day	69.0	109.7	0.0	0.0	3.0	827.25	-69.3	-4.8	-19.8	-1.6	0.0	0.0	0.0	17.2	0.0	-1.0	0.0	0.0	17.2
3		Night	69.0	109.7	0.0	0.0	3.0	827.25	-69.3	-4.8	-19.8	-1.6	0.0	0.0	0.0	17.2	0.0	-1018.2	0.0	0.0	0.0
Residences - Blue Canyon Drive , GF																					
1	Area	Day	69.0	109.7	0.0	0.0	3.0	139.28	-53.9	-2.8	-2.4	-0.3	0.0	0.0	0.1	53.5	0.0	-1.0	0.0	0.0	53.5
1		Night	69.0	109.7	0.0	0.0	3.0	139.28	-53.9	-2.8	-2.4	-0.3	0.0	0.0	0.1	53.5	0.0	-1054.5	0.0	0.0	0.0
4		Day	77.5	109.7	0.0	0.0	3.0	894.00	-70.0	-4.5	-0.4	-1.7	0.0	0.0	0.0	36.0	0.0	-1.0	0.0	0.0	36.0
4		Night	77.5	109.7	0.0	0.0	3.0	894.00	-70.0	-4.5	-0.4	-1.7	0.0	0.0	0.0	36.0	0.0	-1037.0	0.0	0.0	0.0
2		Day	70.3	109.7	0.0	0.0	3.0	883.49	-69.9	-4.3	-0.1	-1.7	0.0	0.0	0.0	36.7	0.0	-1.0	0.0	0.0	36.7
2		Night	70.3	109.7	0.0	0.0	3.0	883.49	-69.9	-4.3	-0.1	-1.7	0.0	0.0	0.0	36.7	0.0	-1037.7	0.0	0.0	0.0
3		Day	69.0	109.7	0.0	0.0	3.0	766.05	-68.7	-4.3	-0.5	-1.5	0.0	0.0	0.0	37.7	0.0	-1.0	0.0	0.0	37.7
3		Night	69.0	109.7	0.0	0.0	3.0	766.05	-68.7	-4.3	-0.5	-1.5	0.0	0.0	0.0	37.7	0.0	-1038.7	0.0	0.0	0.0
Residences - Picturesque Drive , GF																					
1	Area	Day	69.0	109.7	0.0	0.0	3.0	164.57	-55.3	-3.7	-19.5	-0.3	0.0	0.0	1.0	34.9	0.0	-1.0	0.0	0.0	34.9
1		Night	69.0	109.7	0.0	0.0	3.0	164.57	-55.3	-3.7	-19.5	-0.3	0.0	0.0	1.0	34.9	0.0	-1035.9	0.0	0.0	0.0
4		Day	77.5	109.7	0.0	0.0	3.0	816.93	-69.2	-4.4	-18.0	-1.6	0.0	0.0	2.4	21.9	0.0	-1.0	0.0	0.0	21.9
4		Night	77.5	109.7	0.0	0.0	3.0	816.93	-69.2	-4.4	-18.0	-1.6	0.0	0.0	2.4	21.9	0.0	-1022.9	0.0	0.0	0.0
2		Day	70.3	109.7	0.0	0.0	3.0	1003.7	-71.0	-4.2	-16.6	-1.9	0.0	0.0	2.2	21.2	0.0	-1.0	0.0	0.0	21.2
2		Night	70.3	109.7	0.0	0.0	3.0	1003.7	-71.0	-4.2	-16.6	-1.9	0.0	0.0	2.2	21.2	0.0	-1022.2	0.0	0.0	0.0
3		Day	69.0	109.7	0.0	0.0	3.0	886.68	-69.9	-4.3	-17.4	-1.7	0.0	0.0	2.3	21.7	0.0	-1.0	0.0	0.0	21.7
3		Night	69.0	109.7	0.0	0.0	3.0	886.68	-69.9	-4.3	-17.4	-1.7	0.0	0.0	2.3	21.7	0.0	-1022.7	0.0	0.0	0.0
Studio City Inn , GF																					
1	Area	Day	69.0	109.7	0.0	0.0	3.0	196.06	-56.8	-4.6	-13.0	-0.4	0.0	0.0	2.6	40.5	0.0	-1.0	0.0	0.0	40.5
1		Night	69.0	109.7	0.0	0.0	3.0	196.06	-56.8	-4.6	-13.0	-0.4	0.0	0.0	2.6	40.5	0.0	-1041.5	0.0	0.0	0.0
4		Day	77.5	109.7	0.0	0.0	3.0	488.49	-64.8	-4.8	-14.3	-0.9	0.0	0.0	0.0	27.9	0.0	-1.0	0.0	0.0	27.9
4		Night	77.5	109.7	0.0	0.0	3.0	488.49	-64.8	-4.8	-14.3	-0.9	0.0	0.0	0.0	27.9	0.0	-1028.9	0.0	0.0	0.0
2		Day	70.3	109.7	0.0	0.0	3.0	1210.3	-72.7	-4.7	-13.1	-2.3	0.0	0.0	0.0	19.9	0.0	-1.0	0.0	0.0	19.9
2		Night	70.3	109.7	0.0	0.0	3.0	1210.3	-72.7	-4.7	-13.1	-2.3	0.0	0.0	0.0	19.9	0.0	-1020.9	0.0	0.0	0.0
3		Day	69.0	109.7	0.0	0.0	3.0	1110.9	-71.9	-4.7	-13.6	-2.1	0.0	0.0	0.0	20.4	0.0	-1.0	0.0	0.0	20.4
3		Night	69.0	109.7	0.0	0.0	3.0	1110.9	-71.9	-4.7	-13.6	-2.1	0.0	0.0	0.0	20.4	0.0	-1021.4	0.0	0.0	0.0

11611 Ventura Boulevard



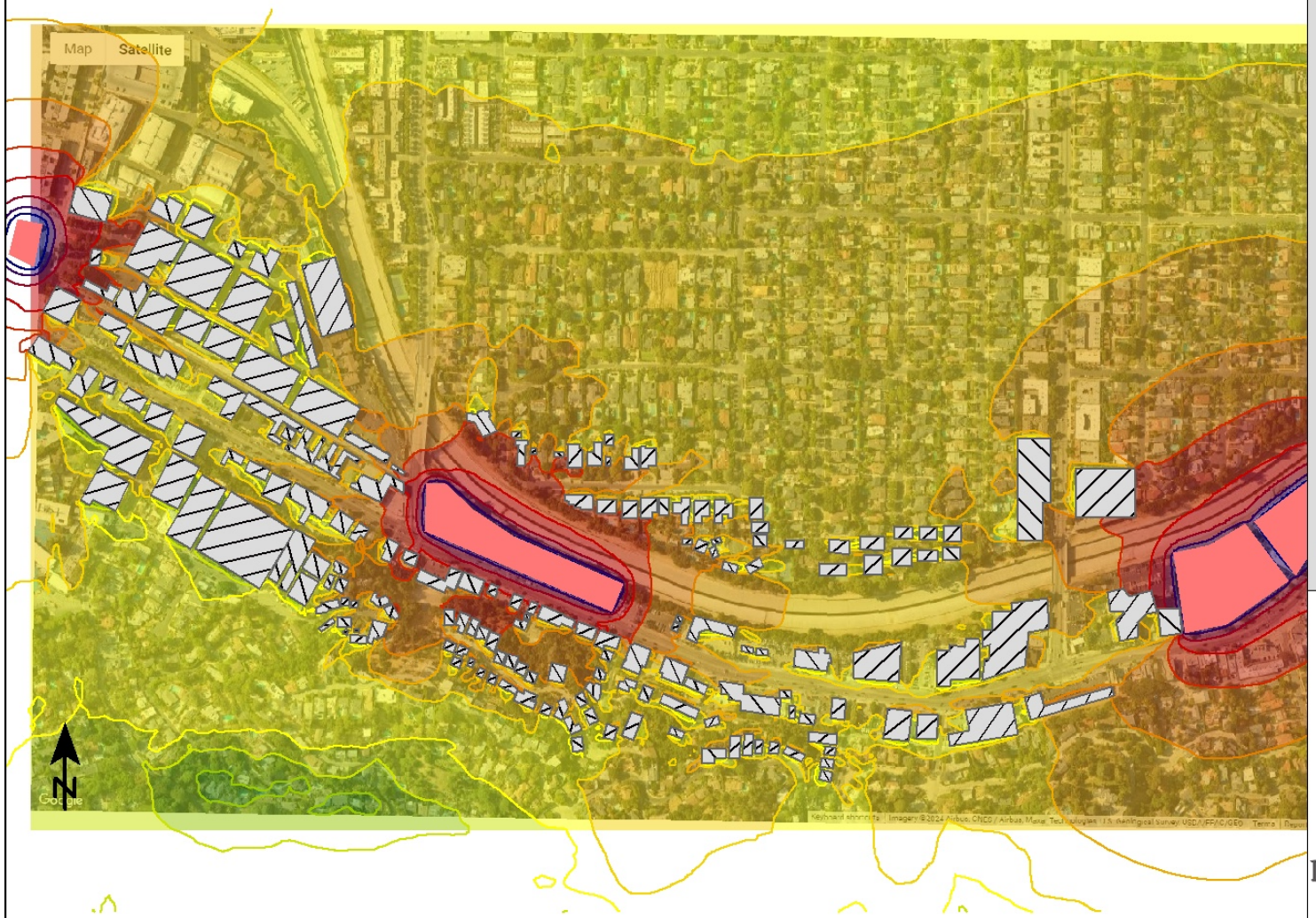
Signs and symbols

- Building
- Analyzed Sensitive Receptor
- Construction Site

1 : 596

0 125 250 500 750 1000 feet

DouglasKim+Associates,LLC



11611 Ventura Boulevard

Signs and symbols

Building

Construction Site

Levels in dB(A)

< 24
24 - 28
28 - 32
32 - 36
36 - 40
40 - 44
44 - 48
48 - 52
52 - 56
56 - 60
60 - 64
64 - 68
68 - 72
>= 72

1 : 596

0 125 250 500 750 1000 feet

DouglasKim+Associates,LLC

Cumulative Construction Noise Impacts

DouglasKim+Associates,LLC

Reference	15.24	meter
Sound Pressure Level (Lp)	75.0	dBA
Sound Power Level (Lw)	109.7	dB

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
Residences - Blue Canyon Rd.	64.5	53.8	64.9	0.4	**No**
Residences - Kelsey St.	53.3	56.1	57.9	4.6	**No**
Residences - Picturesque Dr.	57.2	35.5	57.2	0.0	**No**
Studio City Inn	69.9	40.8	69.9	0.0	**No**

Note: Sound Power Level (Lw) assumes full sphere propagation

APPENDIX E – AIR QUALITY MODELING RESULTS

DouglasKim+Associates,LLC

FUTURE EMISSIONS

11611 Ventura Boulevard (Future) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	11611 Ventura Boulevard (Future)
Construction Start Date	2/1/2025
Operational Year	2027
Lead Agency	City of Los Angeles
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	23.8
Location	11611 Ventura Blvd, Studio City, CA 91604, USA
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3832
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Congregate Care (Assisted Living)	140	Dwelling Unit	1.41	135,454	3,875	—	273	—
Retirement Community	59.0	Dwelling Unit	1.00	68,826	3,000	—	115	—
Enclosed Parking with Elevator	146	Space	0.00	58,400	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	6.27	40.3	35.6	0.14	1.29	7.26	8.55	1.20	2.45	3.65
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	6.27	18.9	33.5	0.04	0.65	3.09	3.74	0.59	0.74	1.32
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	4.12	12.5	22.6	0.03	0.42	2.12	2.53	0.38	0.58	0.94
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	2.27	4.12	0.01	0.08	0.39	0.46	0.07	0.11	0.17

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—
2025	2.93	40.3	32.1	0.14	1.29	7.26	8.55	1.20	2.45	3.65
2026	6.27	18.7	35.6	0.04	0.65	3.09	3.74	0.59	0.74	1.32
2027	6.17	18.0	34.5	0.04	0.58	3.09	3.67	0.53	0.74	1.27
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—
2025	2.18	17.2	23.9	0.04	0.60	2.49	2.97	0.56	0.59	1.03
2026	6.27	18.9	33.5	0.04	0.65	3.09	3.74	0.59	0.74	1.32
2027	6.15	18.3	32.5	0.04	0.58	3.09	3.67	0.53	0.74	1.27
Average Daily	—	—	—	—	—	—	—	—	—	—
2025	1.36	12.1	15.3	0.03	0.39	2.08	2.47	0.36	0.58	0.94
2026	4.12	12.5	22.6	0.03	0.42	2.12	2.53	0.38	0.50	0.88
2027	2.62	9.21	17.0	0.02	0.28	1.78	2.06	0.25	0.42	0.68
Annual	—	—	—	—	—	—	—	—	—	—
2025	0.25	2.20	2.79	0.01	0.07	0.38	0.45	0.07	0.11	0.17
2026	0.75	2.27	4.12	0.01	0.08	0.39	0.46	0.07	0.09	0.16
2027	0.48	1.68	3.10	< 0.005	0.05	0.32	0.38	0.05	0.08	0.12

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—
2025	2.93	40.3	32.1	0.14	1.29	7.26	8.55	1.20	2.45	3.65

2026	6.27	18.7	35.6	0.04	0.65	3.09	3.74	0.59	0.74	1.32
2027	6.17	18.0	34.5	0.04	0.58	3.09	3.67	0.53	0.74	1.27
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—
2025	2.18	17.2	23.9	0.04	0.60	2.49	2.97	0.56	0.59	1.03
2026	6.27	18.9	33.5	0.04	0.65	3.09	3.74	0.59	0.74	1.32
2027	6.15	18.3	32.5	0.04	0.58	3.09	3.67	0.53	0.74	1.27
Average Daily	—	—	—	—	—	—	—	—	—	—
2025	1.36	12.1	15.3	0.03	0.39	2.08	2.47	0.36	0.58	0.94
2026	4.12	12.5	22.6	0.03	0.42	2.12	2.53	0.38	0.50	0.88
2027	2.62	9.21	17.0	0.02	0.28	1.78	2.06	0.25	0.42	0.68
Annual	—	—	—	—	—	—	—	—	—	—
2025	0.25	2.20	2.79	0.01	0.07	0.38	0.45	0.07	0.11	0.17
2026	0.75	2.27	4.12	0.01	0.08	0.39	0.46	0.07	0.09	0.16
2027	0.48	1.68	3.10	< 0.005	0.05	0.32	0.38	0.05	0.08	0.12

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	8.00	2.21	27.6	0.03	0.10	2.88	2.98	0.10	0.73	0.83
Mit.	7.98	1.88	27.5	0.03	0.07	2.88	2.95	0.07	0.73	0.80
% Reduced	< 0.5%	15%	1%	6%	27%	—	1%	27%	—	3%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	6.57	2.19	12.9	0.03	0.09	2.88	2.97	0.09	0.73	0.82
Mit.	6.55	1.86	12.8	0.03	0.06	2.88	2.94	0.07	0.73	0.80

% Reduced	< 0.5%	15%	1%	7%	30%	—	1%	29%	—	3%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	7.51	2.06	22.6	0.03	0.08	2.84	2.91	0.08	0.72	0.80
Mit.	7.49	1.72	22.4	0.03	0.05	2.84	2.89	0.05	0.72	0.77
% Reduced	< 0.5%	16%	1%	7%	35%	—	1%	35%	—	3%
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	1.37	0.38	4.12	0.01	0.01	0.52	0.53	0.01	0.13	0.15
Mit.	1.37	0.31	4.09	0.01	0.01	0.52	0.53	0.01	0.13	0.14
% Reduced	< 0.5%	16%	1%	7%	35%	—	1%	35%	—	3%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	1.82	1.17	13.4	0.03	0.02	2.89	2.91	0.02	0.73	0.75
Area	6.14	0.38	13.9	< 0.005	0.03	—	0.03	0.03	—	0.03
Energy	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Total	8.00	2.21	27.6	0.03	0.10	2.88	2.98	0.10	0.73	0.83
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	1.80	1.28	12.5	0.03	0.02	2.89	2.91	0.02	0.73	0.75
Area	4.74	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02

Energy	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Total	6.57	2.19	12.9	0.03	0.09	2.88	2.97	0.09	0.73	0.82
Average Daily	—	—	—	—	—	—	—	—	—	—
Mobile	1.78	1.29	12.8	0.03	0.02	2.84	2.86	0.02	0.72	0.74
Area	5.69	0.11	9.49	< 0.005	0.01	—	0.01	0.01	—	0.01
Energy	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Total	7.51	2.06	22.6	0.03	0.08	2.84	2.91	0.08	0.72	0.80
Annual	—	—	—	—	—	—	—	—	—	—
Mobile	0.33	0.23	2.33	0.01	< 0.005	0.52	0.52	< 0.005	0.13	0.14
Area	1.04	0.02	1.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	0.01	0.13	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Total	1.37	0.38	4.12	0.01	0.01	0.52	0.53	0.01	0.13	0.15

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	1.82	1.17	13.4	0.03	0.02	2.89	2.91	0.02	0.73	0.75
Area	6.14	0.38	13.9	< 0.005	0.03	—	0.03	0.03	—	0.03
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Total	7.98	1.88	27.5	0.03	0.07	2.88	2.95	0.07	0.73	0.80
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	1.80	1.28	12.5	0.03	0.02	2.89	2.91	0.02	0.73	0.75
Area	4.74	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Total	6.55	1.86	12.8	0.03	0.06	2.88	2.94	0.07	0.73	0.80
Average Daily	—	—	—	—	—	—	—	—	—	—
Mobile	1.78	1.29	12.8	0.03	0.02	2.84	2.86	0.02	0.72	0.74
Area	5.69	0.11	9.49	< 0.005	0.01	—	0.01	0.01	—	0.01
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—

Vegetation	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Total	7.49	1.72	22.4	0.03	0.05	2.84	2.89	0.05	0.72	0.77
Annual	—	—	—	—	—	—	—	—	—	—
Mobile	0.33	0.23	2.33	0.01	< 0.005	0.52	0.52	< 0.005	0.13	0.14
Area	1.04	0.02	1.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Total	1.37	0.31	4.09	0.01	0.01	0.52	0.53	0.01	0.13	0.14

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	13.9	15.1	0.02	0.57	—	0.57	0.52	—	0.52
Demolition	—	—	—	—	—	1.11	1.11	—	0.17	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.56	1.69	< 0.005	0.06	—	0.06	0.06	—	0.06

Demolition	—	—	—	—	—	0.12	0.12	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.29	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01
Demolition	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.74	0.00	0.00	0.16	0.16	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	3.26	1.13	0.02	0.04	0.75	0.78	0.04	0.20	0.24
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.37	0.13	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	13.9	15.1	0.02	0.57	—	0.57	0.52	—	0.52
Demolition	—	—	—	—	—	1.11	1.11	—	0.17	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.56	1.69	< 0.005	0.06	—	0.06	0.06	—	0.06
Demolition	—	—	—	—	—	0.12	0.12	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.29	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01
Demolition	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.74	0.00	0.00	0.16	0.16	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	3.26	1.13	0.02	0.04	0.75	0.78	0.04	0.20	0.24
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.37	0.13	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03

Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43
Dust From Material Movement	—	—	—	—	—	0.62	0.62	—	0.07	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.65	0.66	< 0.005	0.03	—	0.03	0.03	—	0.03
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.12	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005

Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.16	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43

Dust From Material Movement	—	—	—	—	—	0.62	0.62	—	0.07	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.65	0.66	< 0.005	0.03	—	0.03	0.03	—	0.03
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.12	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.16	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59
Dust From Material Movement	—	—	—	—	—	2.78	2.78	—	1.34	1.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.70	1.75	< 0.005	0.08	—	0.08	0.07	—	0.07
Dust From Material Movement	—	—	—	—	—	0.33	0.33	—	0.16	0.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.31	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01

Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.70	0.00	0.00	0.13	0.13	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	15.1	5.39	0.09	0.17	3.60	3.77	0.17	0.98	1.16
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.92	0.65	0.01	0.02	0.43	0.45	0.02	0.12	0.14
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.35	0.12	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59

Dust From Material Movement	—	—	—	—	—	2.78	2.78	—	1.34	1.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.70	1.75	< 0.005	0.08	—	0.08	0.07	—	0.07
Dust From Material Movement	—	—	—	—	—	0.33	0.33	—	0.16	0.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.31	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.70	0.00	0.00	0.13	0.13	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	15.1	5.39	0.09	0.17	3.60	3.77	0.17	0.98	1.16
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.92	0.65	0.01	0.02	0.43	0.45	0.02	0.12	0.14

Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.35	0.12	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	4.44	4.96	0.01	0.17	—	0.17	0.16	—	0.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.81	0.91	< 0.005	0.03	—	0.03	0.03	—	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Worker	0.72	0.73	11.7	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.11	0.54	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.81	9.90	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.16	0.55	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.36	4.35	0.00	0.00	0.90	0.90	0.00	0.21	0.21
Vendor	0.01	0.49	0.23	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.79	0.00	0.00	0.17	0.17	0.00	0.04	0.04
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	4.44	4.96	0.01	0.17	—	0.17	0.16	—	0.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.81	0.91	< 0.005	0.03	—	0.03	0.03	—	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.73	11.7	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.11	0.54	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.81	9.90	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.16	0.55	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.36	4.35	0.00	0.00	0.90	0.90	0.00	0.21	0.21
Vendor	0.01	0.49	0.23	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.79	0.00	0.00	0.17	0.17	0.00	0.04	0.04
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	7.22	8.40	0.02	0.26	—	0.26	0.24	—	0.24
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.32	1.53	< 0.005	0.05	—	0.05	0.04	—	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.65	10.8	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.06	0.51	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.73	9.25	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.11	0.53	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.57	6.91	0.00	0.00	1.54	1.54	0.00	0.36	0.36
Vendor	0.02	0.80	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.26	0.00	0.00	0.28	0.28	0.00	0.07	0.07
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.84	7.22	8.40	0.02	0.26	—	0.26	0.24	—	0.24
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.32	1.53	< 0.005	0.05	—	0.05	0.04	—	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.65	10.8	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.06	0.51	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.73	9.25	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.11	0.53	0.01	0.01	0.26	0.28	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.57	6.91	0.00	0.00	1.54	1.54	0.00	0.36	0.36
Vendor	0.02	0.80	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.26	0.00	0.00	0.28	0.28	0.00	0.07	0.07
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.34	7.65	0.02	0.21	—	0.21	0.19	—	0.19
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.16	1.40	< 0.005	0.04	—	0.04	0.04	—	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.58	10.1	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.02	0.48	0.01	0.01	0.26	0.27	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.72	8.54	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.06	0.49	0.01	0.01	0.26	0.27	0.01	0.07	0.08

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.47	5.87	0.00	0.00	1.41	1.41	0.00	0.33	0.33
Vendor	0.02	0.69	0.32	< 0.005	< 0.005	0.17	0.17	< 0.005	0.05	0.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	1.07	0.00	0.00	0.26	0.26	0.00	0.06	0.06
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.34	7.65	0.02	0.21	—	0.21	0.19	—	0.19
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	1.16	1.40	< 0.005	0.04	—	0.04	0.04	—	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.58	10.1	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.02	0.48	0.01	0.01	0.26	0.27	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.72	8.54	0.00	0.00	2.19	2.19	0.00	0.51	0.51
Vendor	0.03	1.06	0.49	0.01	0.01	0.26	0.27	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.47	5.87	0.00	0.00	1.41	1.41	0.00	0.33	0.33
Vendor	0.02	0.69	0.32	< 0.005	< 0.005	0.17	0.17	< 0.005	0.05	0.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	1.07	0.00	0.00	0.26	0.26	0.00	0.06	0.06
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23
Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23
Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.16	4.41	0.01	0.13	—	0.13	0.12	—	0.12
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.58	0.80	< 0.005	0.02	—	0.02	0.02	—	0.02
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.97	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23
Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23
Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.16	4.41	0.01	0.13	—	0.13	0.12	—	0.12

Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.58	0.80	< 0.005	0.02	—	0.02	0.02	—	0.02
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.97	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	5.74	8.20	0.01	0.23	—	0.23	0.21	—	0.21
Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	5.74	8.20	0.01	0.23	—	0.23	0.21	—	0.21
Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.35	1.93	< 0.005	0.05	—	0.05	0.05	—	0.05
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.25	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	5.74	8.20	0.01	0.23	—	0.23	0.21	—	0.21
Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	5.74	8.20	0.01	0.23	—	0.23	0.21	—	0.21

Paving	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.35	1.93	< 0.005	0.05	—	0.05	0.05	—	0.05
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.25	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.56	0.74	< 0.005	0.02	—	0.02	0.01	—	0.01
Architectural Coatings	2.27	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Architectural Coatings	0.41	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.13	2.17	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.15	1.85	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.27	0.00	0.00	0.28	0.28	0.00	0.07	0.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.56	0.74	< 0.005	0.02	—	0.02	0.01	—	0.01
Architectural Coatings	2.27	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	0.41	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.13	2.17	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.15	1.85	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.27	0.00	0.00	0.28	0.28	0.00	0.07	0.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.29	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01
Architectural Coatings	1.23	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	0.22	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	2.02	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.14	1.71	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.64	0.00	0.00	0.15	0.15	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.47	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.29	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01
Architectural Coatings	1.23	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Architectural Coatings	0.22	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	2.02	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.14	1.71	0.00	0.00	0.44	0.44	0.00	0.10	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.64	0.00	0.00	0.15	0.15	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Trenching (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.19	1.29	1.45	< 0.005	0.06	—	0.06	0.05	—	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.29	1.45	< 0.005	0.06	—	0.06	0.05	—	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.54	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Trenching (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.29	1.45	< 0.005	0.06	—	0.06	0.05	—	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.29	1.45	< 0.005	0.06	—	0.06	0.05	—	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.54	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Retirement Community	0.02	0.34	0.14	< 0.005	0.03	—	0.03	0.03	—	0.03
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Retirement Community	0.02	0.34	0.14	< 0.005	0.03	—	0.03	0.03	—	0.03
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.04	0.69	0.29	< 0.005	0.06	—	0.06	0.06	—	0.06
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01
Retirement Community	< 0.005	0.06	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.01	0.13	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Retirement Community	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Retirement Community	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01
Retirement Community	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02
Consumer Products	4.37	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.35	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.41	0.13	13.8	< 0.005	0.01	—	0.01	0.01	—	0.01
Total	6.14	0.38	13.9	< 0.005	0.03	—	0.03	0.03	—	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02
Consumer Products	4.37	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.35	—	—	—	—	—	—	—	—	—
Total	4.74	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02
Annual	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Consumer Products	0.80	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.02	1.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Total	1.04	0.02	1.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02
Consumer Products	4.37	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.35	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.41	0.13	13.8	< 0.005	0.01	—	0.01	0.01	—	0.01
Total	6.14	0.38	13.9	< 0.005	0.03	—	0.03	0.03	—	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02
Consumer Products	4.37	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.35	—	—	—	—	—	—	—	—	—
Total	4.74	0.25	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02
Annual	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Consumer Products	0.80	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.02	1.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Total	1.04	0.02	1.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—

Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—

Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	—	—	—
Retirement Community	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Texas Privet	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	> -0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005

Citrus	0.00	0.00	—	> -0.005	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	< 0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Coast Live Oak	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Chinese Pistache	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005
Sequestered	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—	—	—	—

Box	—	—	—	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	—	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coast Live Oak	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Pistache	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	—	-0.02	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
—	—	—	—	—	—	—	—	—	—	—
Total	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—

Texas Privet	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	> -0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	0.00	0.00	—	> -0.005	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	< 0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Coast Live Oak	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Chinese Pistache	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005
Sequestered	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—	—	—	—

Aleppo Pine	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	—	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coast Live Oak	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Pistache	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	—	-0.02	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
—	—	—	—	—	—	—	—	—	—	—
Total	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005

Annual	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Texas Privet	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	> -0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	0.00	0.00	—	> -0.005	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	< 0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Coast Live Oak	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Chinese Pistache	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Sequestered	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—	—	—	—

Shamel Ash	—	—	—	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	—	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coast Live Oak	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Pistache	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005

—	—	—	—	—	—	—	—	—	—	—
Total	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Texas Privet	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	> -0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	0.00	0.00	—	> -0.005	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	< 0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Coast Live Oak	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Chinese Pistache	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005
Sequestered	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—	—	—	—

Indian Laurel Fig	—	—	—	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	—	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coast Live Oak	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005

Bay Laurel	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Pistache	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	—	-0.02	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
—	—	—	—	—	—	—	—	—	—	—
Total	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Texas Privet	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	> -0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	0.00	0.00	—	> -0.005	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	< 0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Coast Live Oak	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Chinese Pistache	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005
Sequestered	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—	—	—	—

Peach	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	—	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Coast Live Oak	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Pistache	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	—	-0.02	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
—	—	—	—	—	—	—	—	—	—	—
Total	> -0.005	-0.02	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005
Annual	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Texas Privet	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	> -0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	0.00	0.00	—	> -0.005	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	< 0.005	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Elm	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Coast Live Oak	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	> -0.005	0.00	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Chinese Pistache	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005

Sequestered	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Texas Privet	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Peach	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexican Fan Palm	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Citrus	—	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Laurel Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Myrtle	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weeping Fig	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shamel Ash	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Chinese Elm	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aleppo Pine	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coast Live Oak	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Redbud	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Box	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Bay Laurel	—	> -0.005	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinese Pistache	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
Subtotal	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005
—	—	—	—	—	—	—	—	—	—	—
Total	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	2/1/2025	3/31/2025	5.00	41.0	—
Site Preparation	Site Preparation	4/1/2025	4/30/2025	5.00	22.0	—
Grading	Grading	4/1/2025	5/31/2025	5.00	44.0	—
Building Construction	Building Construction	6/1/2025	11/30/2027	5.00	652	—
Paving	Paving	4/1/2026	4/30/2027	5.00	283	—
Architectural Coating	Architectural Coating	2/1/2026	6/30/2027	5.00	368	—
Trenching	Trenching	6/1/2025	12/31/2025	5.00	153	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	20.1	40.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	1.05	40.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	97.0	40.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	168	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	30.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	33.6	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	20.1	40.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	1.05	40.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	97.0	40.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	168	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	30.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	33.6	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	413,667	137,889	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	3,300	—
Site Preparation	—	182	33.0	0.00	—
Grading	—	34,130	44.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Congregate Care (Assisted Living)	—	0%
Retirement Community	—	0%

Enclosed Parking with Elevator	1.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	690	0.05	0.01
2026	0.00	690	0.05	0.01
2027	0.00	690	0.05	0.01

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	607	607	607	221,555	4,070	4,070	4,070	1,485,550

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	607	607	607	221,555	4,070	4,070	4,070	1,485,550

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Congregate Care (Assisted Living)	—
Wood Fireplaces	0

Gas Fireplaces	10
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	130
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Retirement Community	—
Wood Fireplaces	0
Gas Fireplaces	5
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	54
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Congregate Care (Assisted Living)	—
Wood Fireplaces	0
Gas Fireplaces	10
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	130

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Retirement Community	—
Wood Fireplaces	0
Gas Fireplaces	5
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	54
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
413667	137,889	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	459,689	690	0.0489	0.0069	1,389,550
Retirement Community	211,171	690	0.0489	0.0069	1,335,925
Enclosed Parking with Elevator	215,580	690	0.0489	0.0069	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	459,689	690	0.0489	0.0069	1,389,550
Retirement Community	213,476	690	0.0489	0.0069	0.00
Enclosed Parking with Elevator	215,580	690	0.0489	0.0069	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Congregate Care (Assisted Living)	5,218,332	66,422
Retirement Community	2,199,154	51,423
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Congregate Care (Assisted Living)	5,218,332	66,422
Retirement Community	2,199,154	51,423
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Congregate Care (Assisted Living)	249	—
Retirement Community	105	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Congregate Care (Assisted Living)	249	—
Retirement Community	105	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Congregate Care (Assisted Living)	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00
Retirement Community	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Retirement Community	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Congregate Care (Assisted Living)	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00
Retirement Community	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Retirement Community	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Redbud	8.00	12,105	39.0
Coast Live Oak	4.00	8,470	41.0
Box	50.0	4,962	17.0
Bay Laurel	2.00	4,249	21.0
Chinese Pistache	10.0	10,400	33.0
Mexican Fan Palm	11.0	6,513	25.0
Texas Privet	-28.0	-47,297	-152
Peach	-1.00	-1,852	-6.00
Mexican Fan Palm	-10.0	-5,920	-22.0
Citrus	-1.00	-501	-2.00
Indian Laurel Fig	-1.00	-1,006	-4.00
Common Myrtle	-1.00	-1,727	-7.00
Weeping Fig	-1.00	-1,424	-6.00
Shamel Ash	-2.00	-2,036	-6.00
Chinese Elm	-1.00	-1,683	-5.00
Aleppo Pine	-2.00	-4,374	-21.0
Coast Live Oak	-3.00	-5,889	-29.0

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Redbud	8.00	12,105	39.0

Coast Live Oak	4.00	8,470	41.0
Box	50.0	4,962	17.0
Bay Laurel	2.00	4,249	21.0
Chinese Pistache	10.0	10,400	33.0
Mexican Fan Palm	11.0	6,513	25.0
Texas Privet	-28.0	-47,297	-152
Peach	-1.00	-1,852	-6.00
Mexican Fan Palm	-10.0	-5,920	-22.0
Citrus	-1.00	-501	-2.00
Indian Laurel Fig	-1.00	-1,006	-4.00
Common Myrtle	-1.00	-1,727	-7.00
Weeping Fig	-1.00	-1,424	-6.00
Shamel Ash	-2.00	-2,036	-6.00
Chinese Elm	-1.00	-1,683	-5.00
Aleppo Pine	-2.00	-4,374	-21.0
Coast Live Oak	-3.00	-5,889	-29.0

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.0	annual days of extreme heat
Extreme Precipitation	6.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.68	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	74.1
AQ-PM	59.9
AQ-DPM	34.1
Drinking Water	83.1
Lead Risk Housing	24.7
Pesticides	0.00
Toxic Releases	67.4
Traffic	68.4
Effect Indicators	—
CleanUp Sites	0.00

Groundwater	0.00
Haz Waste Facilities/Generators	41.1
Impaired Water Bodies	58.7
Solid Waste	22.1
Sensitive Population	—
Asthma	7.66
Cardio-vascular	17.6
Low Birth Weights	37.0
Socioeconomic Factor Indicators	—
Education	30.0
Housing	71.9
Linguistic	4.59
Poverty	17.7
Unemployment	63.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	78.63467214
Employed	50.78916977
Median HI	62.22250738
Education	—
Bachelor's or higher	89.24675991
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—

Auto Access	54.54895419
Active commuting	20.5825741
Social	—
2-parent households	49.82676761
Voting	61.58090594
Neighborhood	—
Alcohol availability	19.18388297
Park access	81.35506224
Retail density	69.0619787
Supermarket access	58.7065315
Tree canopy	68.90799435
Housing	—
Homeownership	29.23136148
Housing habitability	34.73630181
Low-inc homeowner severe housing cost burden	38.53458232
Low-inc renter severe housing cost burden	14.14089568
Uncrowded housing	78.31387142
Health Outcomes	—
Insured adults	70.06287694
Arthritis	38.0
Asthma ER Admissions	88.7
High Blood Pressure	44.4
Cancer (excluding skin)	12.2
Asthma	76.7
Coronary Heart Disease	43.7
Chronic Obstructive Pulmonary Disease	68.2
Diagnosed Diabetes	80.8

Life Expectancy at Birth	19.4
Cognitively Disabled	85.7
Physically Disabled	88.8
Heart Attack ER Admissions	72.8
Mental Health Not Good	80.9
Chronic Kidney Disease	64.9
Obesity	71.5
Pedestrian Injuries	55.9
Physical Health Not Good	77.4
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	29.5
Current Smoker	81.1
No Leisure Time for Physical Activity	90.8
Climate Change Exposures	—
Wildfire Risk	0.2
SLR Inundation Area	0.0
Children	50.1
Elderly	21.7
English Speaking	98.1
Foreign-born	27.1
Outdoor Workers	93.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	33.0
Traffic Density	83.2
Traffic Access	61.4
Other Indices	—

Hardship	30.1
Other Decision Support	—
2016 Voting	59.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	27.0
Healthy Places Index Score for Project Location (b)	73.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project plans
Construction: Construction Phases	Developer information
Construction: Off-Road Equipment	—
Construction: Trips and VMT	Assumes 40-mile distance to landfill

Construction: Paving	Assumes 25 percent of site area
Operations: Hearths	Assumes up to ten gas-fueled ovens and stoves for food preparation or outdoor fire pits in the assisted living facility

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MATES V TOXIC EMISSIONS OVERVIEW

About Air Toxics Cancer Risk

Information about community profile statistics
Information about emission sources
Download PDF

Residential Air Toxics Cancer Risk at MATES Monitoring Sites

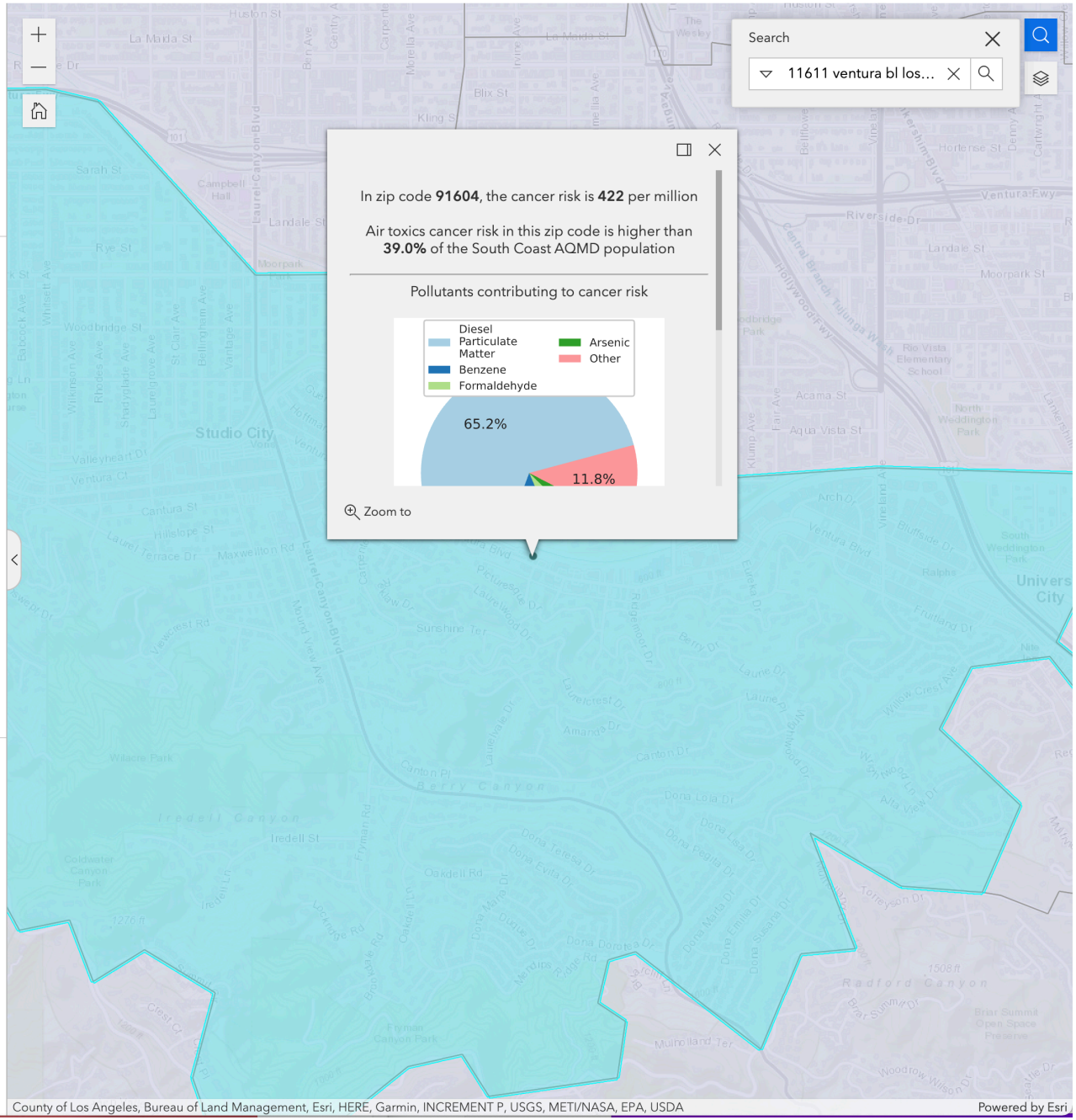
Residential Air Toxics Cancer Risk Calculated from Model Data

Cancer Risk [per million]

- 1601 - 4800
- 1451 - 1600
- 1301 - 1450
- 1151 - 1300
- 1001 - 1150
- 851 - 1000
- 701 - 850
- 551 - 700
- 401 - 550
- 251 - 400
- 101 - 250
- 0 - 100

South Coast AQMD Boundary

The air toxics cancer risk data presented in the MATES Data Visualization is calculated using a population-weighted average.



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CALENVIROSCREEN 4.0 OUTPUT

CalEnviroScreen 3.0 ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors and prevalence of certain health conditions. See the CalEnviroScreen website for more information.

Download PDF

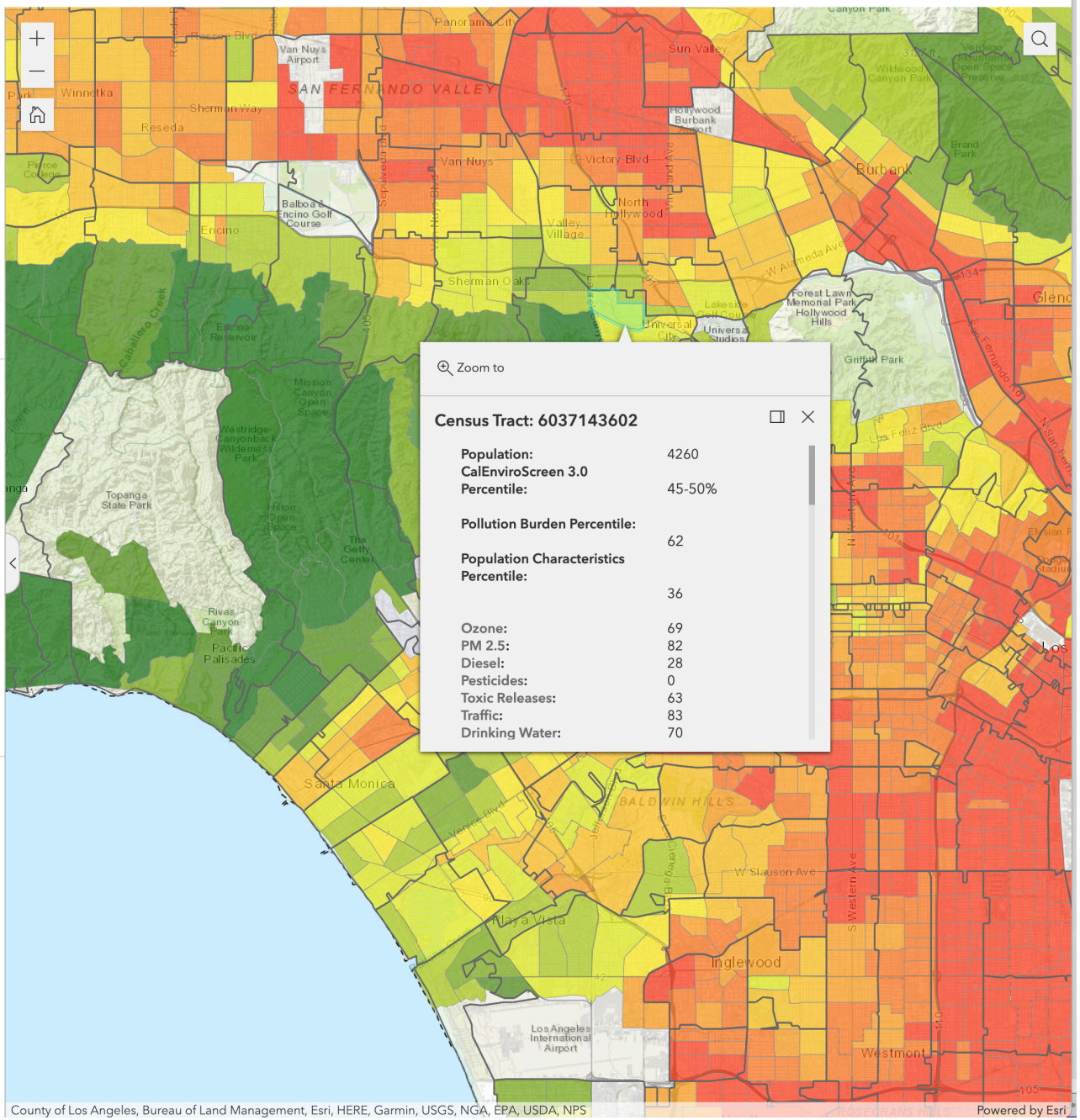
Zip Codes

CalEnviroScreen 3.0

- 91 - 100% (Highest Scores)
- 81 - 90%
- 71 - 80%
- 61 - 70%
- 51 - 60%
- 41 - 50%
- 31 - 40%
- 21 - 30%
- 11 - 20%
- 1 - 10% (Lowest Scores)

South Coast AQMD Boundary

CalEnviroScreen 3.0 is developed by the California Office of Environmental Health Hazard Assessment (OEHHA)



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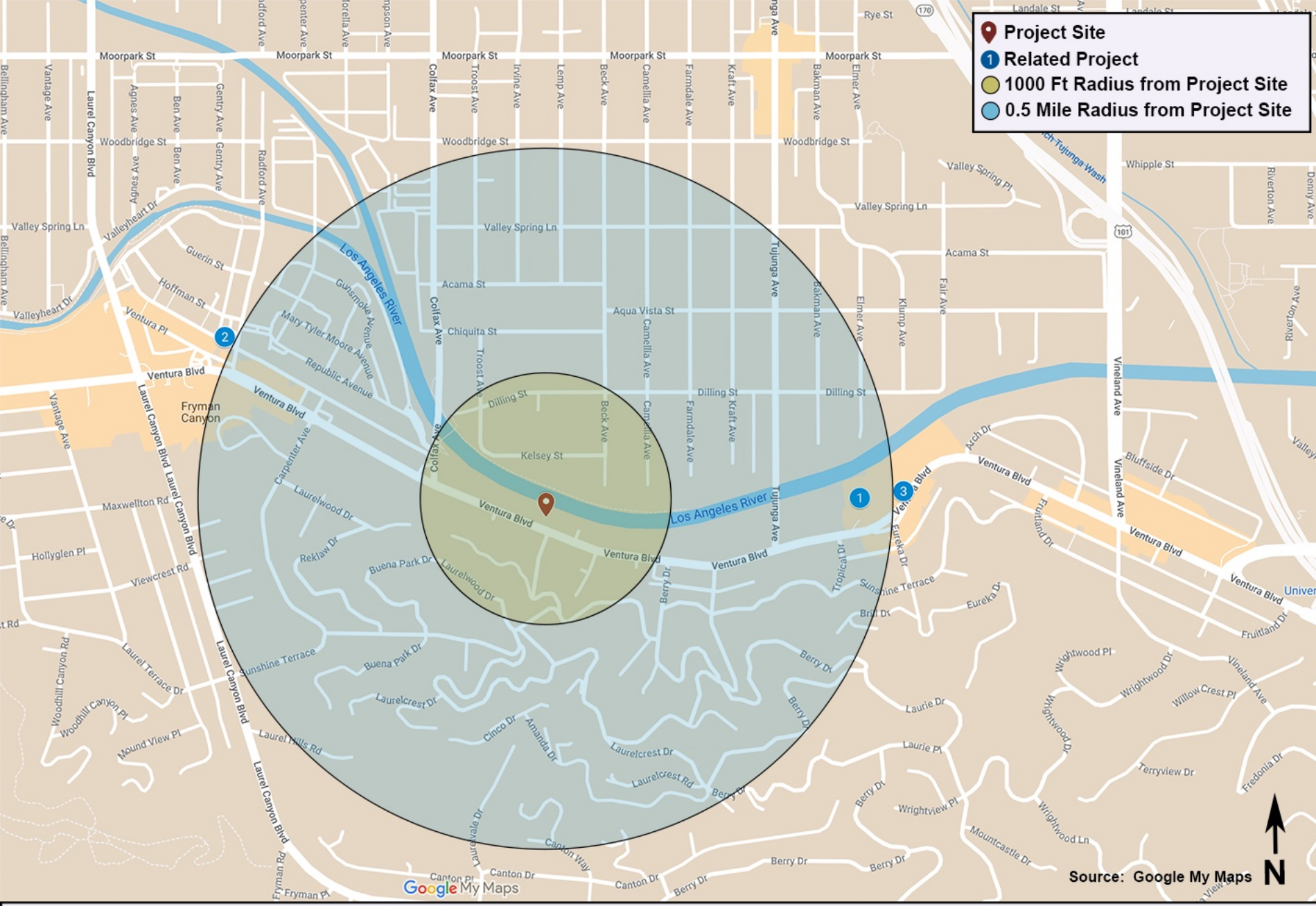
CUMULATIVE PROJECTS



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TREE SEQUESTRATION CALCULATIONS

Project Report - i-Tree Planting Calculator

Location: Los Angeles, California 90004
Total number of trees planted in this project: 51
Electricity Emissions Factor: 252.40 kilograms CO2 equivalent/MWh
Fuel Emissions Factor: 52.00 kilograms CO2 equivalent/MMBtu
Lifetime: 40 years
Annual Tree Mortality: 3%

All amounts in the tables are for the full lifetime of the project.

Location			Tree Growth					
Group Identifier	Tree Group Characteristics	Initial Number of Trees	DBH (The estimated DBH at the end of the projection) ()	Height (The estimated tree height at the end of the projection) ()	Surviving Trees (The number of trees that survive at the end of the projection based on the mortality rate. The models do estimate fractions of individual trees remaining after mortality for the most precise estimates of the benefits.)	Basal Area (The estimated combined basal area of surviving trees at the end of the projection.) ()	Canopy Cover (The estimated combined crown area of surviving trees at the end of the projection. This combined crown area estimate assumes no overlap between tree crowns and represents the maximum area that these trees could possibly cover.) ()	Biomass (The estimated combined biomass of surviving trees at the end of the projection.) (pounds)

1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	18.5	68.1	8.5	15.9	6,871.2	17.7
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.8	62.0	0.30	0.59	270.6	0.6
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	39.3	39.9	3.0	25.7	6,390.6	2.5

4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.3	23.7	0.30	0.56	219.0	0.6
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.3	46.7	0.30	0.56	111.6	0.4
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.1	51.2	0.30	0.55	207.8	0.7

7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	31.0	60.2	0.30	1.6	212.3	1.3
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	35.9	101.4	0.30	2.1	427.8	1.5
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	33.4	97.7	0.30	1.9	258.5	1.3

10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	31.0	82.9	0.61	3.2	336.5	1.6
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	39.3	92.3	0.30	2.6	656.8	3.0
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	22.5	77.1	0.91	2.5	922.3	2.5
Total		51			**16**	**57.7**	**16,885.0**	**33.7**

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	46,330.0	$1,077.49	133,287.0	$3,099.85
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,815.3	$42.22	4,829.4	$112.32
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	6,225.7	$144.79	13,961.2	$324.70
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	551.2	$12.82	4,340.7	$100.95
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,069.1	$24.86	2,712.0	$63.07

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,933.4	$44.97	4,855.6	$112.93
7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,618.6	$37.64	7,626.2	$177.36
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,998.7	$46.48	9,735.3	$226.41
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,650.4	$38.38	7,792.0	$181.22
10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	5,181.6	$120.51	9,171.4	$213.30

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**CO_2 (Carbon Dioxide) Avoided (pounds)**	**CO_2 Avoided ($)**	**CO_2 Sequestered (pounds)**	**CO_2 Sequestered ($)**
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,461.8	$34.00	17,205.7	$400.15
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	6,903.6	$160.56	14,557.0	$338.55
Total		51	**76,739.3**	**$1,784.72**	**230,073.5**	**$5,350.81**

Location			Energy Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	47,297.5	$9,681.79	152.2	$1,969.64
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,852.2	$379.14	6.0	$77.25
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	5,920.9	$1,212.00	22.8	$294.64
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	501.4	$102.65	2.1	$27.65
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,006.2	$205.96	4.0	$51.33

Location			Energy Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,727.0	$353.51	7.7	$99.21
7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,424.6	$291.61	6.5	$84.51
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	2,036.5	$416.87	6.6	$85.24
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,683.4	$344.60	5.4	$70.26
10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	4,374.6	$895.47	21.9	$283.36

Location			Energy Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Electricity Saved (kWh) (Kilowatt-Hours)**	**Electricity Saved ($)**	**Fuel Saved (MMBtu) (Millions of British Thermal Units)**	**Fuel Saved ($)**
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,492.4	$305.50	4.8	$62.14
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	5,889.2	$1,205.51	28.9	$373.34
Total		51	**75,205.7**	**$15,394.61**	**268.8**	**$3,478.57**

Location			Hydrological Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	345,374.4	345,350.6	1,746,800.0	105,034.4	$938.59
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	16,010.9	16,009.8	80,978.5	4,869.2	$43.51
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	148,109.4	148,099.2	749,092.7	45,042.7	$402.50
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	8,704.2	8,703.6	44,023.2	2,647.1	$23.65
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	4,960.3	4,960.0	25,087.7	1,508.5	$13.48

Location			Hydrological Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	11,629.2	11,628.4	58,817.2	3,536.7	$31.60
7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	6,683.2	6,682.8	33,801.8	2,032.5	$18.16
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	26,507.7	26,505.9	134,068.2	8,061.5	$72.04
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	9,770.9	9,770.3	49,418.4	2,971.5	$26.55
10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	10,625.5	10,624.7	53,740.5	3,231.4	$28.88

Location			Hydrological Benefits				
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Rainfall Interception (gallons)**	**Evaporation (gallons)**	**Transpiration (gallons)**	**Runoff Avoided (gallons)**	**Runoff Avoided ($)**
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	16,960.3	16,959.1	85,779.9	5,157.9	$46.09
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	28,448.7	28,446.8	143,885.0	8,651.8	$77.31
Total		51	**633,784.8**	**633,741.1**	**3,205,493.3**	**192,745.1**	**$1,722.37**

Location			Air Benefits									
Group Identifier	Tree Group Characteristics	Initial Number of Trees	O_3 (Ozone) Removed (pounds)	NO_2 (Nitrogen Dioxide) Avoided (pounds)	NO_2 (Nitrogen Dioxide) Removed (pounds)	SO_2 (Sulfur Dioxide) Avoided (pounds)	SO_2 (Sulfur Dioxide) Removed (pounds)	VOC (Volatile Organic Compound) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Removed (pounds)	Avoided Value (Values for avoided pollutants) ($)	Removal Value (Values for removed pollutants) ($)

1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	452.86	3.33	106.32	11.73	7.19	24.51	15.50	4.79	$84.99	$2,804.34
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.81	0.13	4.29	0.46	0.30	0.96	0.61	0.16	$3.33	$110.38

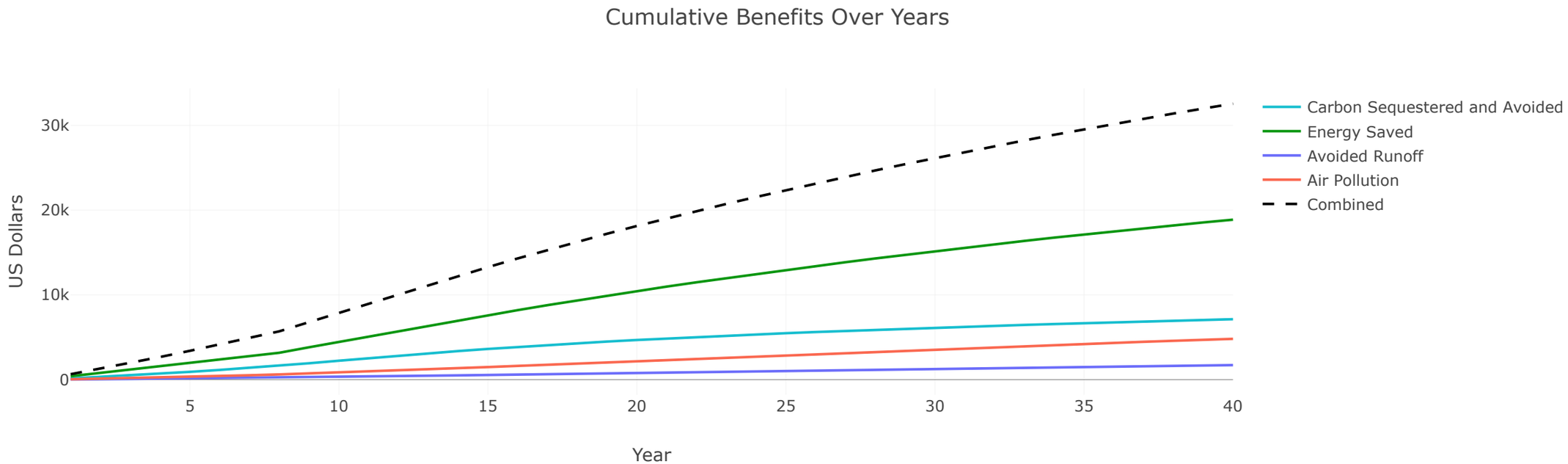
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	134.69	0.45	30.59	1.58	2.45	3.09	1.94	0.76	$10.79	$743.32
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	9.85	0.04	2.37	0.14	0.18	0.26	0.16	0.08	$0.92	$59.39

5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	6.80	0.08	1.72	0.27	0.12	0.53	0.33	0.09	$1.84	$45.92
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	14.41	0.14	3.55	0.49	0.25	0.91	0.57	0.14	$3.19	$90.75

7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	9.48	0.12	2.42	0.41	0.17	0.75	0.47	0.13	$2.64	$65.40
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	30.81	0.14	7.01	0.51	0.50	1.06	0.67	0.26	$3.66	$179.83
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	13.33	0.12	3.17	0.42	0.21	0.87	0.55	0.16	$3.03	$84.80

10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	15.90	0.37	4.12	1.31	0.28	2.31	1.44	0.24	$8.17	$114.13
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	19.10	0.11	4.32	0.37	0.31	0.77	0.49	0.16	$2.68	$110.91
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	40.05	0.50	10.21	1.75	0.70	3.11	1.94	0.52	$10.98	$273.62

Total		51	**766.09**	**5.52**	**180.10**	**19.42**	**12.65**	**39.12**	**24.67**	**7.47**	**$136.21**	**$4,682.79**



Mortality is modeled as a fractional (not whole) tree estimate and may not align year-over-year.
Sequestration does not account for net differences like decay.
Tree canopy cover estimate assumes no overlap between crowns.

Application v2.7.0, powered by engine v0.15.1 (APIv3) and database v12.0.70.

www.fs.usda.gov
www.davey.com
www.arborday.org
ucfsociety.org
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www.esf.edu
www.stateforesters.org
www.americanforests.org

Version 2.7.0

Project Report - i-Tree Planting Calculator

Location: Los Angeles, California 90004
Total number of trees planted in this project: 40
Electricity Emissions Factor: 252.40 kilograms CO2 equivalent/MWh
Fuel Emissions Factor: 52.00 kilograms CO2 equivalent/MMBtu
Lifetime: 40 years
Annual Tree Mortality: 3%

All amounts in the tables are for the full lifetime of the project.

Location			Tree Growth					
Group Identifier	Tree Group Characteristics	Initial Number of Trees	DBH (The estimated DBH at the end of the projection) ()	Height (The estimated tree height at the end of the projection) ()	Surviving Trees (The number of trees that survive at the end of the projection based on the mortality rate. The models do estimate fractions of individual trees remaining after mortality for the most precise estimates of the benefits.)	Basal Area (The estimated combined basal area of surviving trees at the end of the projection.) ()	Canopy Cover (The estimated combined crown area of surviving trees at the end of the projection. This combined crown area estimate assumes no overlap between tree crowns and represents the maximum area that these trees could possibly cover.) ()	Biomass (The estimated combined biomass of surviving trees at the end of the projection.) (pounds)

1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	18.5	63.6	2.4	4.5	1,878.9	2.9
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	23.5	78.4	1.2	3.7	1,334.7	3.8

3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	17.9	40.3	1.5	2.7	1,123.2	4.0
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	23.5	60.6	0.61	1.8	595.3	3.7

5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	31.2	61.4	3.0	16.2	4,646.5	15.4
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	39.3	39.9	3.4	28.2	7,029.7	2.7
Total		40			**12**	**57.1**	**16,608.2**	**32.6**

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	11,859.4	$275.81	21,680.4	$504.22
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	9,948.6	$231.37	21,759.0	$506.05
3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	5,016.0	$116.66	27,508.9	$639.77
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	5,008.7	$116.49	21,722.2	$505.19
5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	10,164.5	$236.40	94,012.1	$2,186.43

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**CO_2 (Carbon Dioxide) Avoided (pounds)**	**CO_2 Avoided ($)**	**CO_2 Sequestered (pounds)**	**CO_2 Sequestered ($)**
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	6,848.3	$159.27	15,357.4	$357.17
Total		40	**48,845.5**	**$1,136.00**	**202,039.8**	**$4,698.83**

Location			Energy Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	12,105.8	$2,478.06	39.0	$504.27
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	8,470.6	$1,733.93	41.7	$539.13
3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	4,962.0	$1,015.72	17.3	$224.18
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	4,249.9	$869.96	21.1	$272.44
5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	10,400.3	$2,128.95	33.3	$430.50

Location			Energy Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Electricity Saved (kWh) (Kilowatt-Hours)**	**Electricity Saved ($)**	**Fuel Saved (MMBtu) (Millions of British Thermal Units)**	**Fuel Saved ($)**
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	6,513.0	$1,333.21	25.0	$324.11
Total		40	**46,701.7**	**$9,559.83**	**177.3**	**$2,294.63**

Location			Hydrological Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	89,977.0	89,970.8	455,076.8	27,363.6	$244.52
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	43,542.2	43,539.2	220,223.5	13,242.0	$118.33
3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	55,407.7	55,403.9	280,235.7	16,850.5	$150.58
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	20,252.7	20,251.3	102,432.1	6,159.2	$55.04
5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	157,755.9	157,745.0	797,881.8	47,976.3	$428.72

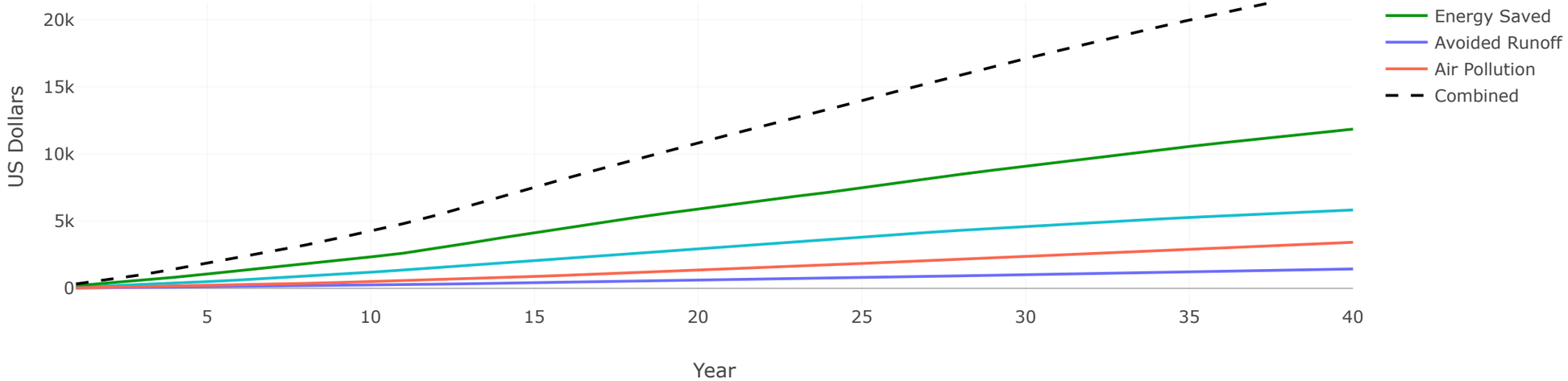
Location			Hydrological Benefits				
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Rainfall Interception (gallons)**	**Evaporation (gallons)**	**Transpiration (gallons)**	**Runoff Avoided (gallons)**	**Runoff Avoided ($)**
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	162,920.3	162,909.1	824,002.0	49,546.9	$442.75
Total		40	**529,855.9**	**529,819.3**	**2,679,851.8**	**161,138.4**	**$1,439.93**

Location			Air Benefits									
Group Identifier	Tree Group Characteristics	Initial Number of Trees	O_3 (Ozone) Removed (pounds)	NO_2 (Nitrogen Dioxide) Avoided (pounds)	NO_2 (Nitrogen Dioxide) Removed (pounds)	SO_2 (Sulfur Dioxide) Avoided (pounds)	SO_2 (Sulfur Dioxide) Removed (pounds)	VOC (Volatile Organic Compound) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Removed (pounds)	Avoided Value (Values for avoided pollutants) ($)	Removal Value (Values for removed pollutants) ($)

1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	104.42	0.85	23.77	3.00	1.68	6.27	3.97	0.88	$21.75	$611.14
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	61.57	0.72	15.70	2.52	1.07	4.47	2.79	0.80	$15.80	$420.81

3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	62.18	0.36	14.92	1.27	1.11	2.58	1.63	0.52	$8.97	$373.02
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	24.99	0.36	6.15	1.27	0.44	2.24	1.40	0.25	$7.93	$157.56

5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	169.42	0.73	37.80	2.57	2.75	5.39	3.41	1.23	$18.68	$960.46
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	148.16	0.49	33.65	1.73	2.70	3.40	2.14	0.83	$11.87	$817.65
Total		40	**570.74**	**3.51**	**131.99**	**12.36**	**9.75**	**24.35**	**15.33**	**4.51**	**$85.00**	**$3,340.65**



Mortality is modeled as a fractional (not whole) tree estimate and may not align year-over-year.
Sequestration does not account for net differences like decay.
Tree canopy cover estimate assumes no overlap between crowns.

Application v2.7.0, powered by engine v0.15.1 (APIv3) and database v12.0.70.

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APPENDIX F – GHG MODELING RESULTS

DouglasKim+Associates,LLC

GREENHOUSE GAS EMISSIONS OVERVIEW

11611 Ventura Boulevard Project
GHG Emissions Impact Compared to "Project Without Reduction Features" Scenario

Source	Project Without Reduction Features (2027)	As Proposed (2027)	Reduction from Project Without Reduction Features	Change from Project Without Reduction Features Scenario
Area	8	8	-	0%
Energy	610	354	(256)	-42%
Mobile	737	517	(220)	-30%
Waste	111	111	-	0%
Water	26	26	-	0%
Refrigerants	0	0	-	0%
Vegetation	(6)	(6)		
Construction	79	79	-	0%
Total Emissions	1,564	1,089	(476)	-30.4%

Mobile Source Emissions	Pavley emission standards (19.8% reduction)
	Low carbon fuel standard (7.2% reduction)
	Vehicle efficiency measures (2.8% reduction)
Energy Production Assumptions	Natural gas transmission and distribution efficiency measures (7.4% reduction)
	Natural gas extraction efficiency measures (1.6% reduction)
	Renewables (electricity) portfolio standard (33% reduction)

DouglasKim+Associates,LLC

GREENHOUSE GAS EMISSIONS

11611 Ventura Boulevard (Future) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	11611 Ventura Boulevard (Future)
Construction Start Date	2/1/2025
Operational Year	2027
Lead Agency	City of Los Angeles
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	23.8
Location	11611 Ventura Blvd, Studio City, CA 91604, USA
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3832
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Congregate Care (Assisted Living)	140	Dwelling Unit	1.41	135,454	3,875	—	273	—
Retirement Community	59.0	Dwelling Unit	1.00	68,826	3,000	—	115	—
Enclosed Parking with Elevator	146	Space	0.00	58,400	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Unmit.	—	18,828	18,828	0.89	2.15	32.4	19,525
Daily, Winter (Max)	—	—	—	—	—	—	—
Unmit.	—	7,319	7,319	0.31	0.46	0.32	7,408
Average Daily (Max)	—	—	—	—	—	—	—
Unmit.	—	5,066	5,066	0.23	0.41	4.06	5,197
Annual (Max)	—	—	—	—	—	—	—
Unmit.	—	839	839	0.04	0.07	0.67	860

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—
2025	—	18,828	18,828	0.89	2.15	32.4	19,525
2026	—	7,471	7,471	0.31	0.27	12.5	7,571
2027	—	7,397	7,397	0.31	0.26	11.4	7,494
Daily - Winter (Max)	—	—	—	—	—	—	—
2025	—	5,620	5,620	0.25	0.46	0.29	5,698
2026	—	7,319	7,319	0.31	0.27	0.32	7,408
2027	—	7,248	7,248	0.22	0.26	0.30	7,332
Average Daily	—	—	—	—	—	—	—
2025	—	5,066	5,066	0.23	0.41	4.06	5,197
2026	—	4,969	4,969	0.21	0.19	3.77	5,034
2027	—	3,994	3,994	0.12	0.16	2.93	4,047
Annual	—	—	—	—	—	—	—
2025	—	839	839	0.04	0.07	0.67	860
2026	—	823	823	0.03	0.03	0.62	833
2027	—	661	661	0.02	0.03	0.48	670

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—
2025	—	18,828	18,828	0.89	2.15	32.4	19,525
2026	—	7,471	7,471	0.31	0.27	12.5	7,571
2027	—	7,397	7,397	0.31	0.26	11.4	7,494
Daily - Winter (Max)	—	—	—	—	—	—	—
2025	—	5,620	5,620	0.25	0.46	0.29	5,698

2026	—	7,319	7,319	0.31	0.27	0.32	7,408
2027	—	7,248	7,248	0.22	0.26	0.30	7,332
Average Daily	—	—	—	—	—	—	—
2025	—	5,066	5,066	0.23	0.41	4.06	5,197
2026	—	4,969	4,969	0.21	0.19	3.77	5,034
2027	—	3,994	3,994	0.12	0.16	2.93	4,047
Annual	—	—	—	—	—	—	—
2025	—	839	839	0.04	0.07	0.67	860
2026	—	823	823	0.03	0.03	0.62	833
2027	—	661	661	0.02	0.03	0.48	670

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Unmit.	205	6,136	6,341	20.9	0.19	12.2	6,932
Mit.	205	5,712	5,917	20.9	0.19	12.2	6,507
% Reduced	—	7%	7%	< 0.5%	—	—	6%
Daily, Winter (Max)	—	—	—	—	—	—	—
Unmit.	205	5,965	6,170	20.9	0.19	2.84	6,753
Mit.	205	5,541	5,746	20.9	0.19	2.84	6,329
% Reduced	—	7%	7%	< 0.5%	—	—	6%
Average Daily (Max)	—	—	—	—	—	—	—
Unmit.	205	5,734	5,939	20.9	0.19	6.75	6,526
Mit.	205	5,310	5,515	20.9	0.19	6.75	6,101
% Reduced	—	7%	7%	< 0.5%	—	—	7%
Annual (Max)	—	—	—	—	—	—	—

Unmit.	34.0	949	983	3.46	0.03	1.12	1,080
Mit.	34.0	879	913	3.46	0.03	1.12	1,010
% Reduced	—	7%	7%	< 0.5%	< 0.5%	—	7%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Mobile	—	3,170	3,170	0.17	0.13	9.63	3,223
Area	0.00	356	356	0.01	< 0.005	—	357
Energy	—	2,550	2,550	0.20	0.02	—	2,561
Water	14.2	96.7	111	1.46	0.04	—	158
Waste	191	0.00	191	19.1	0.00	—	668
Refrig.	—	—	—	—	—	2.59	2.59
Vegetation	—	-36.9	-36.9	—	—	—	-36.9
Total	205	6,136	6,341	20.9	0.19	12.2	6,932
Daily, Winter (Max)	—	—	—	—	—	—	—
Mobile	—	3,039	3,039	0.17	0.14	0.25	3,085
Area	0.00	316	316	0.01	< 0.005	—	316
Energy	—	2,550	2,550	0.20	0.02	—	2,561
Water	14.2	96.7	111	1.46	0.04	—	158
Waste	191	0.00	191	19.1	0.00	—	668
Refrig.	—	—	—	—	—	2.59	2.59
Vegetation	—	-36.9	-36.9	—	—	—	-36.9
Total	205	5,965	6,170	20.9	0.19	2.84	6,753
Average Daily	—	—	—	—	—	—	—
Mobile	—	3,074	3,074	0.17	0.14	4.16	3,124

Area	0.00	49.5	49.5	< 0.005	< 0.005	—	49.6
Energy	—	2,550	2,550	0.20	0.02	—	2,561
Water	14.2	96.7	111	1.46	0.04	—	158
Waste	191	0.00	191	19.1	0.00	—	668
Refrig.	—	—	—	—	—	2.59	2.59
Vegetation	—	-36.9	-36.9	—	—	—	-36.9
Total	205	5,734	5,939	20.9	0.19	6.75	6,526
Annual	—	—	—	—	—	—	—
Mobile	—	509	509	0.03	0.02	0.69	517
Area	0.00	8.19	8.19	< 0.005	< 0.005	—	8.21
Energy	—	422	422	0.03	< 0.005	—	424
Water	2.35	16.0	18.4	0.24	0.01	—	26.2
Waste	31.6	0.00	31.6	3.16	0.00	—	111
Refrig.	—	—	—	—	—	0.43	0.43
Vegetation	—	-6.11	-6.11	—	—	—	-6.11
Total	34.0	949	983	3.46	0.03	1.12	1,080

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Mobile	—	3,170	3,170	0.17	0.13	9.63	3,223
Area	0.00	356	356	0.01	< 0.005	—	357
Energy	—	2,126	2,126	0.16	0.02	—	2,136
Water	14.2	96.7	111	1.46	0.04	—	158
Waste	191	0.00	191	19.1	0.00	—	668
Refrig.	—	—	—	—	—	2.59	2.59

Vegetation	—	-36.9	-36.9	—	—	—	-36.9
Total	205	5,712	5,917	20.9	0.19	12.2	6,507
Daily, Winter (Max)	—	—	—	—	—	—	—
Mobile	—	3,039	3,039	0.17	0.14	0.25	3,085
Area	0.00	316	316	0.01	< 0.005	—	316
Energy	—	2,126	2,126	0.16	0.02	—	2,136
Water	14.2	96.7	111	1.46	0.04	—	158
Waste	191	0.00	191	19.1	0.00	—	668
Refrig.	—	—	—	—	—	2.59	2.59
Vegetation	—	-36.9	-36.9	—	—	—	-36.9
Total	205	5,541	5,746	20.9	0.19	2.84	6,329
Average Daily	—	—	—	—	—	—	—
Mobile	—	3,074	3,074	0.17	0.14	4.16	3,124
Area	0.00	49.5	49.5	< 0.005	< 0.005	—	49.6
Energy	—	2,126	2,126	0.16	0.02	—	2,136
Water	14.2	96.7	111	1.46	0.04	—	158
Waste	191	0.00	191	19.1	0.00	—	668
Refrig.	—	—	—	—	—	2.59	2.59
Vegetation	—	-36.9	-36.9	—	—	—	-36.9
Total	205	5,310	5,515	20.9	0.19	6.75	6,101
Annual	—	—	—	—	—	—	—
Mobile	—	509	509	0.03	0.02	0.69	517
Area	0.00	8.19	8.19	< 0.005	< 0.005	—	8.21
Energy	—	352	352	0.03	< 0.005	—	354
Water	2.35	16.0	18.4	0.24	0.01	—	26.2
Waste	31.6	0.00	31.6	3.16	0.00	—	111
Refrig.	—	—	—	—	—	0.43	0.43

Vegetation	—	-6.11	-6.11	—	—	—	-6.11
Total	34.0	879	913	3.46	0.03	1.12	1,010

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	280	280	0.01	< 0.005	—	281
Demolition	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	46.4	46.4	< 0.005	< 0.005	—	46.5
Demolition	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	164	164	0.01	0.01	0.02	166
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	—	2,754	2,754	0.14	0.43	0.17	2,887
Average Daily	—	—	—	—	—	—	—
Worker	—	18.7	18.7	< 0.005	< 0.005	0.03	18.9
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	309	309	0.02	0.05	0.31	325
Annual	—	—	—	—	—	—	—
Worker	—	3.09	3.09	< 0.005	< 0.005	0.01	3.13
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	51.2	51.2	< 0.005	0.01	0.05	53.7

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	280	280	0.01	< 0.005	—	281
Demolition	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	46.4	46.4	< 0.005	< 0.005	—	46.5
Demolition	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	164	164	0.01	0.01	0.02	166
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	2,754	2,754	0.14	0.43	0.17	2,887
Average Daily	—	—	—	—	—	—	—
Worker	—	18.7	18.7	< 0.005	< 0.005	0.03	18.9
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	309	309	0.02	0.05	0.31	325
Annual	—	—	—	—	—	—	—
Worker	—	3.09	3.09	< 0.005	< 0.005	0.01	3.13
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	51.2	51.2	< 0.005	0.01	0.05	53.7

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,717	2,717	0.11	0.02	—	2,726
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	164	164	0.01	< 0.005	—	164

Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	27.1	27.1	< 0.005	< 0.005	—	27.2
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	104	104	< 0.005	< 0.005	0.38	105
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	143	143	0.01	0.02	0.34	150
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	—	6.01	6.01	< 0.005	< 0.005	0.01	6.09
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	8.62	8.62	< 0.005	< 0.005	0.01	9.05
Annual	—	—	—	—	—	—	—
Worker	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.01
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.50

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—

Off-Road Equipment	—	2,717	2,717	0.11	0.02	—	2,726
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	164	164	0.01	< 0.005	—	164
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	27.1	27.1	< 0.005	< 0.005	—	27.2
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	104	104	< 0.005	< 0.005	0.38	105
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	143	143	0.01	0.02	0.34	150
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	—	6.01	6.01	< 0.005	< 0.005	0.01	6.09
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	8.62	8.62	< 0.005	< 0.005	0.01	9.05
Annual	—	—	—	—	—	—	—
Worker	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.01
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.50

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	296	296	0.01	< 0.005	—	297
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	49.0	49.0	< 0.005	< 0.005	—	49.2
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	138	138	0.01	< 0.005	0.51	140
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	13,272	13,272	0.66	2.08	31.2	13,940
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	—	16.0	16.0	< 0.005	< 0.005	0.03	16.2

Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	1,600	1,600	0.08	0.25	1.62	1,678
Annual	—	—	—	—	—	—	—
Worker	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.69
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	265	265	0.01	0.04	0.27	278

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	296	296	0.01	< 0.005	—	297
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	49.0	49.0	< 0.005	< 0.005	—	49.2
Dust From Material Movement	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	138	138	0.01	< 0.005	0.51	140
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	13,272	13,272	0.66	2.08	31.2	13,940
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	—	16.0	16.0	< 0.005	< 0.005	0.03	16.2
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	1,600	1,600	0.08	0.25	1.62	1,678
Annual	—	—	—	—	—	—	—
Worker	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.69
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	265	265	0.01	0.04	0.27	278

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	922	922	0.04	0.01	—	925
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	153	153	0.01	< 0.005	—	153
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	2,320	2,320	0.10	0.08	8.50	2,355
Vendor	—	979	979	0.04	0.14	2.68	1,023
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	2,199	2,199	0.10	0.08	0.22	2,227
Vendor	—	979	979	0.04	0.14	0.07	1,021
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	935	935	0.04	0.03	1.54	947
Vendor	—	410	410	0.02	0.06	0.49	428
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	155	155	0.01	0.01	0.25	157
Vendor	—	67.9	67.9	< 0.005	0.01	0.08	70.8
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,209

Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	922	922	0.04	0.01	—	925
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	153	153	0.01	< 0.005	—	153
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	2,320	2,320	0.10	0.08	8.50	2,355
Vendor	—	979	979	0.04	0.14	2.68	1,023
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	2,199	2,199	0.10	0.08	0.22	2,227
Vendor	—	979	979	0.04	0.14	0.07	1,021
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	935	935	0.04	0.03	1.54	947
Vendor	—	410	410	0.02	0.06	0.49	428
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	155	155	0.01	0.01	0.25	157
Vendor	—	67.9	67.9	< 0.005	0.01	0.08	70.8
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	1,572	1,572	0.06	0.01	—	1,577
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	260	260	0.01	< 0.005	—	261
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	2,274	2,274	0.09	0.08	7.69	2,307
Vendor	—	962	962	0.04	0.14	2.60	1,006
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	2,155	2,155	0.10	0.08	0.20	2,182
Vendor	—	962	962	0.04	0.14	0.07	1,004
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	1,562	1,562	0.07	0.06	2.38	1,583

Vendor	—	687	687	0.03	0.10	0.80	718
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	259	259	0.01	0.01	0.39	262
Vendor	—	114	114	< 0.005	0.02	0.13	119
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	1,572	1,572	0.06	0.01	—	1,577
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	260	260	0.01	< 0.005	—	261
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	2,274	2,274	0.09	0.08	7.69	2,307
Vendor	—	962	962	0.04	0.14	2.60	1,006

Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	2,155	2,155	0.10	0.08	0.20	2,182
Vendor	—	962	962	0.04	0.14	0.07	1,004
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	1,562	1,562	0.07	0.06	2.38	1,583
Vendor	—	687	687	0.03	0.10	0.80	718
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	259	259	0.01	0.01	0.39	262
Vendor	—	114	114	< 0.005	0.02	0.13	119
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	1,439	1,439	0.06	0.01	—	1,443
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	238	238	0.01	< 0.005	—	239
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	2,230	2,230	0.09	0.08	6.95	2,263
Vendor	—	943	943	0.04	0.13	2.46	985
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	2,114	2,114	0.03	0.08	0.18	2,139
Vendor	—	944	944	0.04	0.13	0.06	983
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	1,402	1,402	0.02	0.05	1.96	1,420
Vendor	—	617	617	0.03	0.09	0.69	643
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	232	232	< 0.005	0.01	0.32	235
Vendor	—	102	102	< 0.005	0.01	0.11	106
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208

Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	1,439	1,439	0.06	0.01	—	1,443
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	238	238	0.01	< 0.005	—	239
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	2,230	2,230	0.09	0.08	6.95	2,263
Vendor	—	943	943	0.04	0.13	2.46	985
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	2,114	2,114	0.03	0.08	0.18	2,139
Vendor	—	944	944	0.04	0.13	0.06	983
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	1,402	1,402	0.02	0.05	1.96	1,420
Vendor	—	617	617	0.03	0.09	0.69	643
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	232	232	< 0.005	0.01	0.32	235
Vendor	—	102	102	< 0.005	0.01	0.11	106
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	669	669	0.03	0.01	—	672
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	111	111	< 0.005	< 0.005	—	111
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	203	203	0.01	0.01	0.69	206
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	193	193	0.01	0.01	0.02	195

Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	105	105	< 0.005	< 0.005	0.16	107
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	17.4	17.4	< 0.005	< 0.005	0.03	17.7
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	669	669	0.03	0.01	—	672
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	111	111	< 0.005	< 0.005	—	111
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	203	203	0.01	0.01	0.69	206
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	193	193	0.01	0.01	0.02	195
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	105	105	< 0.005	< 0.005	0.16	107
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	17.4	17.4	< 0.005	< 0.005	0.03	17.7
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—

Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	292	292	0.01	< 0.005	—	293
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	48.4	48.4	< 0.005	< 0.005	—	48.5
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	199	199	0.01	0.01	0.62	202
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	189	189	< 0.005	0.01	0.02	191
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	45.0	45.0	< 0.005	< 0.005	0.06	45.6
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	7.46	7.46	< 0.005	< 0.005	0.01	7.55
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	292	292	0.01	< 0.005	—	293
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	48.4	48.4	< 0.005	< 0.005	—	48.5
Paving	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	199	199	0.01	0.01	0.62	202
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	189	189	< 0.005	0.01	0.02	191
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	45.0	45.0	< 0.005	< 0.005	0.06	45.6
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	7.46	7.46	< 0.005	< 0.005	0.01	7.55
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	87.3	87.3	< 0.005	< 0.005	—	87.6
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	455	455	0.02	0.02	1.54	461
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	431	431	0.02	0.02	0.04	436
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	286	286	0.01	0.01	0.43	290
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	47.3	47.3	< 0.005	< 0.005	0.07	48.0
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	87.3	87.3	< 0.005	< 0.005	—	87.6
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	455	455	0.02	0.02	1.54	461
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	431	431	0.02	0.02	0.04	436

Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	286	286	0.01	0.01	0.43	290
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	47.3	47.3	< 0.005	< 0.005	0.07	48.0
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	47.3	47.3	< 0.005	< 0.005	—	47.5
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	7.83	7.83	< 0.005	< 0.005	—	7.86
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	446	446	0.02	0.02	1.39	453
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	423	423	0.01	0.02	0.04	428
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	152	152	< 0.005	0.01	0.21	154
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	25.2	25.2	< 0.005	< 0.005	0.04	25.5
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—

Off-Road Equipment	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	47.3	47.3	< 0.005	< 0.005	—	47.5
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	7.83	7.83	< 0.005	< 0.005	—	7.86
Architectural Coatings	—	—	—	—	—	—	—
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	446	446	0.02	0.02	1.39	453
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	423	423	0.01	0.02	0.04	428
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	152	152	< 0.005	0.01	0.21	154
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	25.2	25.2	< 0.005	< 0.005	0.04	25.5
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Trenching (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	207	207	0.01	< 0.005	—	208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	207	207	0.01	< 0.005	—	208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	34.6	34.6	< 0.005	< 0.005	0.13	35.1
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	32.8	32.8	< 0.005	< 0.005	< 0.005	33.2
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	13.9	13.9	< 0.005	< 0.005	0.02	14.1
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	2.31	2.31	< 0.005	< 0.005	< 0.005	2.34
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Trenching (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	207	207	0.01	< 0.005	—	208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	—	207	207	0.01	< 0.005	—	208
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—

Off-Road Equipment	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Onsite truck	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	—	34.6	34.6	< 0.005	< 0.005	0.13	35.1
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	—	32.8	32.8	< 0.005	< 0.005	< 0.005	33.2
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	—	13.9	13.9	< 0.005	< 0.005	0.02	14.1
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	—	2.31	2.31	< 0.005	< 0.005	< 0.005	2.34
Vendor	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	870	870	0.06	0.01	—	874
Retirement Community	—	399	399	0.03	< 0.005	—	401
Enclosed Parking with Elevator	—	408	408	0.03	< 0.005	—	410
Total	—	1,677	1,677	0.12	0.02	—	1,685
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	870	870	0.06	0.01	—	874
Retirement Community	—	399	399	0.03	< 0.005	—	401
Enclosed Parking with Elevator	—	408	408	0.03	< 0.005	—	410
Total	—	1,677	1,677	0.12	0.02	—	1,685
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	144	144	0.01	< 0.005	—	145
Retirement Community	—	66.1	66.1	< 0.005	< 0.005	—	66.4
Enclosed Parking with Elevator	—	67.5	67.5	< 0.005	< 0.005	—	67.8
Total	—	278	278	0.02	< 0.005	—	279

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	870	870	0.06	0.01	—	874
Retirement Community	—	404	404	0.03	< 0.005	—	406
Enclosed Parking with Elevator	—	408	408	0.03	< 0.005	—	410
Total	—	1,681	1,681	0.12	0.02	—	1,689
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	870	870	0.06	0.01	—	874
Retirement Community	—	404	404	0.03	< 0.005	—	406
Enclosed Parking with Elevator	—	408	408	0.03	< 0.005	—	410
Total	—	1,681	1,681	0.12	0.02	—	1,689
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	144	144	0.01	< 0.005	—	145
Retirement Community	—	66.9	66.9	< 0.005	< 0.005	—	67.2
Enclosed Parking with Elevator	—	67.5	67.5	< 0.005	< 0.005	—	67.8
Total	—	278	278	0.02	< 0.005	—	280

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	445	445	0.04	< 0.005	—	447
Retirement Community	—	428	428	0.04	< 0.005	—	429

Enclosed Parking with Elevator	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	873	873	0.08	< 0.005	—	876
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	445	445	0.04	< 0.005	—	447
Retirement Community	—	428	428	0.04	< 0.005	—	429
Enclosed Parking with Elevator	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	873	873	0.08	< 0.005	—	876
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	73.7	73.7	0.01	< 0.005	—	73.9
Retirement Community	—	70.9	70.9	0.01	< 0.005	—	71.1
Enclosed Parking with Elevator	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	145	145	0.01	< 0.005	—	145

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	445	445	0.04	< 0.005	—	447
Retirement Community	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	445	445	0.04	< 0.005	—	447
Daily, Winter (Max)	—	—	—	—	—	—	—

Congregate Care (Assisted Living)	—	445	445	0.04	< 0.005	—	447
Retirement Community	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	445	445	0.04	< 0.005	—	447
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	73.7	73.7	0.01	< 0.005	—	73.9
Retirement Community	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	73.7	73.7	0.01	< 0.005	—	73.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Hearths	0.00	316	316	0.01	< 0.005	—	316
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Landscape Equipment	—	40.6	40.6	< 0.005	< 0.005	—	40.8
Total	0.00	356	356	0.01	< 0.005	—	357
Daily, Winter (Max)	—	—	—	—	—	—	—
Hearths	0.00	316	316	0.01	< 0.005	—	316
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—

Total	0.00	316	316	0.01	< 0.005	—	316
Annual	—	—	—	—	—	—	—
Hearths	0.00	3.58	3.58	< 0.005	< 0.005	—	3.59
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Landscape Equipment	—	4.61	4.61	< 0.005	< 0.005	—	4.62
Total	0.00	8.19	8.19	< 0.005	< 0.005	—	8.21

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Hearths	0.00	316	316	0.01	< 0.005	—	316
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Landscape Equipment	—	40.6	40.6	< 0.005	< 0.005	—	40.8
Total	0.00	356	356	0.01	< 0.005	—	357
Daily, Winter (Max)	—	—	—	—	—	—	—
Hearths	0.00	316	316	0.01	< 0.005	—	316
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Total	0.00	316	316	0.01	< 0.005	—	316
Annual	—	—	—	—	—	—	—
Hearths	0.00	3.58	3.58	< 0.005	< 0.005	—	3.59
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Landscape Equipment	—	4.61	4.61	< 0.005	< 0.005	—	4.62

Total	0.00	8.19	8.19	< 0.005	< 0.005	—	8.21

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	10.00	67.9	77.9	1.03	0.03	—	111
Retirement Community	4.21	28.8	33.0	0.43	0.01	—	47.0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	14.2	96.7	111	1.46	0.04	—	158
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	10.00	67.9	77.9	1.03	0.03	—	111
Retirement Community	4.21	28.8	33.0	0.43	0.01	—	47.0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	14.2	96.7	111	1.46	0.04	—	158
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	1.66	11.2	12.9	0.17	< 0.005	—	18.4
Retirement Community	0.70	4.77	5.47	0.07	< 0.005	—	7.79
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.35	16.0	18.4	0.24	0.01	—	26.2

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	10.00	67.9	77.9	1.03	0.03	—	111
Retirement Community	4.21	28.8	33.0	0.43	0.01	—	47.0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	14.2	96.7	111	1.46	0.04	—	158
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	10.00	67.9	77.9	1.03	0.03	—	111
Retirement Community	4.21	28.8	33.0	0.43	0.01	—	47.0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	14.2	96.7	111	1.46	0.04	—	158
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	1.66	11.2	12.9	0.17	< 0.005	—	18.4
Retirement Community	0.70	4.77	5.47	0.07	< 0.005	—	7.79
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.35	16.0	18.4	0.24	0.01	—	26.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	134	0.00	134	13.4	0.00	—	470
Retirement Community	56.6	0.00	56.6	5.66	0.00	—	198
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	191	0.00	191	19.1	0.00	—	668
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	134	0.00	134	13.4	0.00	—	470
Retirement Community	56.6	0.00	56.6	5.66	0.00	—	198
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	191	0.00	191	19.1	0.00	—	668
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	22.2	0.00	22.2	2.22	0.00	—	77.8
Retirement Community	9.37	0.00	9.37	0.94	0.00	—	32.8
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	31.6	0.00	31.6	3.16	0.00	—	111

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	134	0.00	134	13.4	0.00	—	470
Retirement Community	56.6	0.00	56.6	5.66	0.00	—	198

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	191	0.00	191	19.1	0.00	—	668
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	134	0.00	134	13.4	0.00	—	470
Retirement Community	56.6	0.00	56.6	5.66	0.00	—	198
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	191	0.00	191	19.1	0.00	—	668
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	22.2	0.00	22.2	2.22	0.00	—	77.8
Retirement Community	9.37	0.00	9.37	0.94	0.00	—	32.8
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	31.6	0.00	31.6	3.16	0.00	—	111

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	1.72	1.72
Retirement Community	—	—	—	—	—	0.87	0.87
Total	—	—	—	—	—	2.59	2.59
Daily, Winter (Max)	—	—	—	—	—	—	—

Congregate Care (Assisted Living)	—	—	—	—	—	1.72	1.72
Retirement Community	—	—	—	—	—	0.87	0.87
Total	—	—	—	—	—	2.59	2.59
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	0.28	0.28
Retirement Community	—	—	—	—	—	0.14	0.14
Total	—	—	—	—	—	0.43	0.43

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	1.72	1.72
Retirement Community	—	—	—	—	—	0.87	0.87
Total	—	—	—	—	—	2.59	2.59
Daily, Winter (Max)	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	1.72	1.72
Retirement Community	—	—	—	—	—	0.87	0.87
Total	—	—	—	—	—	2.59	2.59
Annual	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	0.28	0.28
Retirement Community	—	—	—	—	—	0.14	0.14
Total	—	—	—	—	—	0.43	0.43

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Texas Privet	—	-3.17	-3.17	—	—	—	-3.17
Peach	—	-0.12	-0.12	—	—	—	-0.12
Mexican Fan Palm	—	-0.90	-0.90	—	—	—	-0.90
Citrus	—	-0.04	-0.04	—	—	—	-0.04
Indian Laurel Fig	—	-0.07	-0.07	—	—	—	-0.07
Common Myrtle	—	-0.13	-0.13	—	—	—	-0.13
Weeping Fig	—	-0.11	-0.11	—	—	—	-0.11
Shamel Ash	—	-0.14	-0.14	—	—	—	-0.14
Chinese Elm	—	-0.11	-0.11	—	—	—	-0.11
Aleppo Pine	—	-0.35	-0.35	—	—	—	-0.35
Coast Live Oak	—	-1.15	-1.15	—	—	—	-1.15
Redbud	—	-0.81	-0.81	—	—	—	-0.81
Box	—	-0.34	-0.34	—	—	—	-0.34
Bay Laurel	—	-0.34	-0.34	—	—	—	-0.34
Chinese Pistache	—	-0.70	-0.70	—	—	—	-0.70

Subtotal	—	-8.50	-8.50	—	—	—	-8.50
Sequestered	—	—	—	—	—	—	—
Texas Privet	—	-9.13	-9.13	—	—	—	-9.13
Peach	—	-0.33	-0.33	—	—	—	-0.33
Mexican Fan Palm	—	-2.01	-2.01	—	—	—	-2.01
Citrus	—	-0.30	-0.30	—	—	—	-0.30
Indian Laurel Fig	—	-0.19	-0.19	—	—	—	-0.19
Common Myrtle	—	-0.33	-0.33	—	—	—	-0.33
Weeping Fig	—	-0.52	-0.52	—	—	—	-0.52
Shamel Ash	—	-0.67	-0.67	—	—	—	-0.67
Chinese Elm	—	-0.53	-0.53	—	—	—	-0.53
Aleppo Pine	—	-0.63	-0.63	—	—	—	-0.63
Coast Live Oak	—	-2.49	-2.49	—	—	—	-2.49
Redbud	—	-1.48	-1.48	—	—	—	-1.48
Box	—	-1.88	-1.88	—	—	—	-1.88
Bay Laurel	—	-1.49	-1.49	—	—	—	-1.49
Chinese Pistache	—	-6.44	-6.44	—	—	—	-6.44
Subtotal	—	-28.4	-28.4	—	—	—	-28.4
Removed	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—

Chinese Elm	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Total	—	-36.9	-36.9	—	—	—	-36.9
Daily, Winter (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Texas Privet	—	-3.17	-3.17	—	—	—	-3.17
Peach	—	-0.12	-0.12	—	—	—	-0.12
Mexican Fan Palm	—	-0.90	-0.90	—	—	—	-0.90
Citrus	—	-0.04	-0.04	—	—	—	-0.04
Indian Laurel Fig	—	-0.07	-0.07	—	—	—	-0.07
Common Myrtle	—	-0.13	-0.13	—	—	—	-0.13
Weeping Fig	—	-0.11	-0.11	—	—	—	-0.11
Shamel Ash	—	-0.14	-0.14	—	—	—	-0.14
Chinese Elm	—	-0.11	-0.11	—	—	—	-0.11
Aleppo Pine	—	-0.35	-0.35	—	—	—	-0.35
Coast Live Oak	—	-1.15	-1.15	—	—	—	-1.15
Redbud	—	-0.81	-0.81	—	—	—	-0.81
Box	—	-0.34	-0.34	—	—	—	-0.34
Bay Laurel	—	-0.34	-0.34	—	—	—	-0.34
Chinese Pistache	—	-0.70	-0.70	—	—	—	-0.70

Subtotal	—	-8.50	-8.50	—	—	—	-8.50
Sequestered	—	—	—	—	—	—	—
Texas Privet	—	-9.13	-9.13	—	—	—	-9.13
Peach	—	-0.33	-0.33	—	—	—	-0.33
Mexican Fan Palm	—	-2.01	-2.01	—	—	—	-2.01
Citrus	—	-0.30	-0.30	—	—	—	-0.30
Indian Laurel Fig	—	-0.19	-0.19	—	—	—	-0.19
Common Myrtle	—	-0.33	-0.33	—	—	—	-0.33
Weeping Fig	—	-0.52	-0.52	—	—	—	-0.52
Shamel Ash	—	-0.67	-0.67	—	—	—	-0.67
Chinese Elm	—	-0.53	-0.53	—	—	—	-0.53
Aleppo Pine	—	-0.63	-0.63	—	—	—	-0.63
Coast Live Oak	—	-2.49	-2.49	—	—	—	-2.49
Redbud	—	-1.48	-1.48	—	—	—	-1.48
Box	—	-1.88	-1.88	—	—	—	-1.88
Bay Laurel	—	-1.49	-1.49	—	—	—	-1.49
Chinese Pistache	—	-6.44	-6.44	—	—	—	-6.44
Subtotal	—	-28.4	-28.4	—	—	—	-28.4
Removed	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—

Chinese Elm	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Total	—	-36.9	-36.9	—	—	—	-36.9
Annual	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Texas Privet	—	-0.53	-0.53	—	—	—	-0.53
Peach	—	-0.02	-0.02	—	—	—	-0.02
Mexican Fan Palm	—	-0.15	-0.15	—	—	—	-0.15
Citrus	—	-0.01	-0.01	—	—	—	-0.01
Indian Laurel Fig	—	-0.01	-0.01	—	—	—	-0.01
Common Myrtle	—	-0.02	-0.02	—	—	—	-0.02
Weeping Fig	—	-0.02	-0.02	—	—	—	-0.02
Shamel Ash	—	-0.02	-0.02	—	—	—	-0.02
Chinese Elm	—	-0.02	-0.02	—	—	—	-0.02
Aleppo Pine	—	-0.06	-0.06	—	—	—	-0.06
Coast Live Oak	—	-0.19	-0.19	—	—	—	-0.19
Redbud	—	-0.13	-0.13	—	—	—	-0.13
Box	—	-0.06	-0.06	—	—	—	-0.06
Bay Laurel	—	-0.06	-0.06	—	—	—	-0.06
Chinese Pistache	—	-0.12	-0.12	—	—	—	-0.12

Subtotal	—	-1.41	-1.41	—	—	—	-1.41
Sequestered	—	—	—	—	—	—	—
Texas Privet	—	-1.51	-1.51	—	—	—	-1.51
Peach	—	-0.05	-0.05	—	—	—	-0.05
Mexican Fan Palm	—	-0.33	-0.33	—	—	—	-0.33
Citrus	—	-0.05	-0.05	—	—	—	-0.05
Indian Laurel Fig	—	-0.03	-0.03	—	—	—	-0.03
Common Myrtle	—	-0.06	-0.06	—	—	—	-0.06
Weeping Fig	—	-0.09	-0.09	—	—	—	-0.09
Shamel Ash	—	-0.11	-0.11	—	—	—	-0.11
Chinese Elm	—	-0.09	-0.09	—	—	—	-0.09
Aleppo Pine	—	-0.10	-0.10	—	—	—	-0.10
Coast Live Oak	—	-0.41	-0.41	—	—	—	-0.41
Redbud	—	-0.25	-0.25	—	—	—	-0.25
Box	—	-0.31	-0.31	—	—	—	-0.31
Bay Laurel	—	-0.25	-0.25	—	—	—	-0.25
Chinese Pistache	—	-1.07	-1.07	—	—	—	-1.07
Subtotal	—	-4.70	-4.70	—	—	—	-4.70
Removed	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—

Chinese Elm	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—
Redbud	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Total	—	-6.11	-6.11	—	—	—	-6.11

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Texas Privet	—	-3.17	-3.17	—	—	—	-3.17
Peach	—	-0.12	-0.12	—	—	—	-0.12
Mexican Fan Palm	—	-0.90	-0.90	—	—	—	-0.90
Citrus	—	-0.04	-0.04	—	—	—	-0.04
Indian Laurel Fig	—	-0.07	-0.07	—	—	—	-0.07
Common Myrtle	—	-0.13	-0.13	—	—	—	-0.13
Weeping Fig	—	-0.11	-0.11	—	—	—	-0.11
Shamel Ash	—	-0.14	-0.14	—	—	—	-0.14
Chinese Elm	—	-0.11	-0.11	—	—	—	-0.11
Aleppo Pine	—	-0.35	-0.35	—	—	—	-0.35
Coast Live Oak	—	-1.15	-1.15	—	—	—	-1.15
Redbud	—	-0.81	-0.81	—	—	—	-0.81
Box	—	-0.34	-0.34	—	—	—	-0.34
Bay Laurel	—	-0.34	-0.34	—	—	—	-0.34
Chinese Pistache	—	-0.70	-0.70	—	—	—	-0.70
Subtotal	—	-8.50	-8.50	—	—	—	-8.50
Sequestered	—	—	—	—	—	—	—
Texas Privet	—	-9.13	-9.13	—	—	—	-9.13

Peach	—	-0.33	-0.33	—	—	—	-0.33
Mexican Fan Palm	—	-2.01	-2.01	—	—	—	-2.01
Citrus	—	-0.30	-0.30	—	—	—	-0.30
Indian Laurel Fig	—	-0.19	-0.19	—	—	—	-0.19
Common Myrtle	—	-0.33	-0.33	—	—	—	-0.33
Weeping Fig	—	-0.52	-0.52	—	—	—	-0.52
Shamel Ash	—	-0.67	-0.67	—	—	—	-0.67
Chinese Elm	—	-0.53	-0.53	—	—	—	-0.53
Aleppo Pine	—	-0.63	-0.63	—	—	—	-0.63
Coast Live Oak	—	-2.49	-2.49	—	—	—	-2.49
Redbud	—	-1.48	-1.48	—	—	—	-1.48
Box	—	-1.88	-1.88	—	—	—	-1.88
Bay Laurel	—	-1.49	-1.49	—	—	—	-1.49
Chinese Pistache	—	-6.44	-6.44	—	—	—	-6.44
Subtotal	—	-28.4	-28.4	—	—	—	-28.4
Removed	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—

Redbud	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Total	—	-36.9	-36.9	—	—	—	-36.9
Daily, Winter (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Texas Privet	—	-3.17	-3.17	—	—	—	-3.17
Peach	—	-0.12	-0.12	—	—	—	-0.12
Mexican Fan Palm	—	-0.90	-0.90	—	—	—	-0.90
Citrus	—	-0.04	-0.04	—	—	—	-0.04
Indian Laurel Fig	—	-0.07	-0.07	—	—	—	-0.07
Common Myrtle	—	-0.13	-0.13	—	—	—	-0.13
Weeping Fig	—	-0.11	-0.11	—	—	—	-0.11
Shamel Ash	—	-0.14	-0.14	—	—	—	-0.14
Chinese Elm	—	-0.11	-0.11	—	—	—	-0.11
Aleppo Pine	—	-0.35	-0.35	—	—	—	-0.35
Coast Live Oak	—	-1.15	-1.15	—	—	—	-1.15
Redbud	—	-0.81	-0.81	—	—	—	-0.81
Box	—	-0.34	-0.34	—	—	—	-0.34
Bay Laurel	—	-0.34	-0.34	—	—	—	-0.34
Chinese Pistache	—	-0.70	-0.70	—	—	—	-0.70
Subtotal	—	-8.50	-8.50	—	—	—	-8.50
Sequestered	—	—	—	—	—	—	—
Texas Privet	—	-9.13	-9.13	—	—	—	-9.13

Peach	—	-0.33	-0.33	—	—	—	-0.33
Mexican Fan Palm	—	-2.01	-2.01	—	—	—	-2.01
Citrus	—	-0.30	-0.30	—	—	—	-0.30
Indian Laurel Fig	—	-0.19	-0.19	—	—	—	-0.19
Common Myrtle	—	-0.33	-0.33	—	—	—	-0.33
Weeping Fig	—	-0.52	-0.52	—	—	—	-0.52
Shamel Ash	—	-0.67	-0.67	—	—	—	-0.67
Chinese Elm	—	-0.53	-0.53	—	—	—	-0.53
Aleppo Pine	—	-0.63	-0.63	—	—	—	-0.63
Coast Live Oak	—	-2.49	-2.49	—	—	—	-2.49
Redbud	—	-1.48	-1.48	—	—	—	-1.48
Box	—	-1.88	-1.88	—	—	—	-1.88
Bay Laurel	—	-1.49	-1.49	—	—	—	-1.49
Chinese Pistache	—	-6.44	-6.44	—	—	—	-6.44
Subtotal	—	-28.4	-28.4	—	—	—	-28.4
Removed	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—

Redbud	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Total	—	-36.9	-36.9	—	—	—	-36.9
Annual	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Texas Privet	—	-0.53	-0.53	—	—	—	-0.53
Peach	—	-0.02	-0.02	—	—	—	-0.02
Mexican Fan Palm	—	-0.15	-0.15	—	—	—	-0.15
Citrus	—	-0.01	-0.01	—	—	—	-0.01
Indian Laurel Fig	—	-0.01	-0.01	—	—	—	-0.01
Common Myrtle	—	-0.02	-0.02	—	—	—	-0.02
Weeping Fig	—	-0.02	-0.02	—	—	—	-0.02
Shamel Ash	—	-0.02	-0.02	—	—	—	-0.02
Chinese Elm	—	-0.02	-0.02	—	—	—	-0.02
Aleppo Pine	—	-0.06	-0.06	—	—	—	-0.06
Coast Live Oak	—	-0.19	-0.19	—	—	—	-0.19
Redbud	—	-0.13	-0.13	—	—	—	-0.13
Box	—	-0.06	-0.06	—	—	—	-0.06
Bay Laurel	—	-0.06	-0.06	—	—	—	-0.06
Chinese Pistache	—	-0.12	-0.12	—	—	—	-0.12
Subtotal	—	-1.41	-1.41	—	—	—	-1.41
Sequestered	—	—	—	—	—	—	—
Texas Privet	—	-1.51	-1.51	—	—	—	-1.51

Peach	—	-0.05	-0.05	—	—	—	-0.05
Mexican Fan Palm	—	-0.33	-0.33	—	—	—	-0.33
Citrus	—	-0.05	-0.05	—	—	—	-0.05
Indian Laurel Fig	—	-0.03	-0.03	—	—	—	-0.03
Common Myrtle	—	-0.06	-0.06	—	—	—	-0.06
Weeping Fig	—	-0.09	-0.09	—	—	—	-0.09
Shamel Ash	—	-0.11	-0.11	—	—	—	-0.11
Chinese Elm	—	-0.09	-0.09	—	—	—	-0.09
Aleppo Pine	—	-0.10	-0.10	—	—	—	-0.10
Coast Live Oak	—	-0.41	-0.41	—	—	—	-0.41
Redbud	—	-0.25	-0.25	—	—	—	-0.25
Box	—	-0.31	-0.31	—	—	—	-0.31
Bay Laurel	—	-0.25	-0.25	—	—	—	-0.25
Chinese Pistache	—	-1.07	-1.07	—	—	—	-1.07
Subtotal	—	-4.70	-4.70	—	—	—	-4.70
Removed	—	—	—	—	—	—	—
Texas Privet	—	—	—	—	—	—	—
Peach	—	—	—	—	—	—	—
Mexican Fan Palm	—	—	—	—	—	—	—
Citrus	—	—	—	—	—	—	—
Indian Laurel Fig	—	—	—	—	—	—	—
Common Myrtle	—	—	—	—	—	—	—
Weeping Fig	—	—	—	—	—	—	—
Shamel Ash	—	—	—	—	—	—	—
Chinese Elm	—	—	—	—	—	—	—
Aleppo Pine	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—

Redbud	—	—	—	—	—	—	—
Box	—	—	—	—	—	—	—
Bay Laurel	—	—	—	—	—	—	—
Chinese Pistache	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Total	—	-6.11	-6.11	—	—	—	-6.11

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	2/1/2025	3/31/2025	5.00	41.0	—
Site Preparation	Site Preparation	4/1/2025	4/30/2025	5.00	22.0	—
Grading	Grading	4/1/2025	5/31/2025	5.00	44.0	—
Building Construction	Building Construction	6/1/2025	11/30/2027	5.00	652	—
Paving	Paving	4/1/2026	4/30/2027	5.00	283	—
Architectural Coating	Architectural Coating	2/1/2026	6/30/2027	5.00	368	—
Trenching	Trenching	6/1/2025	12/31/2025	5.00	153	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Demolition	Tractors/Loaders/Backh	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backh oes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73

Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	20.1	40.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	1.05	40.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	97.0	40.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	168	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	30.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—

Architectural Coating	Worker	33.6	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	20.1	40.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	1.05	40.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	97.0	40.0	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	168	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	30.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	33.6	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	413,667	137,889	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	3,300	—
Site Preparation	—	182	33.0	0.00	—
Grading	—	34,130	44.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Congregate Care (Assisted Living)	—	0%
Retirement Community	—	0%
Enclosed Parking with Elevator	1.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	690	0.05	0.01
2026	0.00	690	0.05	0.01
2027	0.00	690	0.05	0.01

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	607	607	607	221,555	4,070	4,070	4,070	1,485,550

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	607	607	607	221,555	4,070	4,070	4,070	1,485,550

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Congregate Care (Assisted Living)	—
Wood Fireplaces	0
Gas Fireplaces	10
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	130

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Retirement Community	—
Wood Fireplaces	0
Gas Fireplaces	5
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	54
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Congregate Care (Assisted Living)	—
Wood Fireplaces	0
Gas Fireplaces	10
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	130
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

Retirement Community	—
Wood Fireplaces	0
Gas Fireplaces	5
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	54
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
413667	137,889	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	459,689	690	0.0489	0.0069	1,389,550
Retirement Community	211,171	690	0.0489	0.0069	1,335,925
Enclosed Parking with Elevator	215,580	690	0.0489	0.0069	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	459,689	690	0.0489	0.0069	1,389,550
Retirement Community	213,476	690	0.0489	0.0069	0.00
Enclosed Parking with Elevator	215,580	690	0.0489	0.0069	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Congregate Care (Assisted Living)	5,218,332	66,422
Retirement Community	2,199,154	51,423
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Congregate Care (Assisted Living)	5,218,332	66,422
Retirement Community	2,199,154	51,423
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Congregate Care (Assisted Living)	249	—
Retirement Community	105	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Congregate Care (Assisted Living)	249	—
Retirement Community	105	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Congregate Care (Assisted Living)	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00

Retirement Community	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Retirement Community	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Congregate Care (Assisted Living)	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00
Retirement Community	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Retirement Community	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Redbud	8.00	12,105	39.0
Coast Live Oak	4.00	8,470	41.0
Box	50.0	4,962	17.0
Bay Laurel	2.00	4,249	21.0
Chinese Pistache	10.0	10,400	33.0
Mexican Fan Palm	11.0	6,513	25.0
Texas Privet	-28.0	-47,297	-152
Peach	-1.00	-1,852	-6.00
Mexican Fan Palm	-10.0	-5,920	-22.0
Citrus	-1.00	-501	-2.00
Indian Laurel Fig	-1.00	-1,006	-4.00
Common Myrtle	-1.00	-1,727	-7.00
Weeping Fig	-1.00	-1,424	-6.00
Shamel Ash	-2.00	-2,036	-6.00
Chinese Elm	-1.00	-1,683	-5.00
Aleppo Pine	-2.00	-4,374	-21.0
Coast Live Oak	-3.00	-5,889	-29.0

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Redbud	8.00	12,105	39.0
Coast Live Oak	4.00	8,470	41.0
Box	50.0	4,962	17.0

Bay Laurel	2.00	4,249	21.0
Chinese Pistache	10.0	10,400	33.0
Mexican Fan Palm	11.0	6,513	25.0
Texas Privet	-28.0	-47,297	-152
Peach	-1.00	-1,852	-6.00
Mexican Fan Palm	-10.0	-5,920	-22.0
Citrus	-1.00	-501	-2.00
Indian Laurel Fig	-1.00	-1,006	-4.00
Common Myrtle	-1.00	-1,727	-7.00
Weeping Fig	-1.00	-1,424	-6.00
Shamel Ash	-2.00	-2,036	-6.00
Chinese Elm	-1.00	-1,683	-5.00
Aleppo Pine	-2.00	-4,374	-21.0
Coast Live Oak	-3.00	-5,889	-29.0

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.0	annual days of extreme heat
Extreme Precipitation	6.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.68	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	74.1
AQ-PM	59.9
AQ-DPM	34.1
Drinking Water	83.1
Lead Risk Housing	24.7
Pesticides	0.00
Toxic Releases	67.4
Traffic	68.4
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00

Haz Waste Facilities/Generators	41.1
Impaired Water Bodies	58.7
Solid Waste	22.1
Sensitive Population	—
Asthma	7.66
Cardio-vascular	17.6
Low Birth Weights	37.0
Socioeconomic Factor Indicators	—
Education	30.0
Housing	71.9
Linguistic	4.59
Poverty	17.7
Unemployment	63.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	78.63467214
Employed	50.78916977
Median HI	62.22250738
Education	—
Bachelor's or higher	89.24675991
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	54.54895419

Active commuting	20.5825741
Social	—
2-parent households	49.82676761
Voting	61.58090594
Neighborhood	—
Alcohol availability	19.18388297
Park access	81.35506224
Retail density	69.0619787
Supermarket access	58.7065315
Tree canopy	68.90799435
Housing	—
Homeownership	29.23136148
Housing habitability	34.73630181
Low-inc homeowner severe housing cost burden	38.53458232
Low-inc renter severe housing cost burden	14.14089568
Uncrowded housing	78.31387142
Health Outcomes	—
Insured adults	70.06287694
Arthritis	38.0
Asthma ER Admissions	88.7
High Blood Pressure	44.4
Cancer (excluding skin)	12.2
Asthma	76.7
Coronary Heart Disease	43.7
Chronic Obstructive Pulmonary Disease	68.2
Diagnosed Diabetes	80.8
Life Expectancy at Birth	19.4

Cognitively Disabled	85.7
Physically Disabled	88.8
Heart Attack ER Admissions	72.8
Mental Health Not Good	80.9
Chronic Kidney Disease	64.9
Obesity	71.5
Pedestrian Injuries	55.9
Physical Health Not Good	77.4
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	29.5
Current Smoker	81.1
No Leisure Time for Physical Activity	90.8
Climate Change Exposures	—
Wildfire Risk	0.2
SLR Inundation Area	0.0
Children	50.1
Elderly	21.7
English Speaking	98.1
Foreign-born	27.1
Outdoor Workers	93.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	33.0
Traffic Density	83.2
Traffic Access	61.4
Other Indices	—
Hardship	30.1

Other Decision Support	—
2016 Voting	59.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	27.0
Healthy Places Index Score for Project Location (b)	73.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project plans
Construction: Construction Phases	Developer information
Construction: Off-Road Equipment	—
Construction: Trips and VMT	Assumes 40-mile distance to landfill
Construction: Paving	Assumes 25 percent of site area

Operations: Hearths	Assumes up to ten gas-fueled ovens and stoves for food preparation or outdoor fire pits in the assisted living facility

DouglasKim+Associates,LLC

iTREE CALCULATIONS (REMOVED TREES)

Project Report - i-Tree Planting Calculator

Location: Los Angeles, California 90004
Total number of trees planted in this project: 51
Electricity Emissions Factor: 252.40 kilograms CO2 equivalent/MWh
Fuel Emissions Factor: 52.00 kilograms CO2 equivalent/MMBtu
Lifetime: 40 years
Annual Tree Mortality: 3%

All amounts in the tables are for the full lifetime of the project.

Location			Tree Growth					
Group Identifier	Tree Group Characteristics	Initial Number of Trees	DBH (The estimated DBH at the end of the projection) ()	Height (The estimated tree height at the end of the projection) ()	Surviving Trees (The number of trees that survive at the end of the projection based on the mortality rate. The models do estimate fractions of individual trees remaining after mortality for the most precise estimates of the benefits.)	Basal Area (The estimated combined basal area of surviving trees at the end of the projection.) ()	Canopy Cover (The estimated combined crown area of surviving trees at the end of the projection. This combined crown area estimate assumes no overlap between tree crowns and represents the maximum area that these trees could possibly cover.) ()	Biomass (The estimated combined biomass of surviving trees at the end of the projection.) (pounds)

1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	18.5	68.1	8.5	15.9	6,871.2	17.7
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.8	62.0	0.30	0.59	270.6	0.6
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	39.3	39.9	3.0	25.7	6,390.6	2.5

4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.3	23.7	0.30	0.56	219.0	0.6
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.3	46.7	0.30	0.56	111.6	0.4
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.1	51.2	0.30	0.55	207.8	0.7

7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	31.0	60.2	0.30	1.6	212.3	1.3
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	35.9	101.4	0.30	2.1	427.8	1.5
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	33.4	97.7	0.30	1.9	258.5	1.3

10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	31.0	82.9	0.61	3.2	336.5	1.6
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	39.3	92.3	0.30	2.6	656.8	3.0
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	22.5	77.1	0.91	2.5	922.3	2.5
Total		51			**16**	**57.7**	**16,885.0**	**33.7**

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	46,330.0	$1,077.49	133,287.0	$3,099.85
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,815.3	$42.22	4,829.4	$112.32
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	6,225.7	$144.79	13,961.2	$324.70
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	551.2	$12.82	4,340.7	$100.95
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,069.1	$24.86	2,712.0	$63.07

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,933.4	$44.97	4,855.6	$112.93
7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,618.6	$37.64	7,626.2	$177.36
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,998.7	$46.48	9,735.3	$226.41
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,650.4	$38.38	7,792.0	$181.22
10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	5,181.6	$120.51	9,171.4	$213.30

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**CO_2 (Carbon Dioxide) Avoided (pounds)**	**CO_2 Avoided ($)**	**CO_2 Sequestered (pounds)**	**CO_2 Sequestered ($)**
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,461.8	$34.00	17,205.7	$400.15
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	6,903.6	$160.56	14,557.0	$338.55
Total		51	**76,739.3**	**$1,784.72**	**230,073.5**	**$5,350.81**

Location			Energy Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	47,297.5	$9,681.79	152.2	$1,969.64
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,852.2	$379.14	6.0	$77.25
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	5,920.9	$1,212.00	22.8	$294.64
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	501.4	$102.65	2.1	$27.65
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,006.2	$205.96	4.0	$51.33

Location			Energy Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,727.0	$353.51	7.7	$99.21
7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,424.6	$291.61	6.5	$84.51
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	2,036.5	$416.87	6.6	$85.24
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,683.4	$344.60	5.4	$70.26
10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	4,374.6	$895.47	21.9	$283.36

Location			Energy Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Electricity Saved (kWh) (Kilowatt-Hours)**	**Electricity Saved ($)**	**Fuel Saved (MMBtu) (Millions of British Thermal Units)**	**Fuel Saved ($)**
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	1,492.4	$305.50	4.8	$62.14
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	5,889.2	$1,205.51	28.9	$373.34
Total		51	**75,205.7**	**$15,394.61**	**268.8**	**$3,478.57**

Location			Hydrological Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	345,374.4	345,350.6	1,746,800.0	105,034.4	$938.59
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	16,010.9	16,009.8	80,978.5	4,869.2	$43.51
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	148,109.4	148,099.2	749,092.7	45,042.7	$402.50
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	8,704.2	8,703.6	44,023.2	2,647.1	$23.65
5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	4,960.3	4,960.0	25,087.7	1,508.5	$13.48

Location			Hydrological Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	11,629.2	11,628.4	58,817.2	3,536.7	$31.60
7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	6,683.2	6,682.8	33,801.8	2,032.5	$18.16
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	26,507.7	26,505.9	134,068.2	8,061.5	$72.04
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	9,770.9	9,770.3	49,418.4	2,971.5	$26.55
10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	10,625.5	10,624.7	53,740.5	3,231.4	$28.88

Location			Hydrological Benefits				
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Rainfall Interception (gallons)**	**Evaporation (gallons)**	**Transpiration (gallons)**	**Runoff Avoided (gallons)**	**Runoff Avoided ($)**
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	16,960.3	16,959.1	85,779.9	5,157.9	$46.09
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	28,448.7	28,446.8	143,885.0	8,651.8	$77.31
Total		51	**633,784.8**	**633,741.1**	**3,205,493.3**	**192,745.1**	**$1,722.37**

Location			Air Benefits									
Group Identifier	Tree Group Characteristics	Initial Number of Trees	O_3 (Ozone) Removed (pounds)	NO_2 (Nitrogen Dioxide) Avoided (pounds)	NO_2 (Nitrogen Dioxide) Removed (pounds)	SO_2 (Sulfur Dioxide) Avoided (pounds)	SO_2 (Sulfur Dioxide) Removed (pounds)	VOC (Volatile Organic Compound) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Removed (pounds)	Avoided Value (Values for avoided pollutants) ($)	Removal Value (Values for removed pollutants) ($)

1	• 28 Texas swampprivet(Forestiera angustifolia) trees of 5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	28	452.86	3.33	106.32	11.73	7.19	24.51	15.50	4.79	$84.99	$2,804.34
2	• 1 Peach(Prunus persica) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	18.81	0.13	4.29	0.46	0.30	0.96	0.61	0.16	$3.33	$110.38

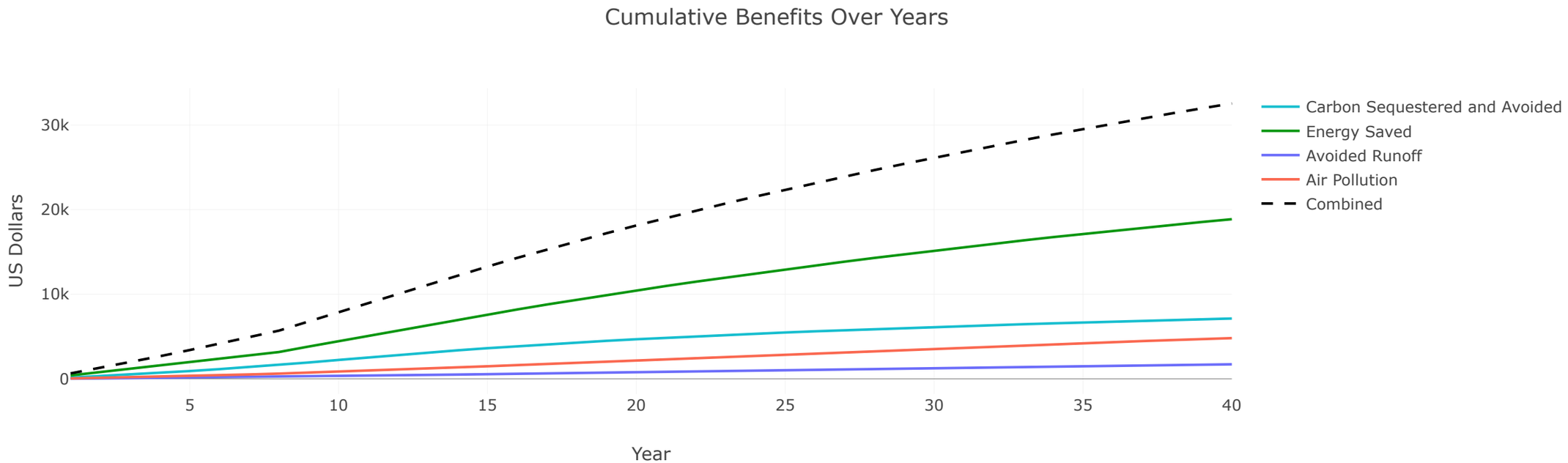
3	• 10 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	134.69	0.45	30.59	1.58	2.45	3.09	1.94	0.76	$10.79	$743.32
4	• 1 Citrus spp(Citrus) tree of 1.5 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	9.85	0.04	2.37	0.14	0.18	0.26	0.16	0.08	$0.92	$59.39

5	• 1 Indian laurel fig(Ficus retusa ssp. nitida) tree of 2 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	6.80	0.08	1.72	0.27	0.12	0.53	0.33	0.09	$1.84	$45.92
6	• 1 Wild crapemyrtle(Malpighia glabra) tree of 8 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	14.41	0.14	3.55	0.49	0.25	0.91	0.57	0.14	$3.19	$90.75

7	• 1 Fig spp(Ficus) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	9.48	0.12	2.42	0.41	0.17	0.75	0.47	0.13	$2.64	$65.40
8	• 1 Shamel ash(Fraxinus uhdei) tree of 15 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	30.81	0.14	7.01	0.51	0.50	1.06	0.67	0.26	$3.66	$179.83
9	• 1 Shamel ash(Fraxinus uhdei) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	13.33	0.12	3.17	0.42	0.21	0.87	0.55	0.16	$3.03	$84.80

10	• 2 Aleppo pine(Pinus halepensis) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	15.90	0.37	4.12	1.31	0.28	2.31	1.44	0.24	$8.17	$114.13
11	• 1 Chinese elm(Ulmus parvifolia) tree of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	1	19.10	0.11	4.32	0.37	0.31	0.77	0.49	0.16	$2.68	$110.91
12	• 3 Coastal live oak(Quercus agrifolia) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	3	40.05	0.50	10.21	1.75	0.70	3.11	1.94	0.52	$10.98	$273.62

Total		51	**766.09**	**5.52**	**180.10**	**19.42**	**12.65**	**39.12**	**24.67**	**7.47**	**$136.21**	**$4,682.79**



Mortality is modeled as a fractional (not whole) tree estimate and may not align year-over-year.
Sequestration does not account for net differences like decay.
Tree canopy cover estimate assumes no overlap between crowns.

Application v2.7.0, powered by engine v0.15.1 (APIv3) and database v12.0.70.

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Version 2.7.0

DouglasKim+Associates,LLC

iTREE CALCULATIONS (NEW TREES)

Project Report - i-Tree Planting Calculator

Location: Los Angeles, California 90004
Total number of trees planted in this project: 40
Electricity Emissions Factor: 252.40 kilograms CO2 equivalent/MWh
Fuel Emissions Factor: 52.00 kilograms CO2 equivalent/MMBtu
Lifetime: 40 years
Annual Tree Mortality: 3%

All amounts in the tables are for the full lifetime of the project.

Location			Tree Growth					
Group Identifier	Tree Group Characteristics	Initial Number of Trees	DBH (The estimated DBH at the end of the projection) ()	Height (The estimated tree height at the end of the projection) ()	Surviving Trees (The number of trees that survive at the end of the projection based on the mortality rate. The models do estimate fractions of individual trees remaining after mortality for the most precise estimates of the benefits.)	Basal Area (The estimated combined basal area of surviving trees at the end of the projection.) ()	Canopy Cover (The estimated combined crown area of surviving trees at the end of the projection. This combined crown area estimate assumes no overlap between tree crowns and represents the maximum area that these trees could possibly cover.) ()	Biomass (The estimated combined biomass of surviving trees at the end of the projection.) (pounds)

1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	18.5	63.6	2.4	4.5	1,878.9	2.9
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	23.5	78.4	1.2	3.7	1,334.7	3.8

3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	17.9	40.3	1.5	2.7	1,123.2	4.0
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	23.5	60.6	0.61	1.8	595.3	3.7

5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	31.2	61.4	3.0	16.2	4,646.5	15.4
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	39.3	39.9	3.4	28.2	7,029.7	2.7
Total		40			**12**	**57.1**	**16,608.2**	**32.6**

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	11,859.4	$275.81	21,680.4	$504.22
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	9,948.6	$231.37	21,759.0	$506.05
3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	5,016.0	$116.66	27,508.9	$639.77
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	5,008.7	$116.49	21,722.2	$505.19
5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	10,164.5	$236.40	94,012.1	$2,186.43

Location			CO_2 (Carbon Dioxide) Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**CO_2 (Carbon Dioxide) Avoided (pounds)**	**CO_2 Avoided ($)**	**CO_2 Sequestered (pounds)**	**CO_2 Sequestered ($)**
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	6,848.3	$159.27	15,357.4	$357.17
Total		40	**48,845.5**	**$1,136.00**	**202,039.8**	**$4,698.83**

Location			Energy Benefits			
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	12,105.8	$2,478.06	39.0	$504.27
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	8,470.6	$1,733.93	41.7	$539.13
3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	4,962.0	$1,015.72	17.3	$224.18
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	4,249.9	$869.96	21.1	$272.44
5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	10,400.3	$2,128.95	33.3	$430.50

Location			Energy Benefits			
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Electricity Saved (kWh) (Kilowatt-Hours)**	**Electricity Saved ($)**	**Fuel Saved (MMBtu) (Millions of British Thermal Units)**	**Fuel Saved ($)**
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	6,513.0	$1,333.21	25.0	$324.11
Total		40	**46,701.7**	**$9,559.83**	**177.3**	**$2,294.63**

Location			Hydrological Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	89,977.0	89,970.8	455,076.8	27,363.6	$244.52
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	43,542.2	43,539.2	220,223.5	13,242.0	$118.33
3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	55,407.7	55,403.9	280,235.7	16,850.5	$150.58
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	20,252.7	20,251.3	102,432.1	6,159.2	$55.04
5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	157,755.9	157,745.0	797,881.8	47,976.3	$428.72

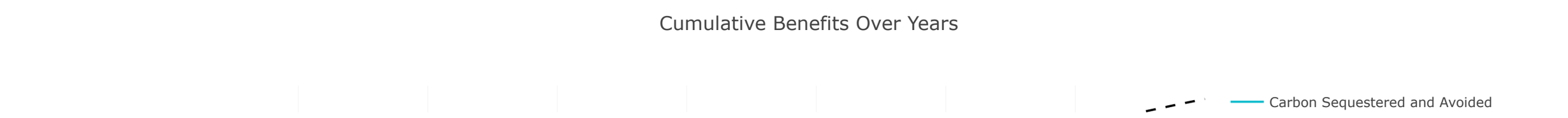
Location			Hydrological Benefits				
Group Identifier	**Tree Group Characteristics**	**Initial Number of Trees**	**Rainfall Interception (gallons)**	**Evaporation (gallons)**	**Transpiration (gallons)**	**Runoff Avoided (gallons)**	**Runoff Avoided ($)**
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	162,920.3	162,909.1	824,002.0	49,546.9	$442.75
Total		40	**529,855.9**	**529,819.3**	**2,679,851.8**	**161,138.4**	**$1,439.93**

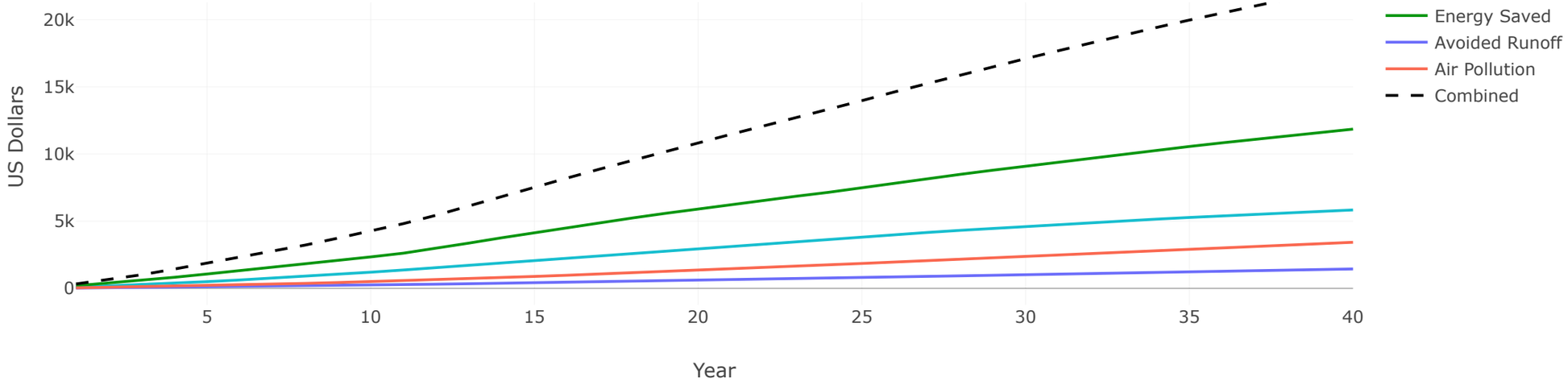
Location			Air Benefits									
Group Identifier	Tree Group Characteristics	Initial Number of Trees	O_3 (Ozone) Removed (pounds)	NO_2 (Nitrogen Dioxide) Avoided (pounds)	NO_2 (Nitrogen Dioxide) Removed (pounds)	SO_2 (Sulfur Dioxide) Avoided (pounds)	SO_2 (Sulfur Dioxide) Removed (pounds)	VOC (Volatile Organic Compound) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Removed (pounds)	Avoided Value (Values for avoided pollutants) ($)	Removal Value (Values for removed pollutants) ($)

1	• 8 Redbud spp(Cercis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	8	104.42	0.85	23.77	3.00	1.68	6.27	3.97	0.88	$21.75	$611.14
2	• 4 Coastal live oak(Quercus agrifolia) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	4	61.57	0.72	15.70	2.52	1.07	4.47	2.79	0.80	$15.80	$420.81

3	• 5 Common box(Buxus sempervirens) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	5	62.18	0.36	14.92	1.27	1.11	2.58	1.63	0.52	$8.97	$373.02
4	• 2 Bay laurel(Laurus nobilis) trees of 4 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	2	24.99	0.36	6.15	1.27	0.44	2.24	1.40	0.25	$7.93	$157.56

5	• 10 Chinese pistache(Pistacia chinensis) trees of 6 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	10	169.42	0.73	37.80	2.57	2.75	5.39	3.41	1.23	$18.68	$960.46
6	• 11 Mexican fan palm(Washingtonia robusta) trees of 3 inches initial DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in excellent condition and planted in full sun.	11	148.16	0.49	33.65	1.73	2.70	3.40	2.14	0.83	$11.87	$817.65
Total		40	**570.74**	**3.51**	**131.99**	**12.36**	**9.75**	**24.35**	**15.33**	**4.51**	**$85.00**	**$3,340.65**





Mortality is modeled as a fractional (not whole) tree estimate and may not align year-over-year.
Sequestration does not account for net differences like decay.
Tree canopy cover estimate assumes no overlap between crowns.

Application v2.7.0, powered by engine v0.15.1 (APIv3) and database v12.0.70.

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APPENDIX G – HISTORIC RESOURCES MEMO

Teresa Grimes | Historic Preservation
Teresa.Grimes@icloud.com
323-868-2391

MEMORANDUM

Date: November 1, 2021

For: Andy Loos
SRM Development
720 6th Street South, Suite 200
Kirkland, Washington 98033

Subject: Ventura and Colfax, Los Angeles

INTRODUCTION

This memorandum was prepared in response to your request for information regarding a proposed development project (Project) in the City of Los Angeles. The Project Site is outlined in red on **Figure 1** and includes the following Assessor Parcel Numbers: 2368-007-001, -002, -028, -029, and -030. The addresses include 11617-95 Ventura Boulevard and 4010-28 Colfax Avenue.

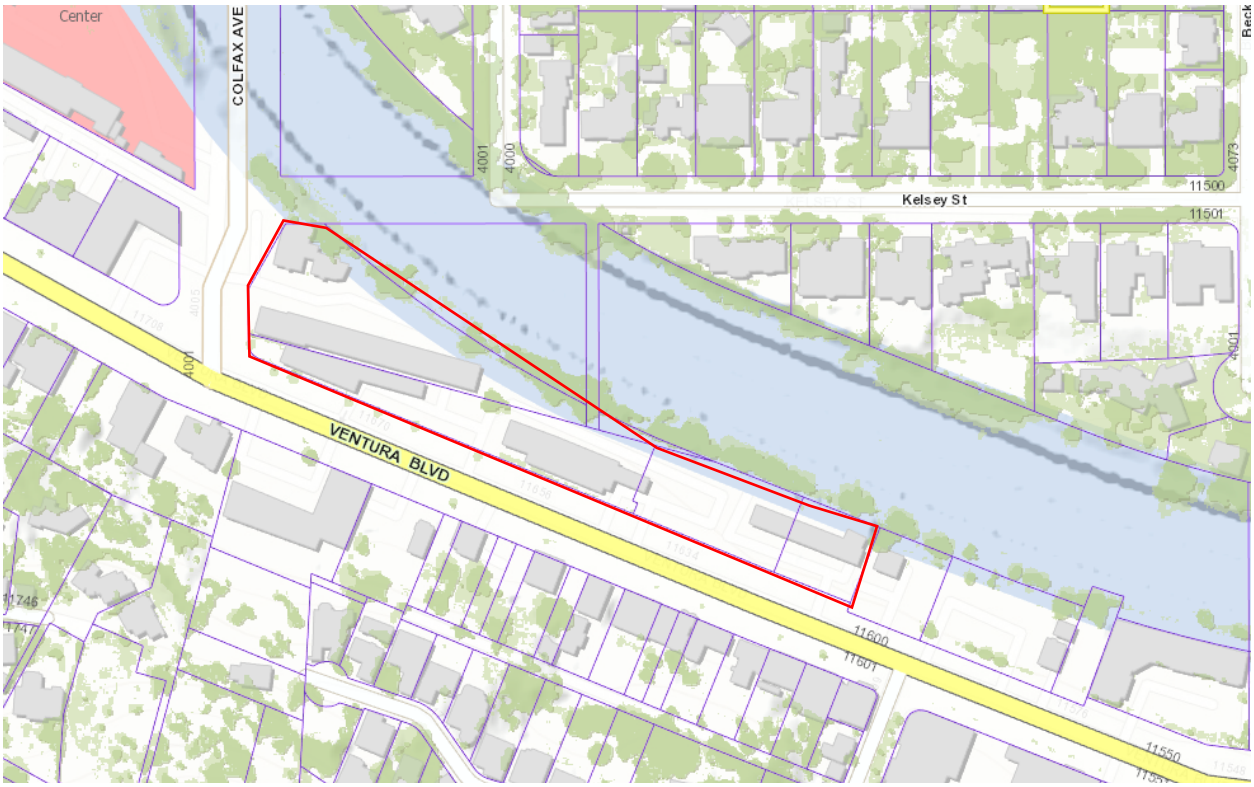


Figure 1: Project Site

I conducted research to determine if the Project has the potential to impact historical resources defined by the California Environmental Quality Act (CEQA). My qualifications as a historic preservation professional are included as **Appendix A.**

HISTORICAL RESOURCES UNDER CEQA

CEQA defines a historical resource as a property listed in the California Register of Historical Resources (California Register) or determined to be eligible for listing in the California Register by the State Historical Resource Commission. A property designated under a local preservation ordinance or identified as eligible in a historic resource survey is presumed to be a historical resource unless a preponderance of evidence demonstrates that the property is not architecturally, historically, or culturally significant.[1] The lead agency has the discretion to treat a property as a historical resource if it meets statutory requirements and substantial evidence supports the conclusion. Thus, there are three categories of historical resources:

- *Mandatory historical resources* are properties listed or determined to be eligible for listing in the California Register by the State Historical Resource Commission.[2] The California Register automatically includes properties listed and formally determined to be eligible for listing in the National Register of Historic Places (National Register) as well as some California State Landmarks and Points of Historical Interest.

- *Presumptive historical resources* are properties included in a local register of historical resources as defined by subdivision (k) of Section 5020.1 of the Public Resources.[3] The Los Angeles Cultural Heritage Ordinance and the Historic Preservation Overlay Zone Ordinance meet this definition. Therefore properties designated Los Angeles Historic Cultural Monuments (HCMs) and areas designated as Historic Preservation Overlay Zones (HPOZs) are presumed to be historical resources by the City of Los Angeles. Presumptive historical resources also include properties deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 of the Public Resources Code, unless a preponderance of the evidence demonstrates that the property is not significant.[4]

[1] Public Resources Code § 5024.1 and Title 14 California Code of Regulations § 4850 & § 15064.5 (a) (2).

[2] Title 14 California Code of Regulations § 15064.5 (a) (1).

[3] A local register of historical resources is defined as a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

[4] A resource identified as significant in a historical resource survey may be listed in the California Register if the survey meets all of the following criteria:

1. The survey has been or will be included in the State Historic Resources Inventory.
2. The survey and the survey documentation were prepared in accordance with office procedures and requirements.
3. The properties were evaluated and determined by the office (SHOP) to have a significance rating of Category 1 to 5 on DPR Form 523.
4. If the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the integrity of the resource.

SurveyLA does not meet these requirements. Nevertheless, the City of Los Angeles presumes properties identified as significant by SurveyLA to be historical resources unless a Historical Resource Assessment Report demonstrates otherwise.

- *Discretionary historical resources* are properties determined to be eligible for listing in the California Register by the lead agency. The determination must be supported by evidence in light of the whole record.[5]

PREVIOUS DESIGNATIONS AND EVALUATIONS

The following sources were consulted to determine if the Project Site includes properties currently designated under national, state, or local landmark or historic district programs or identified as significant in a historic resource survey or study:

1. The Built Environment Resources Directory (BERD) was reviewed to determine if any of the properties are listed or determined eligible for listing in the National Register, listed or determined to be eligible for listing in the California Register, California Registered Historical Landmarks, Points of Historical Interest, or evaluated in historic resource surveys and other planning activities.

    a. This research revealed there are no properties located on the Project Site listed or determined to be eligible for listing or previously surveyed as potential historical resources.

2. The Los Angeles Historic Resources Inventory website, HistoricPlacesLA.org, was reviewed to determine if any of the properties are designated HCMs or within a designated HPOZ.

    a. This research revealed there are no HCMs or HPOZs located on the Project Site

3. The findings of SurveyLA, the citywide historic resource survey of Los Angeles, are also included in HistoricPlacesLA.org as well as individual survey reports for each Community Plan Area (CPA). The Project Site is located within the Sherman Oaks – Studio City – Toluca Lake CPA.

    a. This research revealed there are no properties located on the Project Site identified by SurveyLA. SurveyLA was conducted from the public right-of-way and all of the building on the Project Site are visible.

Therefore, none of the properties on the Project Site are mandatory and presumptive historical resources as defined by CEQA and interpreted by the City of Los Angeles.

[5] Title 14 California Code of Regulations § 15064.5 (a) (3) (4).

LOS ANGELES CITYWIDE HISTORIC CONTEXT STATEMENT

I conducted additional research to determine if any of the properties have the potential to meet the relevant eligibility standards set forth in the *Los Angeles Citywide Historic Context Statement (LACHCS).* Historical aerial photographs indicate the Project Site was undeveloped from at least 1923 until the 1940s (see **Appendix B**). Photographs also indicate the Project Site was developed with automotive sales offices, a car washing rack, and a gas station between 1950 and 1960. The car washing rack and gas station were removed between 1960 and 1966. Historical city directories indicate that the Project Site has been occupied by various businesses at all addresses associated with the Project Site (**Appendix C**).

APN 2368-007-001 - This property is occupied by three buildings. The building permits for all three buildings use the address 4028 Colfax Avenue; however, the plot plans indicate three addresses: 4010-14, 4026, and 4028 Colfax Avenue.

The building located at *4010-14 Colfax Avenue* was constructed in 1961 according to the Los Angeles County Office of the Assessor; however, there is no permit on record with the Los Angeles Department of Building and Safety for the original construction. The one-story building has a long, rectangular shape, a flat roof, and a stucco exterior. The building has been occupied by various commercial businesses over time. See **Appendix B** for city directory research beginning in 1962.

4026 Colfax Avenue was constructed as a one-story building with an echo chamber and storage in 1968. Carl Howard was the owner. No architect was used in the design of the building. As the building is now two-stories in height, an addition was added. The date is unknown as there is not a permit for an addition with Building and Safety. The building has a flat roof and a stucco exterior. The address does not appear in the city directory until 1990. At that time, it was occupied by SMV Inc.

4028 Colfax Avenue is an office building constructed in 1963 for Carl Howard. The one-story building has a multi-gabled roof and stucco exterior. No architect was used in the design of the building. It does not appear in the city directory until 1970. At that time, it was occupied by Independent Records Inc. There are a few building permits on record for minor alterations.

The buildings were not designed in a particular architectural style so there are no relevant themes in the Architecture and Engineer Context to apply. None of these buildings exhibit quality of design through distinctive features that would make them good examples of a type, period, or method of construction. Therefore, the buildings have no potential to qualify as historical resources for architectural significance.

Research also did not reveal information regarding any specific individuals associated with the property who could be considered persons significant in our past. The city directory research indicates the buildings have been used by a variety of businesses including recording and production companies. The Entertainment Industry Context includes themes for commercial

properties such as office buildings and industrial properties such as recording studios. To qualify, a property must be proven to have played a significant role in the motion picture and recording industries. No evidence was found indicating that the businesses associated with the property played a significant role in the history of the entertainment industry. “Hey, Hey We’re The Monkees” is rumored to have been recorded in the building at *4028 Colfax Avenue*. The song was the theme to the television show *The Monkees*. Online sources document that the song was recorded in 1966 at the RCA Victor Studios in Hollywood at 6363 Hollywood Boulevard. Even if the song had been recorded in the building, the recording of a single famous song in the building would not meet the eligibility standards in the *LACHCS.* Therefore, the buildings have no potential to qualify as historical resources for historic associations with people or events.

APN 2368-007-002 - This property is vacant land.

APN 2368-007-028 - This property is occupied by two buildings. According to the Los Angeles County Office of the Assessor, the building at the east end of the lot with the address *11647 Ventura Boulevard* was constructed in 1963 with an addition or major alteration in 1970. The building at the west end of the lot with the address *11685 Ventura Boulevard* was constructed in 1950 with an addition or major alteration in 1964. The building permits for these addresses document the property has been used for automobile sales and services since 1948; however, original buildings were demolished, new buildings were constructed, and alterations were made regularly. Thus, the building permit record does not clearly corroborate the Assessor construction dates, but documents sustained changes to the buildings. Additionally, historic aerial photographs document the presences of two, relatively small buildings in 1970, the one on the east had been enlarged by 1977 and the one on the west had been enlarged 1989 (see **Appendix C**).

These two buildings have no potential to qualify as historical resources regardless of any significance they may or may not possess. The buildings are either less than 45 years of age and not old enough to warrant evaluation or lack all aspects of integrity (other than location) as a result of alterations.

APN 2368-007-029 – This property is vacant land.

APN 2368-007-030 – This property is vacant land.

CONCLUSIONS

The properties comprising the Project Site are not historical resources as defined by CEQA. No further research is warranted.

Appendix A – Qualifications

TERESA GRIMES | Historic Preservation

Teresa.Grimes@icloud.com
323-868-2391

Teresa Grimes has 30 years of experience in the field of historic preservation. She is widely recognized as an expert in the identification and evaluation of historical resources having successfully prepared dozens of landmark and historic district applications for a wide variety of property types. Teresa graduated from the University of California with a Master of Art degree in Architecture and has worked in the private, public, and non-profit sectors. Teresa has extensive experience in the preparation of environmental compliance documents in accordance with the California Environmental Quality Act including the identification of historical resources, analysis of direct, indirect, and cumulative impacts, and development of mitigation measures. Her many projects throughout Southern California include the Art Center College of Design Master Plan, Baldwin Hills Crenshaw Plaza, Cinerama Dome Entertainment Center, City of Hope Master Plan, Claremont Graduate University Master Plan, Claremont McKenna College Master Plan, John Anson Ford Theatres, Oakwood School Master Plan, Los Angeles County Museum of Art, Times Mirror Square, Sunset Las Palms Studios, and Sunset Bronson Studios.

Educational Background

- M.A., Architecture, University of California, Los Angeles, 1992
- B.A., Political Science, University of California, Los Angeles, 1986

Qualifications

- Meets the Secretary of the Interior's Professional Qualifications Standards for history and architectural history pursuant to the Code of Federal Regulations, 36 CFR Part 61, Appendix A.

Professional Activities

- Pasadena Heritage Board Member, 2008-2012
- Highland Park Heritage Trust, Board Member, 1996-1998
- West Hollywood Cultural Heritage Advisory Board, 1990-1994

Professional Experience

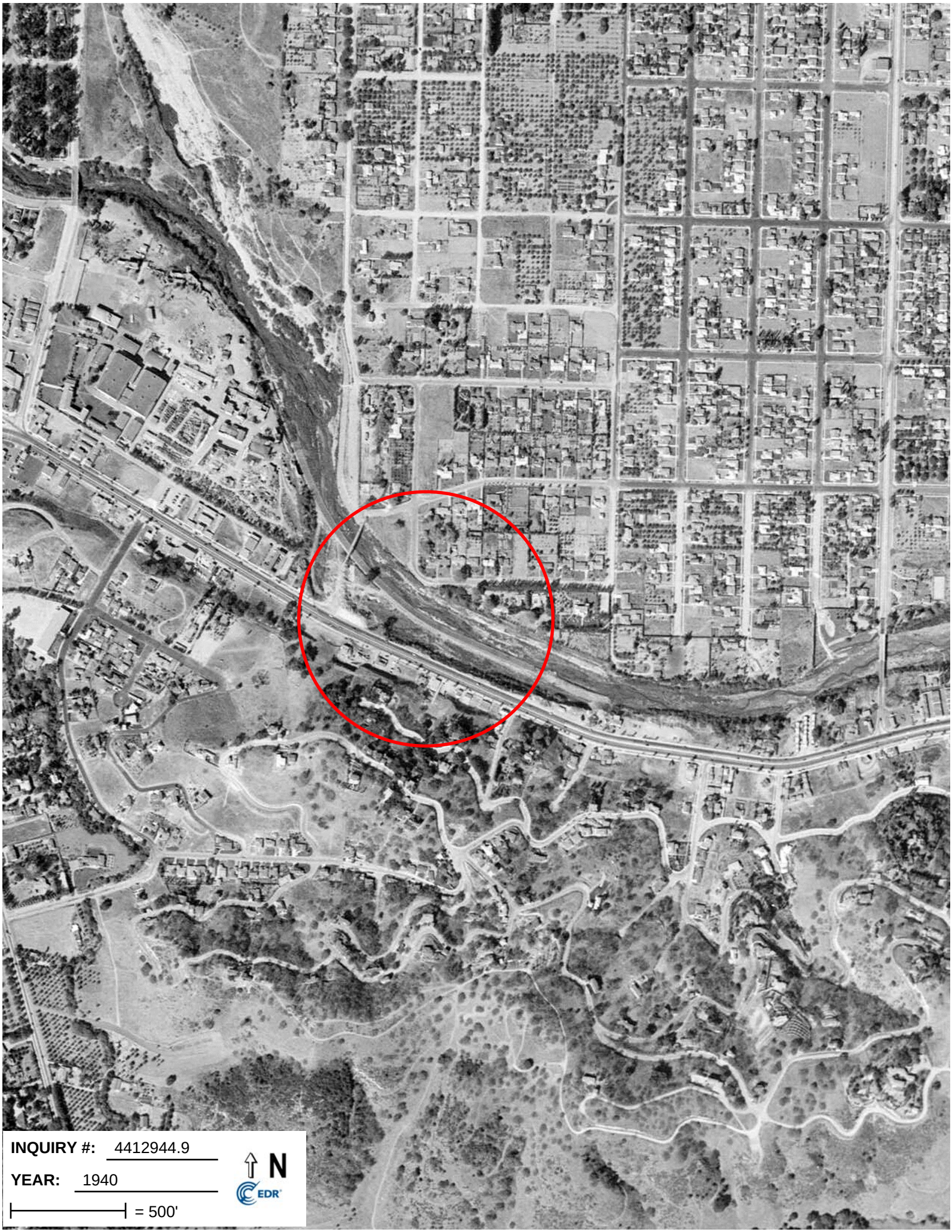
- Teresa Grimes | Historic Preservation, Principal, 2020 - Present
- GPA Consulting, Principal Architectural Historian, 2009-2020
- Christopher A. Joseph & Associates, Senior Architectural Historian, 2006-2009
- Teresa Grimes | Historic Preservation, Principal, 1999-2005, 1993-1994, 1991-1992
- Historic Resources Group, Architectural Historian, 1994-1998
- Getty Conservation Institute, Research Associate, 1992-1993
- Los Angeles Conservancy, Preservation Officer, 1988-1991

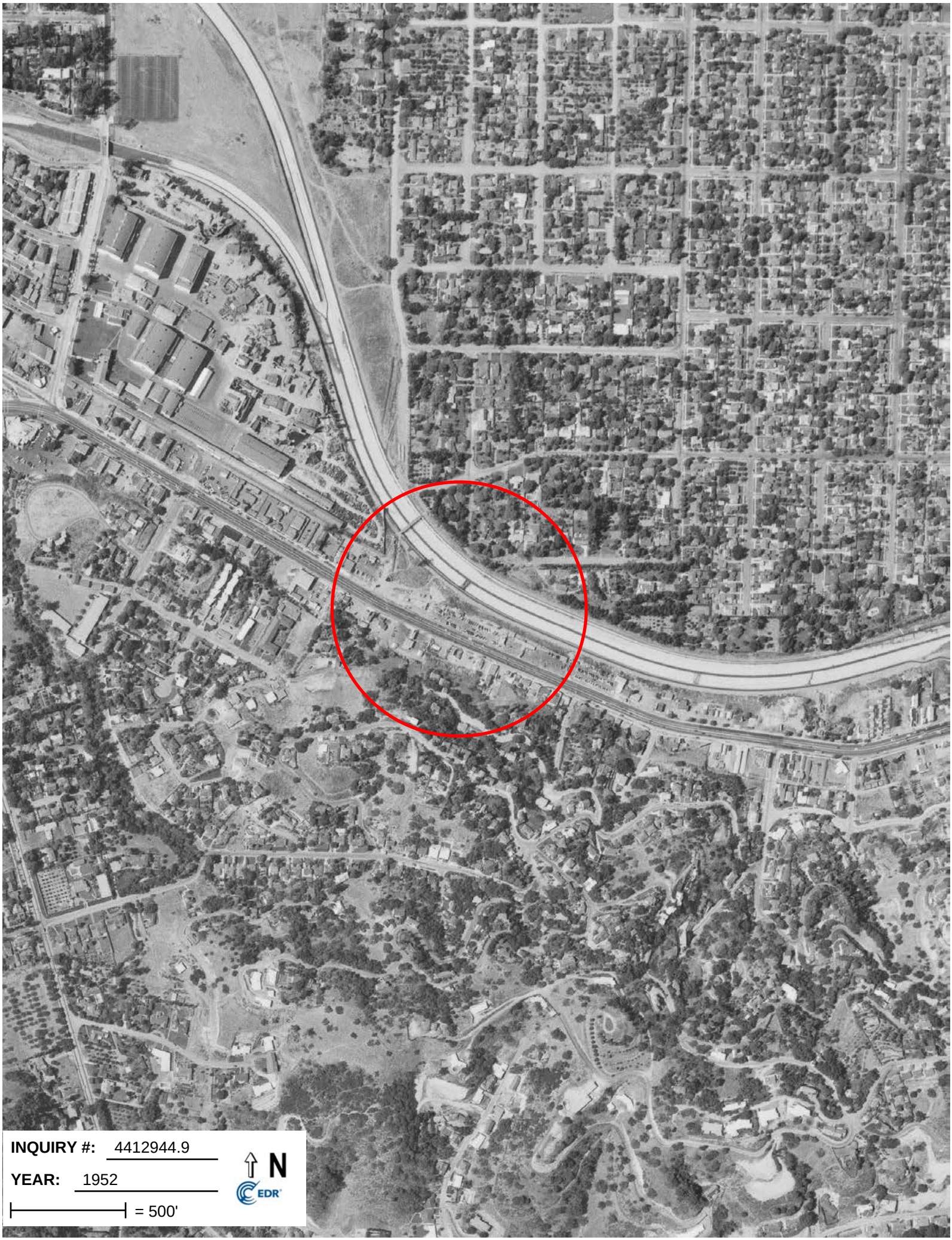
Appendix B – Historic Aerial Photographs


INQUIRY #: 4412944.9
YEAR: 1923
= 500'
N
EDR

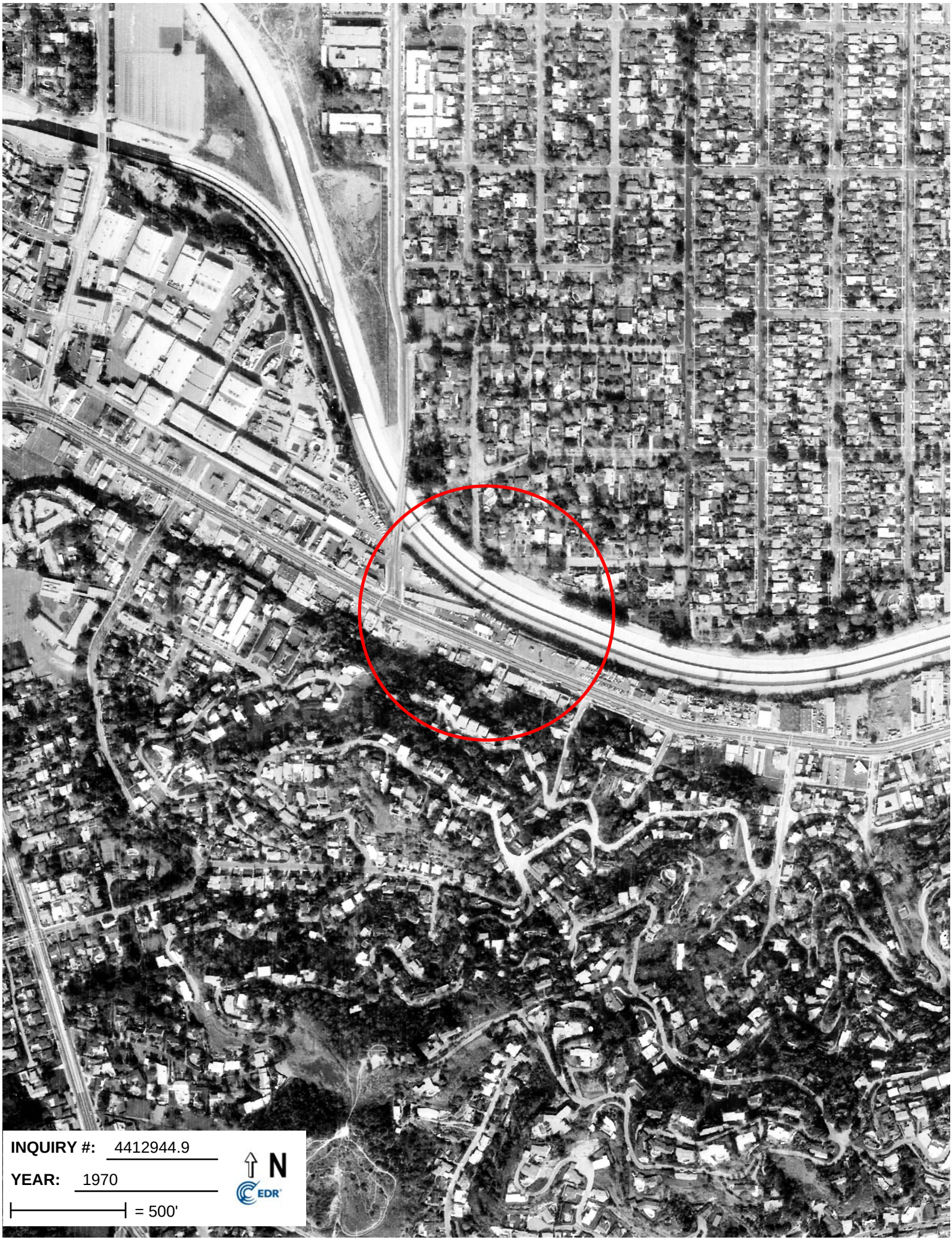

INQUIRY #: 4412944.9
YEAR: 1928
= 500'
N
EDR

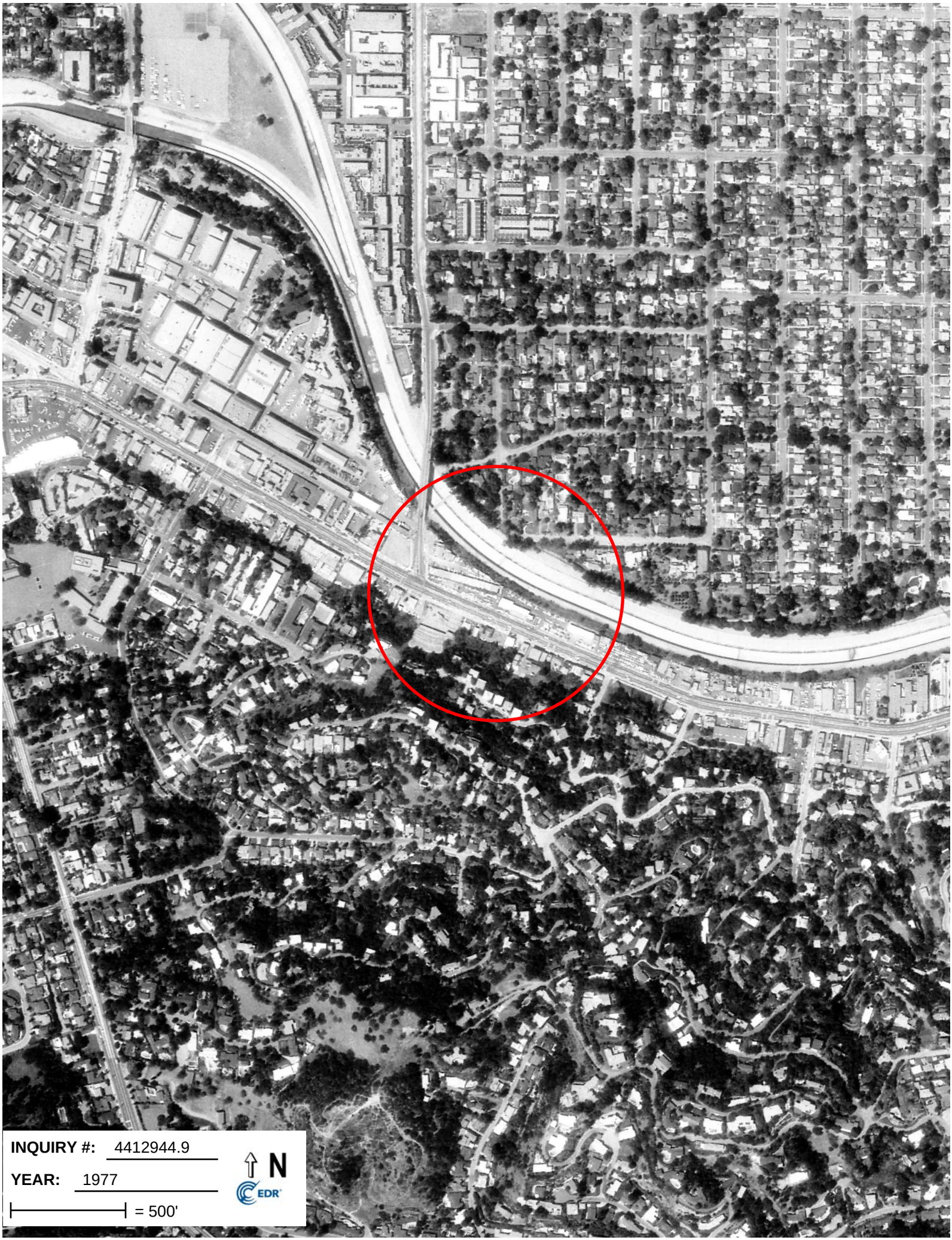

INQUIRY #: 4412944.9
YEAR: 1938
= 500'
N
EDR

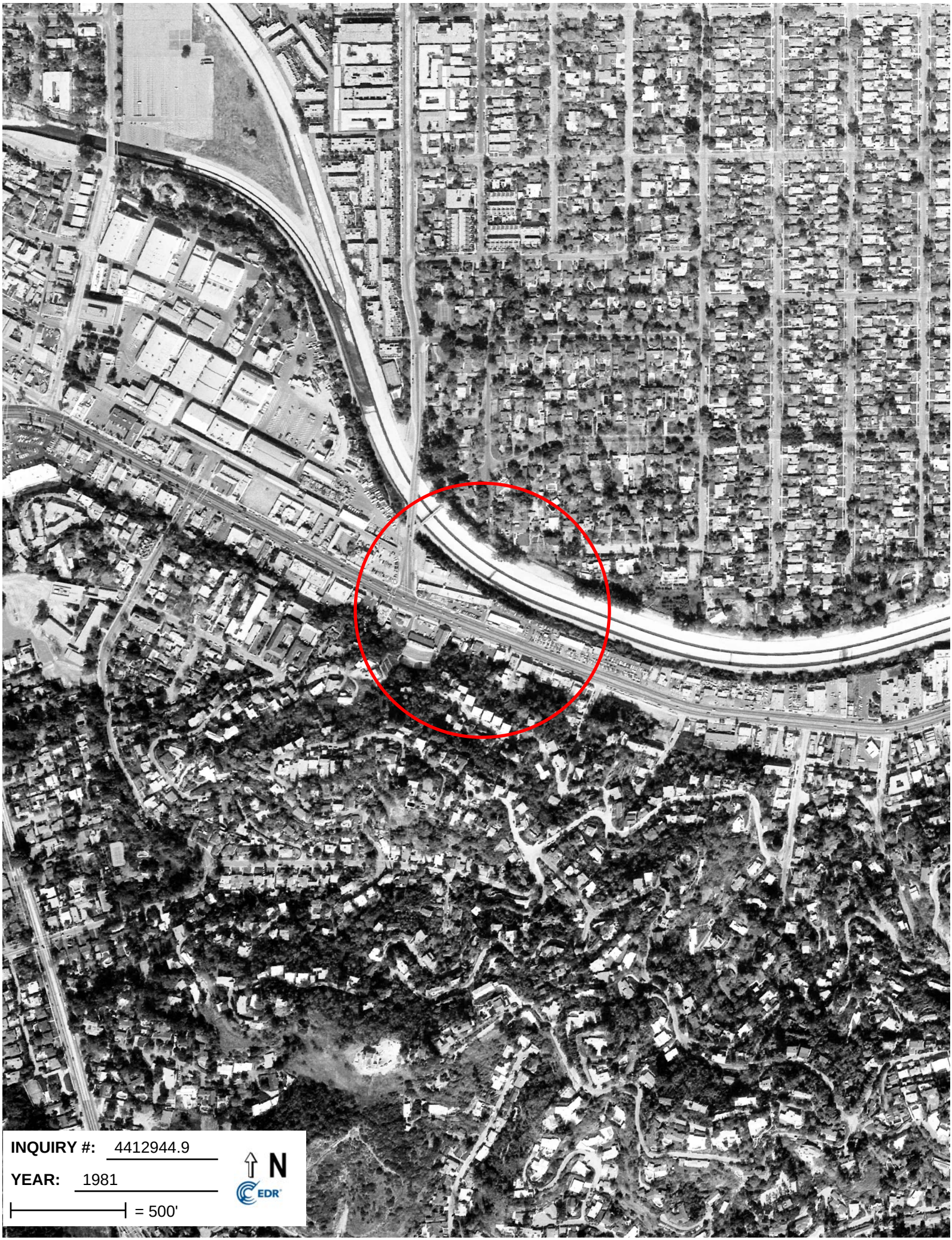

INQUIRY #: 4412944.9
YEAR: 1940
= 500'
N
EDR

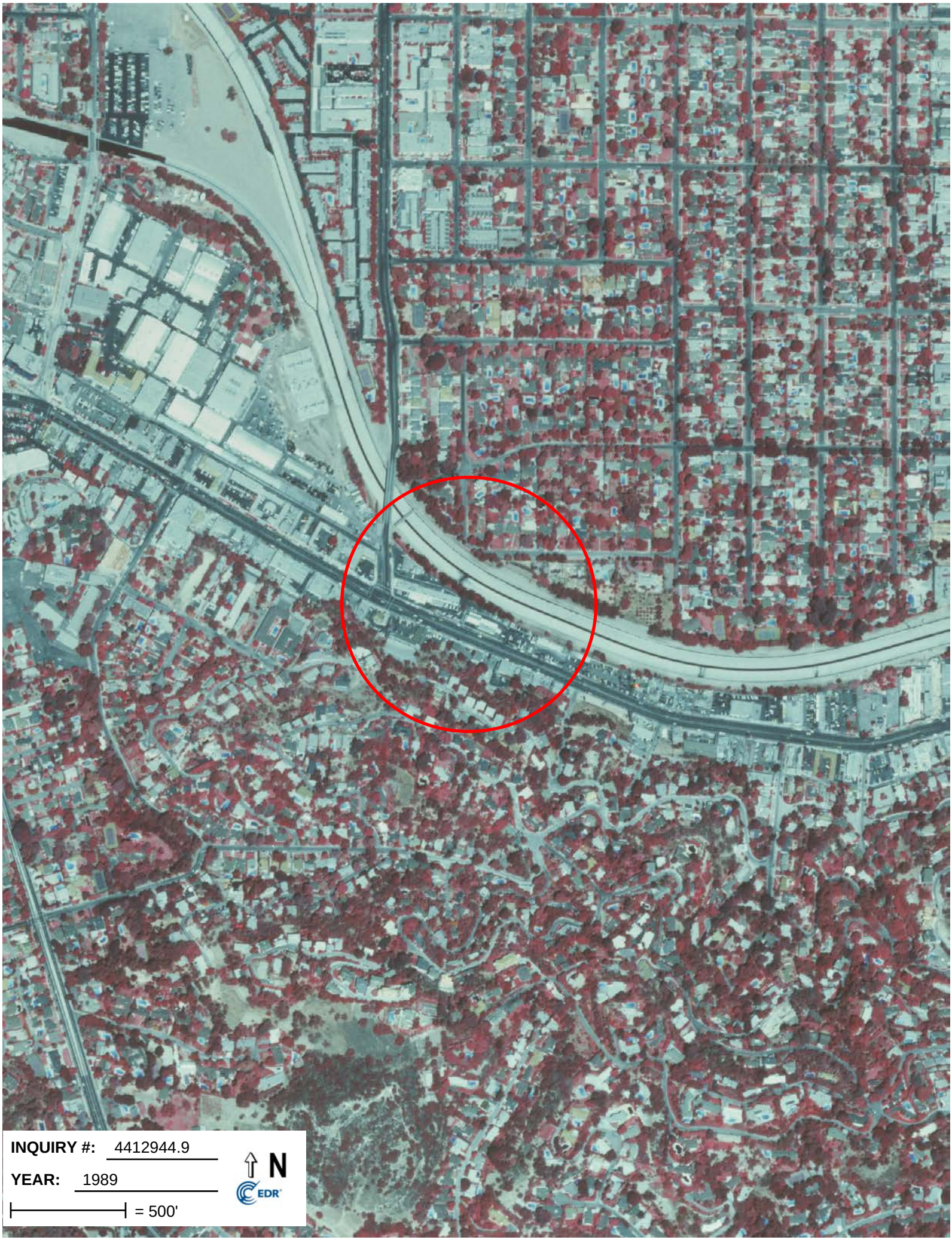

INQUIRY #: 4412944.9
YEAR: 1952
= 500'
N
EDR


INQUIRY #: 4412944.9
YEAR: 1964
= 500'
N
EDR


INQUIRY #: 4412944.9
YEAR: 1970
= 500'
N
EDR


INQUIRY #: 4412944.9
YEAR: 1977
= 500'
N
EDR


INQUIRY #: 4412944.9
YEAR: 1981
= 500'
N
EDR


INQUIRY #: 4412944.9
YEAR: 1989
= 500'
N
EDR

Appendix C – City Directory Research

6.0 SITE UTILIZATION HISTORY

6.1 HISTORICAL CITY DIRECTORIES

EDR Company was contacted to research historical city directories for the subject property and adjacent sites. The city directories were reviewed at approximately five year intervals spanning from 1920-2013. A summary of city directories reviewed for the subject property is included in **TABLE I**. The EDR City Directory is attached in **APPENDIX II**.

TABLE I
Historical City Directories

Year	Use/User	Source
11617 Ventura Blvd.		
1956	Chevron Service Station	Pacific Telephone
1962	Valley Car Wash & Service Station	Pacific Telephone
11647 Ventura Blvd.		
1950	O' Hanlon Trailer Co, Westcraft Trailer Coaches	Pacific Telephone
1956	Holiday Motors Inc.	Pacific Telephone
1962-2001	Haste & Hirsty Imported Cars, Bill Hirsty Foreign Cars & Service, Studio City Saab, Studio City Volvo	Pacific Telephone, Pacific Bell, Haines & Company, Inc.
11685 Ventura Blvd.		
1967	Irving Door & Trim	Pacific Telephone
2006	Vista Car Leasing	Haines Company, Inc.
2008	AK 007 Group Inc., Luxury Ride Inc.	Cole Information Services
2013	Beverly Hills Rent-a-car, Century West BMW	Cole Information Services
4000 Colfax Ave.		
1962	Hollywood Land Realty Co.	Pacific Telephone
1970	Subaru of North Hollywood, The Wagen Shop	Pacific Telephone
1980	The Wagen Shop, Spaghetti & Pizza Factory	Pacific Telephone
1991	Café Rosalind	Pacific Bell
2001-2008	Killer Shrimp	Haines Company, Inc., Cole Information Services
2013	Studio Café	Cole Information Services
4004 Colfax Ave.		
1970	Ben Yost Service	Pacific Telephone

TABLE I
Historical City Directories-continued

4006 Colfax Ave.		
1962	Larry Austin Co.	Pacific Telephone
4008 Colfax Ave.		
1962	Julian Food Distributors	Pacific Telephone
2001	Bellini Intl. Production Inc., LA Tech International, M3 Studios, T. M. Photolinks Inc.	Haines & Company, Inc.
4010 Colfax Ave.		
1970	G & H Studio Grip Equipment	Pacific Telephone
1980	Hunsaker Mfg., Hunsaker Backhoe Rental	Pacific Telephone
1995-2008	Doves Bodies	Pacific Bell, Haines Company, Inc., Cole Information Services
4012 Colfax Ave.		
1962	Race Car Imagineering, Kent Fullerm A. W. Ewing	Pacific Telephone
1970	Royce M. Finley	Pacific Telephone
1995	Richard & Audrey Stenum, Step Up To Fitness	Pacific Bell
2001-2006	Marta Woodhull – Vocal Coach	Haines Company, Inc.
4014 Colfax Ave.		
1970	Wade L. Bingham	Pacific Telephone
1980	S. Colleron Polishing, Polymorph Inc.	Pacific Telephone
1995	Tumac Entertainment Corp.	Pacific Bell
2001	Barking Dog Studios, Rob Strickland Productions	Haines & Company, Inc.
4016 Colfax Ave.		
1970	Wade Bingham	Pacific Telephone
4026 Colfax Ave.		
1990	SMV Inc.	Pacific Bell
1991	Mighty Todd Construction Co., Mighty Wind Productions, Mighty Mite Productions, Mighty Mouths Productions	Pacific Bell
1995	Shenandoah Inc.	Pacific Bell
4028 Colfax Ave.		
1970-1976	Independent Recorders Inc.	Pacific Telephone
1980-1981	Grand Slam Productions, The Mom & Pops Company Store	Pacific Telephone
1985	Bull Pen Music, MVP Records, Perren Vibes Music	Pacific Bell
2006	Studio E Annex	Haines Company, Inc.
2008-2013	Studiopolis Inc.	Cole Information Services

Appendix D – Selected Building Permits

1

APPLICATION TO ERECT A NEW BUILDING AND FOR A CERTIFICATE OF OCCUPANCY

Form B-1-2086-1-48

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No. 234 1/2

Map recorded Book 83 Page 11 & 12 Misc records of said County

Tract 11663

Location of Building 11663 ~~1165~~ Ventura Blvd. (House Number and Street)

Between what cross streets Colfax & Blue Canyon Dr.

Approved by City Engineer ______ Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building ______ (Store, Dwelling, Apartment House, Hotel or other purpose) Families ____ Rooms ____
2. Owner STUDIO CITY FORD Co. (Print Name) Phone Su 2-5162
3. Owner's address 12355 Ventura P.O. Studio City
4. Certificated Architect ______ State License No. ____ Phone ____
5. Licensed Engineer ______ State License No. ____ Phone ____
6. Contractor ______ State License No. ____ Phone ____
7. Contractor's address ______
8. VALUATION OF PROPOSED WORK {Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.} $ ______
9. State how many buildings NOW on lot and give use of each. ______ (Store, Dwelling, Apartment House, Hotel or other purpose.)
10. Size of new building ____ x ____ No. Stories ____ Height to highest point ____ Size lot ____ x ____
11. Material Exterior Walls ______ Type of Roofing ______
12. For Accessory Buildings and similar structures
    (a) Footing: Width ____ Depth in Ground ____ Width of Wall ____
    (b) Size of Studs ____ Material of Floor ____
    (c) Size of Floor Joists ____ x ____ Size of Rafters ____ x ____

I hereby certify, that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

Sign here Studio City Ford Co. (Owner or Authorized Agent)

By Wayne L. [illegible]

DISTRICT OFFICE VAN NUYS

FOR DEPARTMENT USE ONLY

PLAN CHECKING		REINFORCED CONCRETE	FEES
Date		Bbls. Cement	Bldg. Per.
Receipt No.		Tons of Reinforcing Steel	Cert. of Occupancy
Valuation $			Total
Fee Paid $			

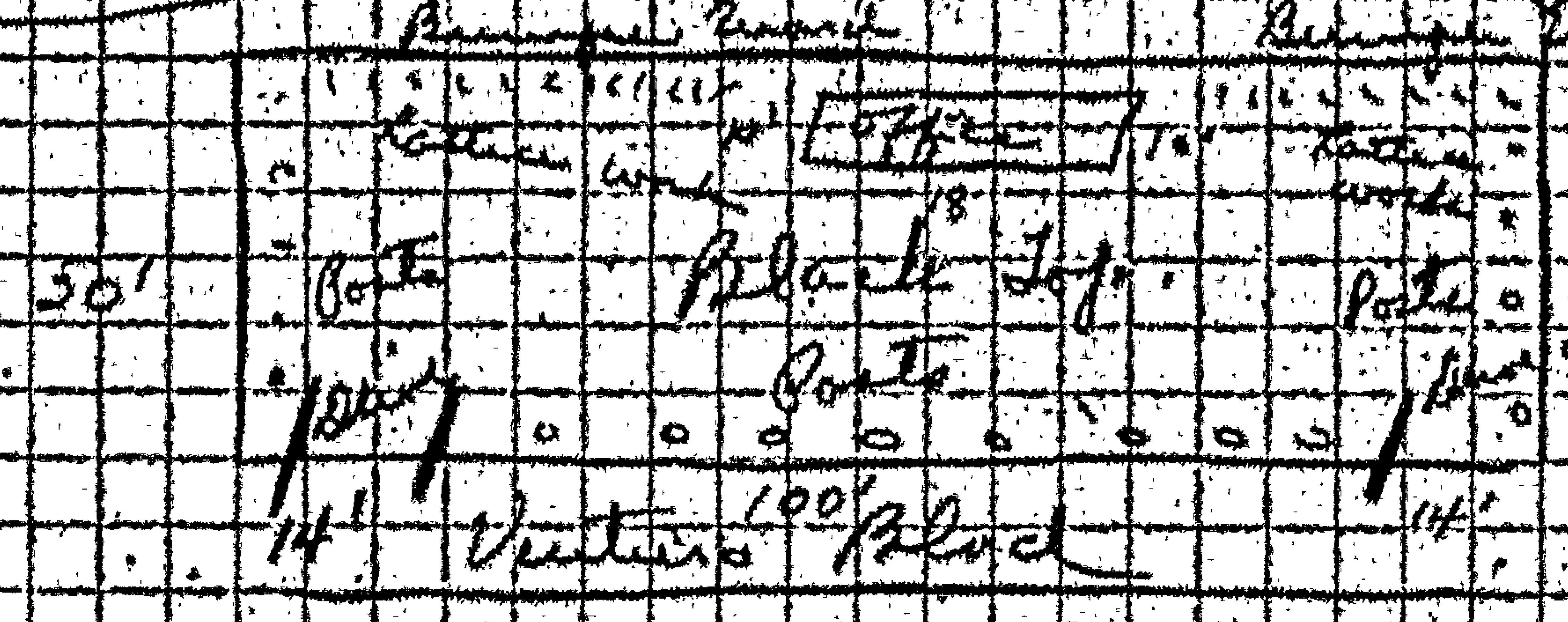
TYPE	GROUP	Maximum No. Occupants	Inside Lot (circled) / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	~~No~~ rear alley / ~~No~~ side alley	Clerk

PERMIT No. LA 15205	Plans and Specifications checked	Zone C-2	Fire District No. 2	District Map No. 7324
	Corrections Verified	Bldg. Line 100' from South side of Ventura Blvd.	Street Widening	
PLANS	Plans, Specifications and Application rechecked and approved.	Application checked and approved	Clerk	[illegible] here when [illegible] is issued
Rec'd.	For Plans See / Filed with	Continuous Inspection	SPRINKLER Specified—Required Valuation Included Yes—No	Inspector

Ord. #59574

PLANS APPROVED

Re: Flood Control



Posts 8' on center with permanent chains attached 2' high. 4X4 Bumper Guards 4 sides.

248 — 1364

Department of Building & Safety

Legal Description: Beg at NE cor Calif ... [illegible]

84 ... [illegible] 05" E ... [illegible]

S 0° 05' E 37 ft to beg Part of Lot 134½

Plat showing dividing line between ... J B Lankershim and Lots 234, 235, 236, 237 & 238 of the Lankershim Ranch Land and Water Co. Tr.

The above property was subdivided (Date) Prior to 19 46 as shown on our records.

City Clerk - Map & Lot Division

By [signature]

M.R. 15205

B-88-136-4-47

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY

Los Angeles, Calif. April 7, 1947

MR. G. E. MORRIS,
Superintendent of Building,
Los Angeles, Calif.

Dear Sir:

I hereby respectfully request the change of address on

Building Permit No. 15205 Issued 4-3-47

From 11655 Venice Blvd

To 11663 Venice Blvd

for the following reasons:

( ) Change from one street to another street for corner lot.

(✓) Change because of error on part of some city department.

NOTE: Change of address not permitted where the new address is on a lot different from that shown in the legal description on the building permit application.

OK Bureau of Engineering
EWO

Respectfully,

Culver City Lbr. Co.

Owner, Contractor or Authorized Agent

Address

Checked by

H. Owens

Clerk.

Approved by

Chief Clerk.

3

APPLICATION TO ALTER, REPAIR, or DEMOLISH AND FOR A Certificate of Occupancy

Form B-3
CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No. part of Lot 234½ Plat Showing Division
Tract between the end of R & B. Lankershim Lots 234 to 238 Lankershim Ranch Land Co. Water Co.

Location of Building 11641 VENTURA BLVD.
(House Number and Street)

Between what cross streets? Tujunga & Cahuenga

Approved by City Engineer
Deputy.

USE INK OR INDELIBLE PENCIL

1. Present use of building SALES OFFICE, DISPLAY & SERVICE Families 0 Rooms 1
(Store, Dwelling, Apartment House, Hotel or other purpose)
change oil lube change spark plugs
2. State how long building has been used for present occupancy 5 yrs
3. Use of building AFTER alteration or moving SAME Families 0 Rooms 3
4. Owner [redacted], GRACE B ROE Phone
(Print Name)
5. Owner's Address BOX 423 P. O.
6. Certificated Architect none State License No. Phone
7. Licensed Engineer none State License No. Phone
8. Contractor OWNER State License No. Phone
9. Contractor's Address SAME
10. VALUATION OF PROPOSED WORK {Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.} $ 5000.00 2-27-58
11. State how many buildings NOW on lot and give use of each. {.....
(Store, Dwelling, Apartment House, Hotel or other purpose)
12. Size of existing building 15 x 30 Number of stories high 1 Height to highest point 14
13. Material Exterior Walls STUCCO (Wood, Steel or Masonry) Exterior framework WOOD (Wood or Steel)
14. Describe briefly all proposed construction and work:
ADD 2 ROOMS TO ENLARGE PRESENT BLDG

NEW CONSTRUCTION

15. Size of Addition 15 x 30 Size of Lot ..... x ..... Number of Stories when complete 1
16. Footing: Width 12" Depth in Ground 12" Width of Wall 6" Size of Floor Joists 2x6
17. Size of Studs 2x4 Material of Floor Conc. Size of Rafters ..... x ..... Type of Roofing Comp.

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

DISTRICT OFFICE VAN NUYS DUPLICATE Sign here [redacted] By
(Owner or Authorized Agent)

FOR DEPARTMENT USE ONLY

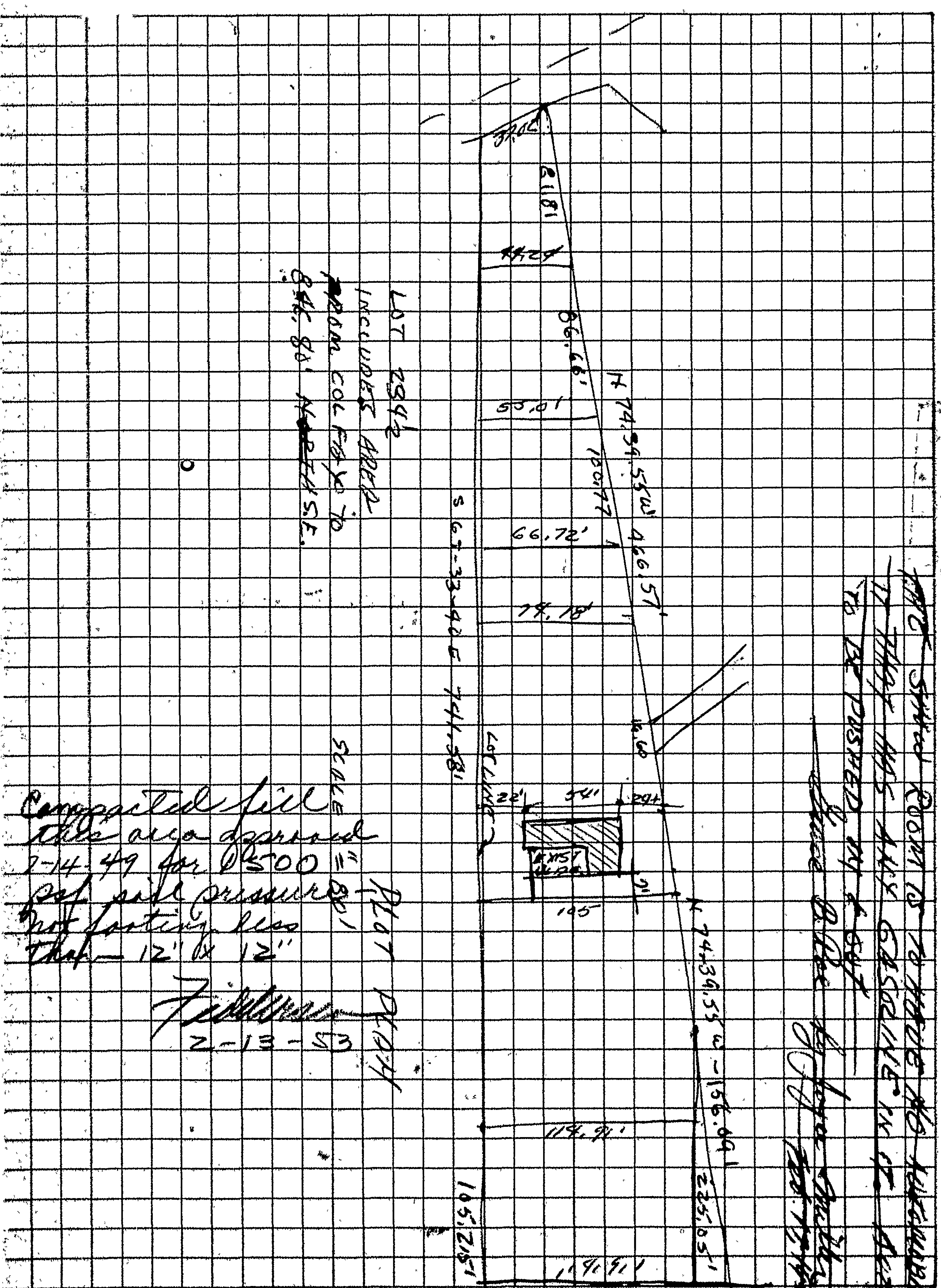
PLAN CHECKING	OCCUPANCY SURVEY	
Valuation $ 5000	Area of Bldg. ..... Sq. Ft.	Investigation Fee $ .....
Fee $ 10.00	Fee $	Cert. of Occupancy Fee $ 5.00
		Bldg. Permit Fee $ 18.00
		Total $ 18.00

TYPE	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size irreg.	..... Ft. rear alley / ..... Ft. side alley	Clerk
V	—					
GROUP	Plans and Specifications checked		Zone	Fire District No.		
VG			C-2	2 (8)		
For Plans See	Correction Verified		Bldg. Line 100' Ft.	Street Widening — Ft.	Application checked and approved FEB 27 1958	
Filed with	Plans, Specifications and Application rechecked and approved.		Continuous Inspection	SPRINKLER Specified—Required Valuation Included Yes— —No	Inspector	
						15783

From South 5766 DO NOT WRITE BELOW THIS LINE RAF 10393

TYPE OF RECEIPT	DATE ISSUED	TRACER NO. (M)	RECEIPT NO.	CODE	FEE PAID
Plan Checking	FEB 27 58		29525		5.44
Supplemental Plan Checking					
Building Permit	FEB 27 58		LA52596		

TYPE OF RECEIPT | Certificate of Occupancy | Occupancy Survey
DATE ISSUED
TRACER NO. (M)
RECEIPT NO.
CODE
FEE PAID



Compacted fill
this area approved
7-14-49 for 1500 ″
psf soil pressure
not footing less
than — 12″ x 12″
2-13-53
PLOT PLAN
SCALE
LOT LINE
53.01'
66.72'
74.18'
114.91'
105
22'
54'

That portion of Lot 234 1/2 of Plat shown in Map Book 83, Pages 11 and 12, described as follows:

BEGINNING at the intersection of the Northerly line of said Lot 234-1/2 with the Easterly Line of Colfax Avenue; thence South 0° 6' 00" East 37.02 feet along said Easterly line of Colfax Avenue to the Northerly line of Ventura Boulevard 80.00 feet wide; thence Southeasterly along said Northerly line a distance of 846.80 feet; thence Northeasterly at right angles to said Northerly line of Ventura Boulevard to the Northerly line of said Lot 234-1/2 thence Northwesterly along said Northerly line to the point of beginning.

Bruggeman

Form B-1-20M-5-46

1

APPLICATION TO ERECT A NEW BUILDING AND FOR A CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
BUILDING DIVISION

Lot No. Part of 234½

Plat showing building line between the land of J.B. ... Lots 234 & 238 ... of the Lankershim Ranch Land & Water Co.

Tract

Location of Building 11665 VENTURA BLVD (House Number and Street)

Between what cross streets ~~Carpenter Ave & Blue Canyon Dr~~ TUJUNGA & COLFAX Ave

Approved by City Engineer ... Deputy.

USE INK OR INDELIBLE PENCIL

1. Purpose of building OFFICE (Store, Dwelling, Apartment House, Hotel or other purpose) Families — Rooms 1
2. Owner MANNY POST (Print Name) Phone Stan 71232
3. Owner's address 11665 Ventura P. O.
4. Certificated Architect — State License No. Phone
5. Licensed Engineer Robert W. Haussler State License No. 6249 Phone No30527
6. Contractor WALTER F HAUSSLER State License No. 24507 Phone "
7. Contractor's address 2845 Riverside
8. VALUATION OF PROPOSED WORK (Including all labor and material and all permanent lighting, heating, ventilating, water supply, plumbing, fire sprinkler, electrical wiring and elevator equipment therein or thereon.) $ 150.00
9. State how many buildings NOW on lot and give use of each. 1 OFFICE (Store, Dwelling, Apartment House, Hotel or other purpose)
10. Size of new building 6' x 6' No. Stories 1 Height to highest point 9' Size lot 60' x 228'
11. Material Exterior Walls Metal Type of Roofing Metal
12. For Accessory Buildings and similar structures
    (a) Footing: Width NONE Depth in Ground Reinforced slab Width of Wall
    (b) Size of Studs 2½" steel L Material of Floor Concrete
    (c) Size of Floor Joists — x — Size of Rafters — x —

I hereby certify that to the best of my knowledge and belief the above application is correct and that this building or construction work will comply with all laws, and that in the doing of the work authorized thereby I will not employ any person in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

VAN NUYS

Sign here Walter F. Haussler (Owner or Authorized Agent)

DISTRICT OFFICE By

FOR DEPARTMENT USE ONLY

PLAN CHECKING

Date DEC 3 1953

Receipt No. LA43481

Valuation $ 150

Fee Paid $ 1.00

REINFORCED CONCRETE
Bbls. Cement
Tons of Reinforcing Steel

FEES
Bldg. Per
Cert. of Occupancy
Total $2.00

TYPE	GROUP	Maximum No. Occupants	Inside Lot / Corner Lot	Key Lot / Corner Lot Keyed	Lot Size	Ft. rear alley / Ft. side alley	Clerk
V	G-1	—			See over IRREG	— / —	DUNHAM

PERMIT No. LA75917

Plans and Specifications checked: Watson

Corrections Verified: Bruggeman

Plans, Specifications and Application rechecked and approved: Bruggeman

Zone C-2

Fire District No. 2 1CO

District Map No. 7324

Bldg. Line See plot plan on back

Street Widening — Ft.

Application checked and approved DEC 3 1953 Clerk

DEC 3 1953 Stamp here when Permit is issued

PLANS Rec'd.

For Plans See / File with

Continuous Inspection none

SPRINKLER Specified—Required Valuation Included Yes— —No

Inspector

AFF 10494

228'

EXIST
10X20 OFFICE

57'

69'

PROPOSED

N

BC

VENTURA BLVD

No New Driveways
SO. SIDE OF STREET

ST. MUST BE 10' FT UNDER PER ORD 5754

1

APPLICATION TO CONSTRUCT NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY

Form B-1

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. — LOT: 3 ATTACHED — BLK. — TRACT: ~~6961~~

2. JOB ADDRESS: 11665 Ventura Blvd — N/E

3. BETWEEN CROSS STREETS: Tujunga AND Colfax

4. PURPOSE OF BUILDING: Cover over spray booth

5. OWNER'S NAME: Jack Foreman — PHONE

6. OWNER'S ADDRESS: 5511 Van Nuys Blvd — P. O. BOX — ZONE

7. CERT. ARCH. — STATE LICENSE NO. — PHONE

8. LIC. ENGR.: C. Bond — C.E. 8644 - S.E. 1677 — PHONE: FA-1-5871

9. CONTRACTOR: Southwest Const — 156230 ~~15670~~ — STATE LICENSE NO. — PHONE: FA-1-5871

10. CONTRACTOR'S ADDRESS: 17822 S Broadway — P. O. BOX — Gardena — ZONE

11. SIZE OF NEW BLDG.	STORIES	HEIGHT	NO. OF EXISTING BUILDINGS ON LOT AND USE
161 X 25'	1	11	2 Garage & sales

11665 Ventura Blvd.

12. MATERIAL: ☐ WOOD ☒ METAL ☐ CONC. BLOCK — EXT. WALLS: ☐ STUCCO ☐ BRICK ☐ CONCRETE — ROOF CONST. ☐ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING: PLUM *

13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ $900.00

Approval of driveway location must be obtained from the Department of Public Works before securing Building Permit.

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

Signed C. W. Wilhelm

This Form When Properly Validated is a Permit to Do the Work Described.

VALUATION APPROVED	SEWER (Available) (Not Available)
APPLICATION CHECKED	
PLANS CHECKED Valverin	DWELL. UNITS
CORRECTIONS VERIFIED	SPACES PARKING
PLANS APPROVED Valverin	GUEST ROOMS
APPLICATION APPROVED	FILE WITH
INSPECTOR	CONT. INSP.

ADDRESS APPROVED Phy

DIST. MAP 733-4

ZONE C-2

FIRE DIST. 2

INSIDE 80

KEY

COR. LOT

REV. COR.

LOT SIZE ~~125 X~~ 80 Irreg.

REAR ALLEY

SIDE ALLEY

BLDG. LINE 20

BLDG. AREA 4150

DISTRICT OFFICE V. N.

SPRINKLES REQ'D. SPECIFIED

AFFIDAVITS Fire Sec. Fire

CRITICAL SOIL

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
IV	F-1	2	2.75			5.50			

CASHIER'S USE ONLY

NOV--8-61 #76022 B — 2 CK 2.75

LA 1599 NOV-15-61 #78319 C — 1 CK 5.50

C G 9677

P.C. No. _____ GRADING _____ CRIT. SOIL _____ CONS. _____

Parcel 2; That portion of lot 234½ of "Plat showing Dividing line between the land of J. B. Lankershim and Lots 234, 235, 236, 237 and 238 of Lankershim Ranch Land and Water Co." in the city of Los Angeles, County of Los Angeles, state of California, as per map recorded in book 83 pages 11 and 12 of Miscellaneous Records, in the office of the county recorder of said county, more particularly described as follows:

Beginning at the intersection of the northeasterly line of Ventura Boulevard (formerly Los Angeles and Ventura Road) with the easterly line of Colfax Avenue (formerly Eucalyptus Avenue) as both are shown on said map; thence along said northeasterly line of Ventura Boulevard, South 67° 33' 40" east 377.89 feet; thence North 22° 26' 20" East 27 feet; thence North 67° 33' 40" West 7 feet; thence North 22° 26' 20" east 76.23 feet to the northeasterly line of said lot 234½; thence along said northeasterly line North 74° 39' 55" West 373.76 feet to a line that bears North 22° 26' 20" east from the true point of beginning; thence South 22° 26' 20" west 57.01 feet to said true point of beginning.

Parcel 2; That portion of lot 234½ of "Plat showing Dividing line between the land of J. B. Lankershim and Lots 234, 235, 236, 237 and 238 of Lankershim Ranch Land and Water Co." in the city of Los Angeles, County of Los Angeles, state of California, as per map recorded in book 83 pages 11 and 12 of Miscellaneous Records, in the office of the county recorder of said county, more particularly described as follows:

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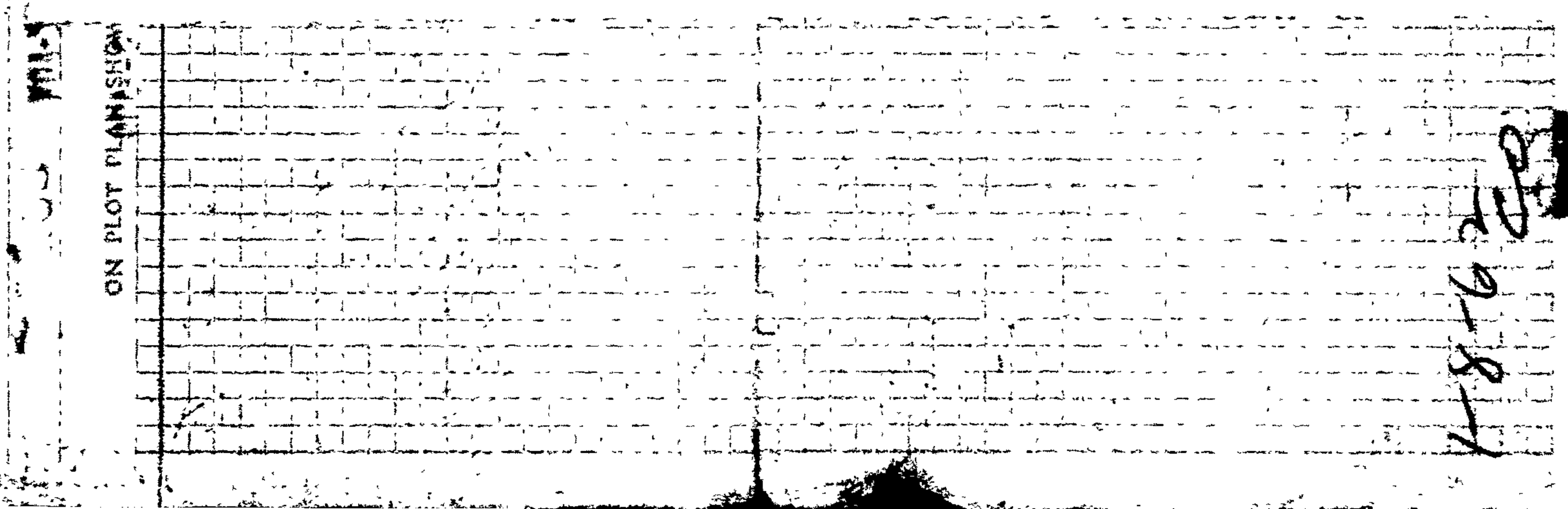
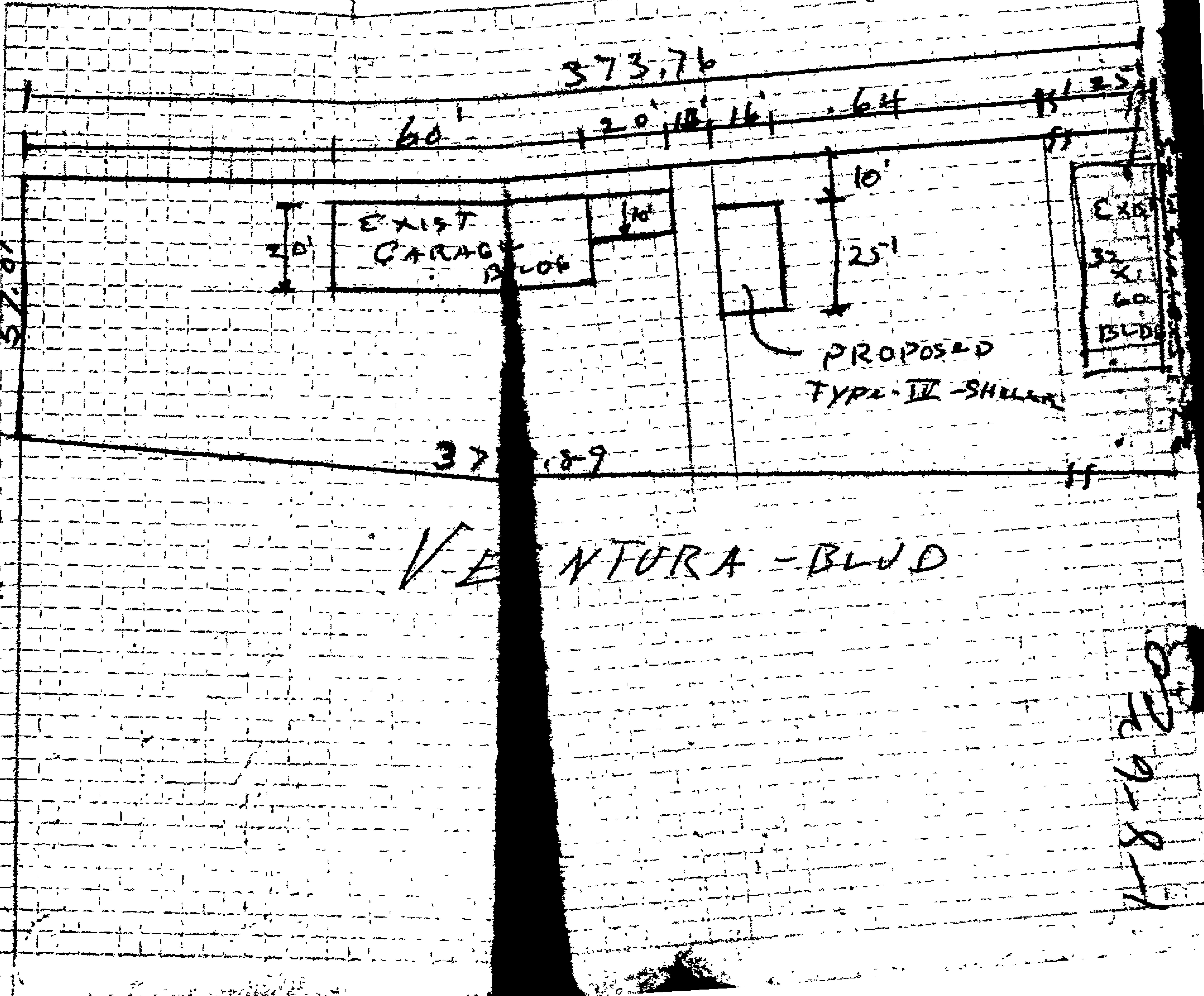


ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH 2.75

C-1CK 5.50

LEGAL DESCRIPTION



1-8-69

3

APPLICATION TO ALTER - REPAIR - DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

E

Form B-3

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

SEWER (Available) (Not Available)

1. LEGAL DESCR.	LOT	BLK.	TRACT: See over for Legal	ADDRESS APPROVED
2. BUILDING ADDRESS: 4028 Colfax Ave			NH	DIST. MAP: 7324
3. BETWEEN CROSS STREETS: Ventura AND Kelsye				ZONE: C-2-1
4. PRESENT USE OF BUILDING: Office			NEW USE OF BUILDING: Same	FIRE DIST.: 2/65
5. OWNER'S NAME: Carl C. Howard			PHONE: P012635	INSIDE: BEK 65+
6. OWNER'S ADDRESS: 4475 Vineland Ave.			P.O. N_H ZONE	COR. LOT / REV. COR. /
7. CERT. ARCH.: None			STATE LICENSE / PHONE	LOT SIZE: Irreg See Plot
8. LIC. ENGR.: None			STATE LICENSE / PHONE	
9. CONTRACTOR: Owner			STATE LICENSE / PHONE	REAR ALLEY / SIDE ALLEY /
10. CONTRACTOR'S ADDRESS: See #6			P. O. / ZONE	BLDG. LINE: 15'-35
11. SIZE OF EXISTING BLDG.: 11 x 18	STORIES: 1	HEIGHT: 12	NO. OF EXISTING BUILDINGS ON LOT AND USE: One	BLDG. AREA /

3 4028 Colfax Ave

DISTRICT OFFICE: VN

12. MATERIAL: ☐ WOOD ☒ METAL ☐ CONC. BLOCK; EXT. WALLS: ☒ STUCCO ☐ BRICK ☐ CONCRETE	ROOF CONST.: ☒ WOOD ☐ STEEL ☐ CONC. ☐ OTHER	ROOFING	SPRINKLERS REQ'D. SPECIFIED		
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 200,00			VALUATION APPROVED: Finlay	AFFIDAVITS: Z015621 does not appl	
14. SIZE OF ADDITION: 11 x 14	STORIES: 1	HEIGHT: 10	APPLICATION CHECKED	Fill-see fill	
15. NEW WORK: (Describe)	EXT. WALLS: None	ROOFING: Comp	PLANS CHECKED	DWELL. UNITS: NC	
			CORRECTIONS VERIFIED	SPACES PARKING /	
			PLANS APPROVED	GUEST ROOMS /	
			APPLICATION APPROVED	FILE WITH	
			INSPECTOR	CONT. INSP. /	

CRITICAL SOIL

Add porch roof

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

Signed X Carl C Howard

This Form When Properly Validated is a Permit to Do the Work Described.

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.E.	O.S.	C/O
V	R	x	1.00	x	X	2.00	X	x x	x

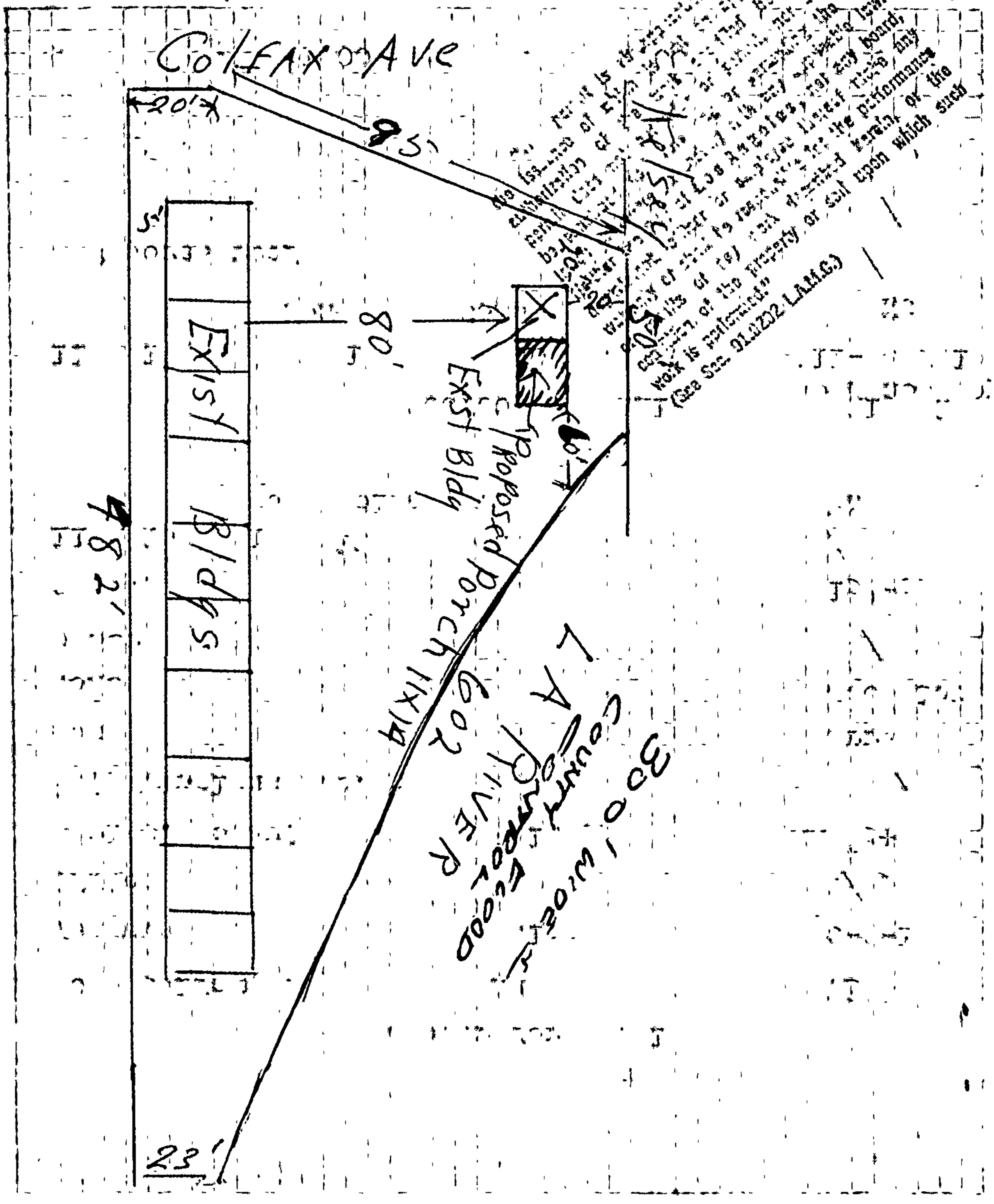
CASHIER'S USE ONLY

APR-25-63 19170 Ck VN 29208 N 1 1.00
APR-25-63 19171 Ck VN 29208 N 1 2.00

P.C. No. ___ GRADING ___ CRIT. SOIL ___ CONS. ___

LEGAL DESCRIPTION **Lot 1 TR 6964 ex that portion given over for County Flood Control property**

PLOT PLAN SHOW ALL BUILDINGS ON LOT AND



1

APPLICATION TO CONSTRUCT NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY

B&S Form B-1

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR.	LOT: 1	BLK.: 5	TRACT: 6964	ADDRESS APPROVED
2. JOB ADDRESS: 4028 Colfax Avenue		N. Hollywood		DIST. MAP: 7324
3. BETWEEN CROSS STREETS: Ventura Blvd. AND Kelsey St.				ZONE: C-2-1
4. PURPOSE OF BUILDING: ~~Store~~ Office bldg. (a-1)				FIRE DIST.
5. OWNER'S NAME: Carl Howard	PHONE: PO 12635			INSIDE KEY
6. OWNER'S ADDRESS: 4475 Vineland	P. O. BOX: N. H.	ZONE		COR. LOT / REV. COR.
7. CERT. ARCH. NONE	STATE LICENSE NO.	PHONE		LOT SIZE: Irreg.
8. LIC. ENGR.	STATE LICENSE NO.	PHONE		
9. CONTRACTOR: owner builder	STATE LICENSE NO.	PHONE		REAR ALLEY / SIDE ALLEY
10. CONTRACTOR'S ADDRESS: same	P. O. BOX	ZONE		BLDG. LINE: 15'-35'
11. SIZE OF NEW BLDG.: 11 x 18	STORIES: 1	HEIGHT: 12	NO. OF EXISTING BUILDINGS ON LOT AND USE: 10 stores	BLDG. AREA: 170 sq ft
1 4028 Colfax Avenue		N Hollywood		DISTRICT OFFICE: VN
12. MATERIAL ☐ WOOD ☐ METAL ☐ CONC. BLOCK EXT. WALLS: ☐ STUCCO ☐ BRICK ☐ CONCRETE	ROOF CONST. ☐ WOOD ☐ CONC. ☐ STEEL ROOFING ☐ OTHER			SPRINKLES REQ'D. SPECIFIED
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 600.00	VALUATION APPROVED			AFFIDAVITS: Comp. fill (see file)
Approval of driveway location must be obtained from the Department of Public Works before securing Building Permit.	APPLICATION CHECKED: McCausland			
	PLANS CHECKED			DWELL. UNITS
	CORRECTIONS VERIFIED			SPACES PARKING 0
	PLANS APPROVED			GUEST ROOMS
	APPLICATION APPROVED			FILE WITH
	INSPECTOR			CONT. INSP.

SEWER (Available) (Not Available)

CRITICAL SOIL

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance, and I have read reverse side of application.

Signed X Carl C Howard

This Form When Properly Validated is a Permit to Do the Work Described.

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
V	G-1		2.00		none	4.00	X		

HKJ

CASHIER'S USE ONLY

LA30288	FEB-7-63	06665	ML — 2 CK	2.00
	FEB-7-63	06666	ML — 1 CK	4.00

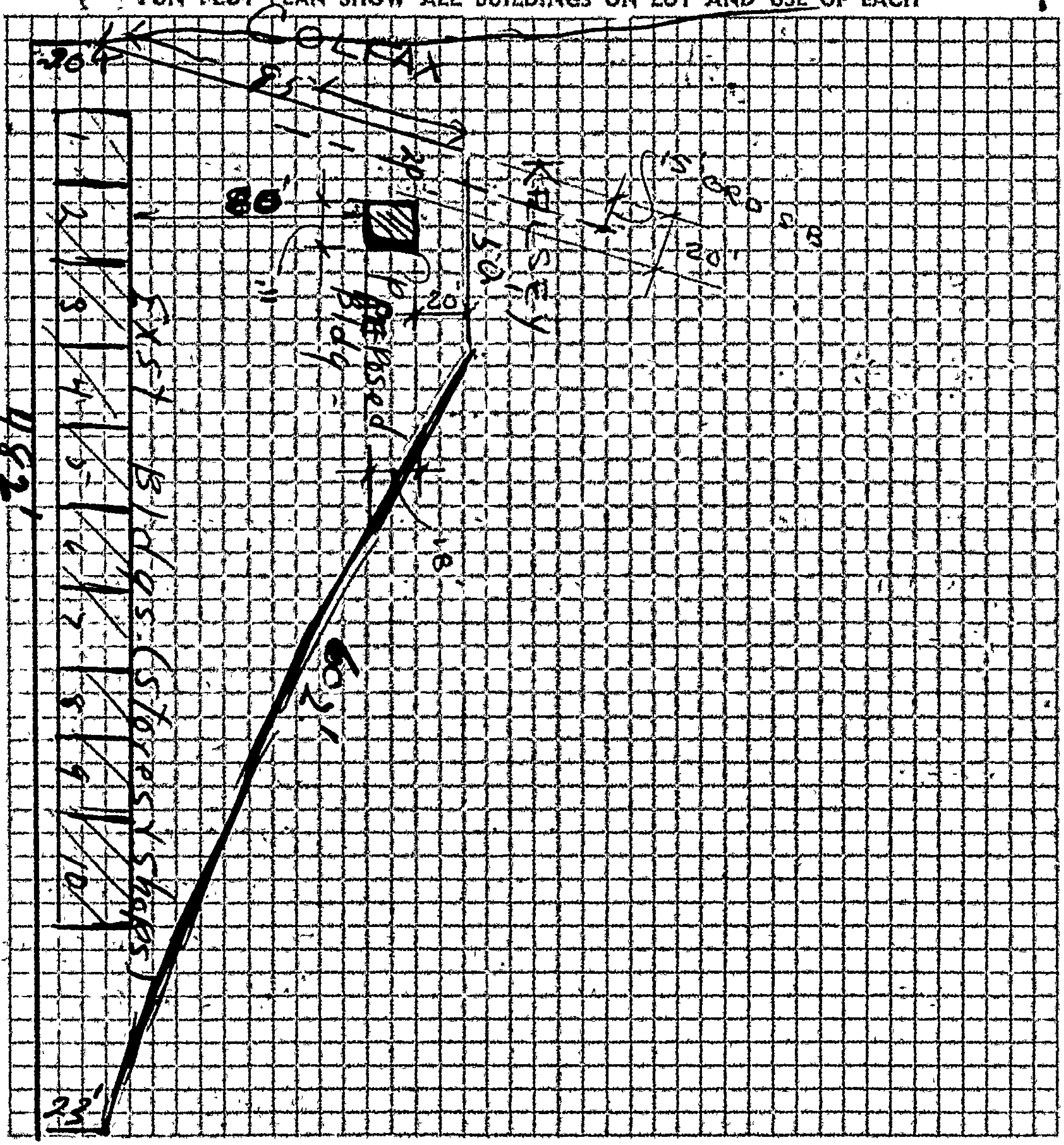
P.C. No. JJ177 GRADING yes CRIT. SOIL ~~X~~ CONS. ~~X~~

LEGAL DESCRIPTION

TR—102

TR—102

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH



SCOPE OF PERMIT

"This permit is an application for inspection, the issuance of which is not an approval or an authorization of the work specified herein. This permit does not authorize or permit, nor shall it be construed as authorizing or permitting the violation or failure to comply with any applicable law. Neither the City of Los Angeles, nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed." (See Sec. 91.0202 L.A.M.C.)

1

APPLICATION TO CONSTRUCT NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY

Form B-1

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR. — LOT: 3 ATTACHED — BLK. — TRACT: ~~6961~~

2. JOB ADDRESS: 11665 Ventura Blvd — N/E

3. BETWEEN CROSS STREETS: Tujunga AND Colfax

4. PURPOSE OF BUILDING: Cover over spray booth

5. OWNER'S NAME: Jack Foreman — PHONE

6. OWNER'S ADDRESS: 5511 Van Nuys Blvd — P. O. BOX — ZONE

7. CERT. ARCH. — STATE LICENSE NO. — PHONE

8. LIC. ENGR.: C. Bond — C.E. 8644 - S.E. 1677 — PHONE: FA-1-5871

9. CONTRACTOR: Southwest Const — 156230 ~~15670~~ — STATE LICENSE NO. — PHONE: FA-1-5871

10. CONTRACTOR'S ADDRESS: 17822 S Broadway — P. O. BOX — Gardena — ZONE

11. SIZE OF NEW BLDG.	STORIES	HEIGHT	NO. OF EXISTING BUILDINGS ON LOT AND USE
161 X 25'	1	11	2 Garage & sales

11665 Ventura Blvd.

12. MATERIAL: ☐ WOOD ☒ METAL ☐ CONC. BLOCK — EXT. WALLS: ☐ STUCCO ☐ BRICK ☐ CONCRETE — ROOF CONST. ☐ WOOD ☐ STEEL ☐ CONC. ☐ OTHER — ROOFING: PLUM *

13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ $900.00

Approval of driveway location must be obtained from the Department of Public Works before securing Building Permit.

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

Signed C. W. Wilhelm

This Form When Properly Validated is a Permit to Do the Work Described.

VALUATION APPROVED	SEWER (Available) (Not Available)
APPLICATION CHECKED	
PLANS CHECKED Valverin	DWELL. UNITS
CORRECTIONS VERIFIED	SPACES PARKING
PLANS APPROVED Valverin	GUEST ROOMS
APPLICATION APPROVED	FILE WITH
INSPECTOR	CONT. INSP.

ADDRESS APPROVED Phy

DIST. MAP 733-4

ZONE C-2

FIRE DIST. 2

INSIDE 80

KEY

COR. LOT

REV. COR.

LOT SIZE ~~125 X~~ 80 Irreg.

REAR ALLEY

SIDE ALLEY

BLDG. LINE 20

BLDG. AREA 4150

DISTRICT OFFICE V. N.

SPRINKLES REQ'D. SPECIFIED

AFFIDAVITS Fire Sec. Fire

CRITICAL SOIL

TYPE	GROUP	MAX. OCC.	P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O
IV	F-1	2	2.75			5.50			

CASHIER'S USE ONLY

NOV--8-61 #76022 B — 2 CK 2.75

LA 1599 NOV-15-61 #78319 C — 1 CK 5.50

C G 9677

P.C. No. _____ GRADING _____ CRIT. SOIL _____ CONS. _____

Parcel 2; That portion of lot 234½ of "Plat showing Dividing line between the land of J. B. Lankershim and Lots 234, 235, 236, 237 and 238 of Lankershim Ranch Land and Water Co." in the city of Los Angeles, County of Los Angeles, state of California, as per map recorded in book 83 pages 11 and 12 of Miscellaneous Records, in the office of the county recorder of said county, more particularly described as follows:

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Parcel 2; That portion of lot 234½ of "Plat showing Dividing line between the land of J. B. Lankershim and Lots 234, 235, 236, 237 and 238 of Lankershim Ranch Land and Water Co." in the city of Los Angeles, County of Los Angeles, state of California, as per map recorded in book 83 pages 11 and 12 of Miscellaneous Records, in the office of the county recorder of said county, more particularly described as follows:

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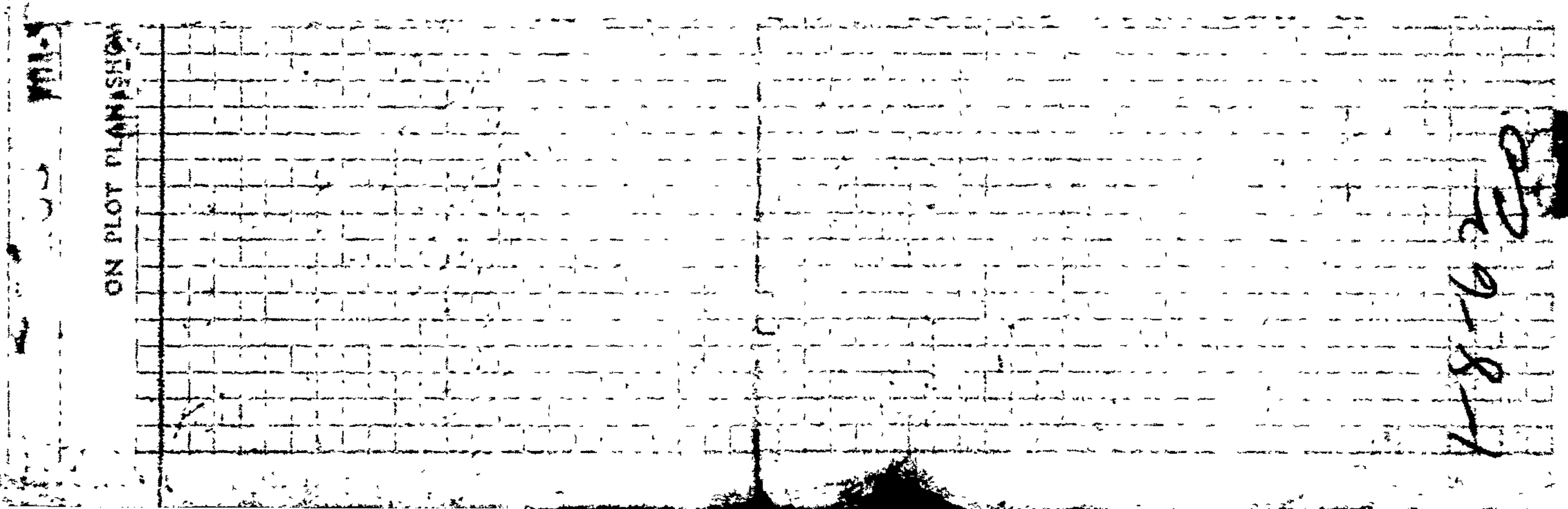
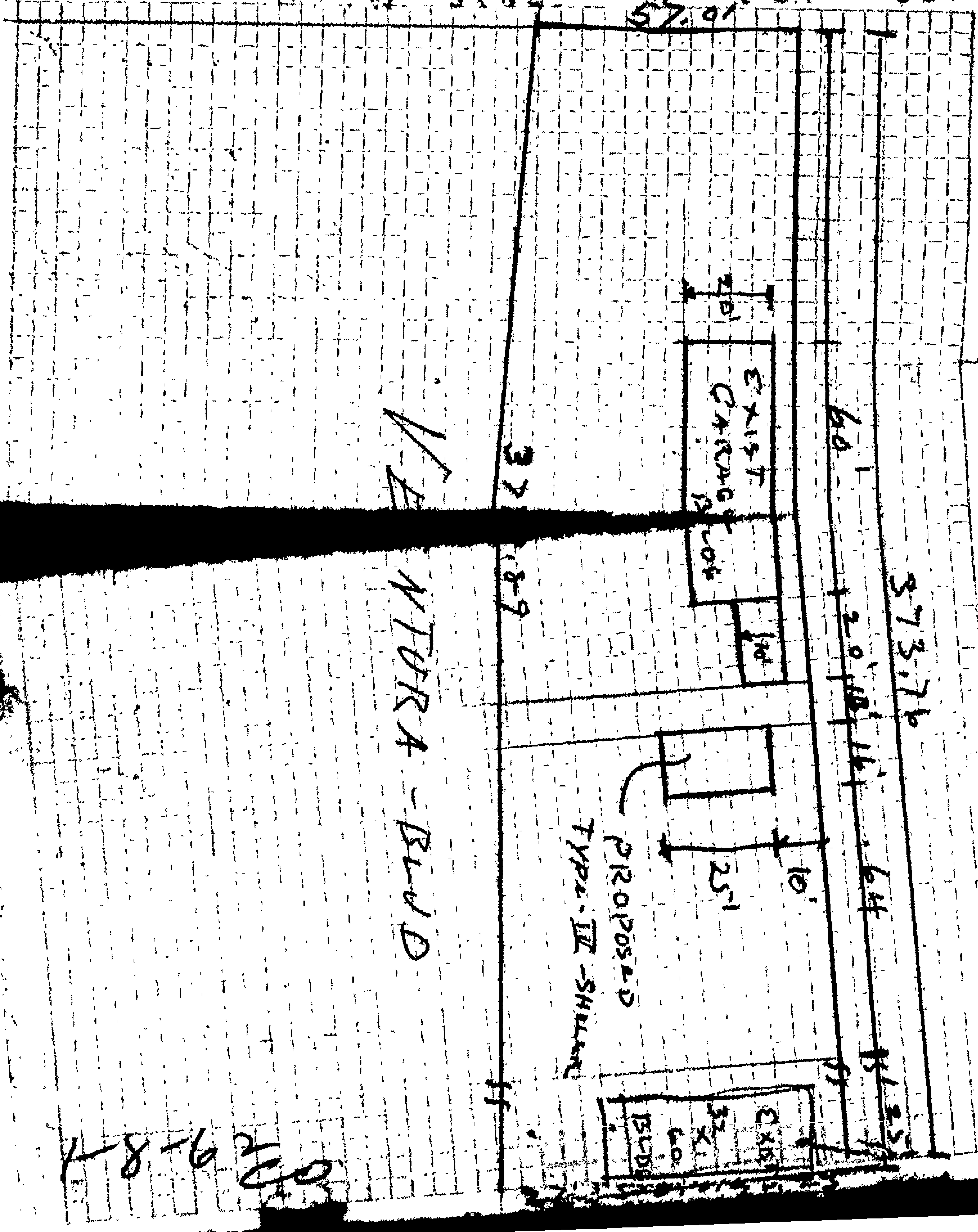


LEGAL DESCRIPTION

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH



1 APPLICATION FOR INSPECTION OF NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY

B&S B-1—Rev. AB-1

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

CENSUS TRACT: 1436

1. LEGAL DESCR. — LOT: 1 — BLK.: 5 — TRACT: 6964
DIST. MAP: 7324
2. PURPOSE OF BUILDING: (23) Echo Chamber
ZONE: C2-1
3. JOB ADDRESS: 4028 Colfax Ave.
FIRE DIST.: II
4. BETWEEN CROSS STREETS: Ventura AND Kelsey
INSIDE / COR. LOT: tx
KEY / REV. COR.
5. OWNER'S NAME: Carl C. Howard — PHONE: PO 12635
LOT SIZE: irreg
6. OWNER'S ADDRESS: 4475 Vineland — P. O. BOX — ZONE
7. ARCHITECT OR DESIGNER: owner — STATE LICENSE NO. — PHONE
REAR ALLEY
SIDE ALLEY
8. ENGINEER — STATE LICENSE NO. — PHONE
BLDG. LINE: 17'/15'clf
9. CONTRACTOR: owner — STATE LICENSE NO. — PHONE
AFFIDAVITS: aff 10593, al 520, comp fill
10. SIZE OF NEW BLDG.: 8 x 16 — STORIES: 1-~~10~~ — HEIGHT: 10' — NO. OF EXISTING BUILDINGS ON LOT AND USE: 2 - Bldgs
11. MATERIAL OF CONSTRUCTION — EXT. WALLS: Stucco — ROOF: compo — FLOOR: conc
12. JOB ADDRESS: 4028 Colfax Ave.
DISTRICT OFFICE: VN
13. VALUATION: TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING. $ 3000.00
GRADING: yes
CRIT. SOIL: yes

1

PURPOSE OF BUILDING: Echo Chamber — VALUATION APPROVED
HIGHWAY DED.: yes
TYPE: V — GROUP: G-1 — STORIES: 1 — PLANS CHECKED
FLOOD
BLDG. AREA: 128 s.f — MAX. OCC.: 1 — TOTAL — PLANS APPROVED
CONS.: /
DWELL. UNITS: 0 — GUEST ROOMS: 0 — SPACES REQ'D: N/C — PROVIDED — APPLICATION APPROVED
ZONED BY: Johnson
SPRINKLERS REQ'D SPECIFIED — CONT. INSP.
FILE WITH
P.C. No.
INSPECTOR: I

P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O	TYPIST
910			1402	25 00 YES			yp

Plan check expires six months after fee is paid. Permit expires one year after fee is paid or six months after fee is paid if construction is not commenced.

CASHIER'S USE ONLY

AUG-28-68 45047 • 73180 X — 6 CK 9.10

AUG-28-68 45048 • 73180 X — 1 CK 39.00

STATEMENT OF RESPONSIBILITY

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

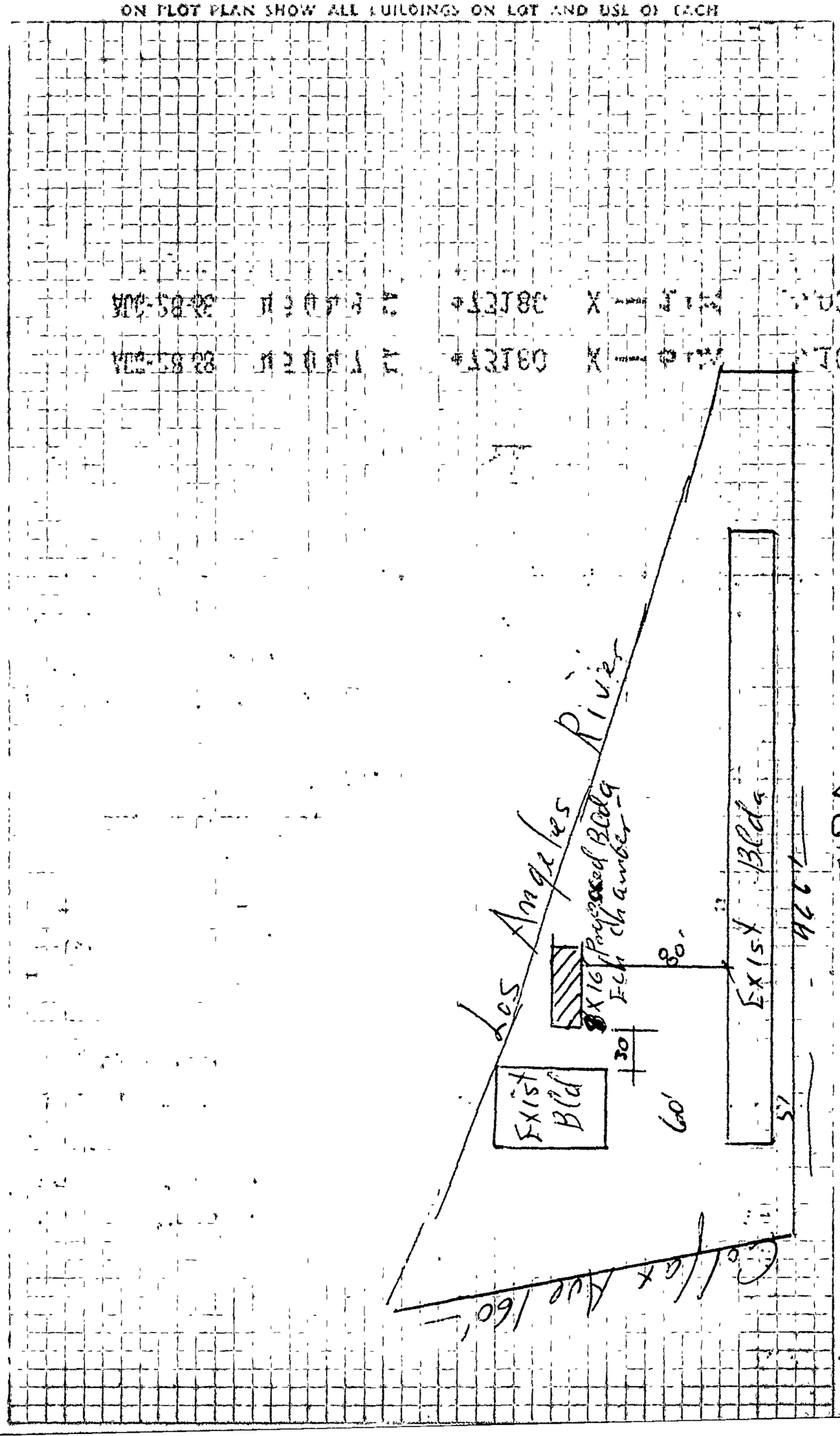
"This permit is an application for inspection, the issuance of which is not an approval or an authorization of the work specified herein. This permit does not authorize or permit, nor shall it be construed as authorizing or permitting the violation or failure to comply with any applicable law. Neither the City of Los Angeles, nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed." (See Sec. 91.0202 L.A.M.C.)

Signed Carl C Howard (Owner or Agent)

		Name	Date
Bureau of Engineering	ADDRESS APPROVED	L.Dalton 8-27-68	
	SEWERS AVAILABLE		
	NOT AVAILABLE		
	DRIVEWAY APPROVED		
	HIGHWAY DEDICATION REQUIRED		
	COMPLETED		
	FLOOD CLEARANCE APPROVED		
Conservation	APPROVED FOR ISSUE FILE #		
Plumbing	PRIVATE SEWAGE DISPOSAL SYSTEM APPROVED		
Planning	APPROVED UNDER CASE #		
Fire	APROVED (TITLE 19) (L.A.M.C.-S700)		
Traffic	APPROVED FOR		

LEGAL DESCRIPTION

ON PLOT PLAN SHOW ALL BUILDINGS ON LOT AND USE OF EACH



3

APPLICATION TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

CITY OF LOS ANGELES — DEPT. OF BUILDING AND SAFETY

B&S B-3 R12-70

E C-1

INSTRUCTIONS: Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT	BLK.	TRACT	CENSUS TRACT
		SEE ATTACHED		1436
2. PRESENT USE OF BUILDING		NEW USE OF BUILDING		DIST. MAP
( ) Office		( ) same		7324
3. JOB ADDRESS				ZONE
11647 Ventura Blvd. N.H.				C-2-1
4. BETWEEN CROSS STREETS				FIRE DIST
Colfax	AND	Tujunga		#2
5. OWNER'S NAME		PHONE		LOT (TYPE)
Haste & Hirsty Imports				Cor.
6. OWNER'S ADDRESS		CITY	ZIP	LOT SIZE
11647 Ventura Blvd.		Stu Co. Hollywood		Irreg. Over
7. ARCHITECT OR DESIGNER		STATE LICENSE No.	PHONE	
8. ENGINEER		STATE LICENSE No.	PHONE	ALLEY
				/
9. CONTRACTOR		STATE LICENSE No.	PHONE	BLDG LINE 17'
A.S.B.C.		263011	347-4469	10' Vent. CD
10. LENDER		BRANCH	ADDRESS	AFFIDAVITS
none				Z.I. #520 over Fill see File prior 62 per DM

11. SIZE OF EXISTING BLDG.	STORIES	HEIGHT	NO. OF EXISTING BUILDINGS ON LOT AND USE
LENGTH 25 WIDTH 12	1	9	3 Sales Off, Parts, Service

12. MATERIAL OF CONSTRUCTION OF EXISTING BLDG →	EXT WALLS	ROOF	FLOOR
	stucco	compo	conc.

3

13. JOB ADDRESS: 11647 Ventura Blvd.

DISTRICT OFFICE: VN B-19

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 5000.

GRADING: /

15. NEW WORK (Describe): Add 12x25 Office Space

CRIT SOIL: /

HIGHWAY DED: Yes X

NEW USE OF BUILDING	SIZE OF ADDITION	STORIES	HEIGHT	FLOOD
Office	12x25	1	8	

TYPE	GROUP	SPRINKLERS REQ'D SPECIFIED	INSPECTION ACTIVITY (COMB)	GEN	MAJ S	CONS	CONS
V	G-1						

BLDG AREA	MAX. OCC	TOTAL	PLANS CHECKED	ZONED BY
3086 2186		21	RS R. Stanley	Fike Over

DWELL. UNITS	GUEST ROOMS	PARKING SPACES REQ'D	PROVIDED	PLANS APPROVED	FILE WITH
/	/	1	1	R. Stanley	

P.C. No.	CONT INSP	APPLICATION APPROVED	INSPECTOR
		R. Stanley	

P.C.	S.P.C.	G.P.I.	B.P.	I.F.	O.S.	C/O	TYPIST
20.47			31.50				jt

PLAN CHECK EXPIRES SIX MONTHS AFTER FEE IS PAID PERMIT EXPIRES ONE YEAR AFTER FEE IS PAID OR SIX MONTHS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED

CASHIER'S USE ONLY

JAN-18-72 2473 Ck VN•78376 B = 1 20.47
JAN-18-72 2474 Ck VN•78376 B = 1 31.50

STATEMENT OF RESPONSIBILITY

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

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Signed R. Stanley (Owner or Agent)

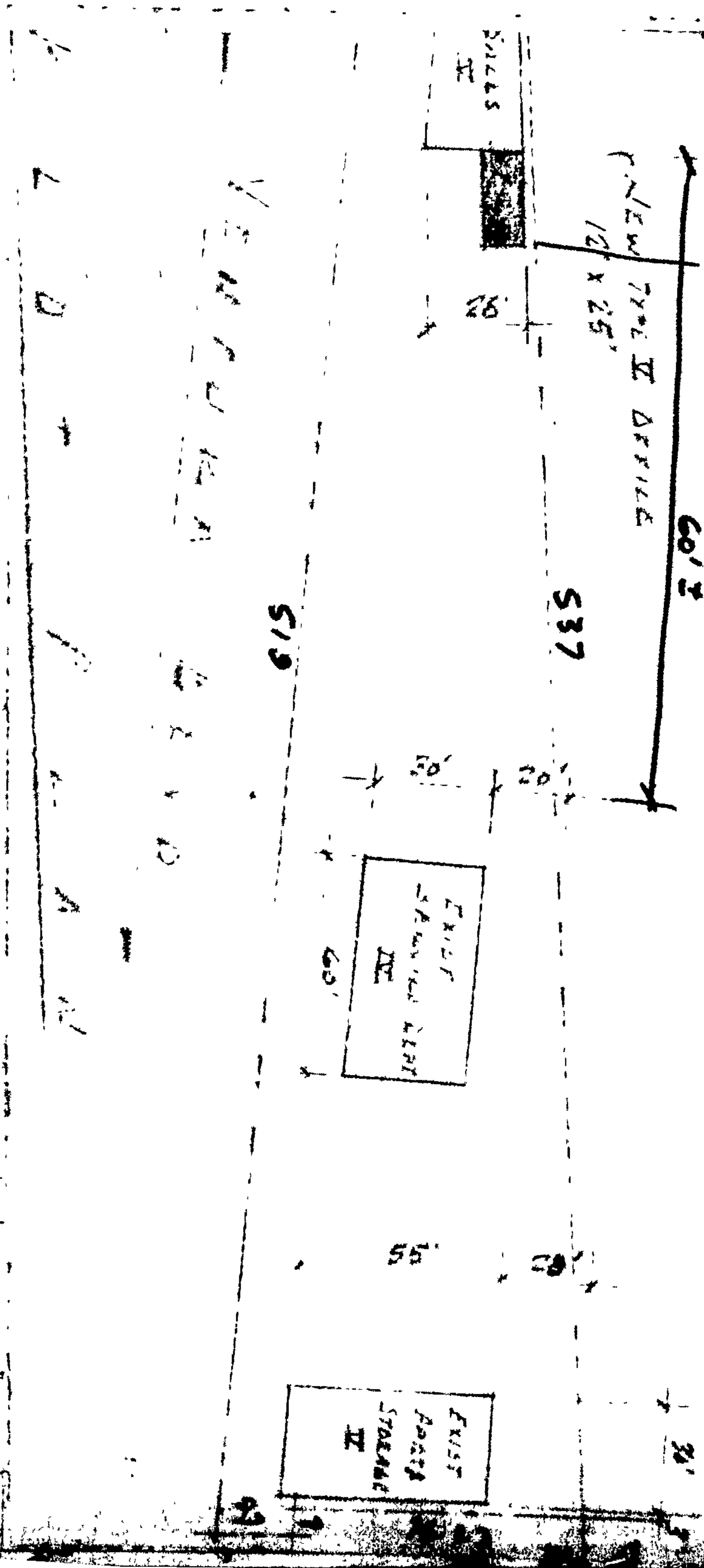
		Name	Date
Bureau of Engineering *	ADDRESS APPROVED	M. McLouis	11/4/71
	SEWERS AVAILABLE / NOT AVAILABLE — Fees Due $63.00	Dist.	11-4-71
	DRIVEWAY APPROVED		11-4-71
	HIGHWAY DEDICATION REQUIRED / COMPLETED		11-4-71
	FLOOD CLEARANCE APPROVED		1/4/72
Conservation	APPROVED FOR ISSUE FILE #		1-4-72
Plumbing	PRIVATE SEWAGE DISPOSAL SYSTEM APPROVED		
Planning	APPROVED UNDER CASE #		
Fire	APPROVED (TITLE 19) (L.A.M.C.-S700)		
Traffic	APPROVED FOR		

Send applicant to Public Works. Storm Drain easement is needed across property per zone. Info. ~~xxxx~~ #520 ac see over (Flood)

ACCOUNT NO	SEQUENCE NO	DIVISION INDEX	CODE	MAP BOOK	PAGE	PARCEL
	84179		0013	0368	007	006

11647 VENTURA BLVD NORTH HOL
LAND OF J B LANKERSHIM LOT EX OF ST COM AT INTERSECTION OF E LINE OF COLFAX AVE WITH NE LINE OF LOT 234 1/2 TH S 0°05' E 37 FT TH S 67°32'20" E 546.79 FT TH N 22°26'20" E 27 FT TH N 67°33'40" W ? FT TH N 22°26'20" E TO SD NE LINE OF LOT TH NW THEREON TO BEG PART OF LOT 234 1/2

STUDIO CITY, CALIF.



1 APPLICATION FOR INSPECTION

CITY OF LOS ANGELES DEPT OF BUILDING AND SAFETY

0 1 5 0 0 3 0 0 3 3 6

OF NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

1. LEGAL DESCR.	LOT: See Attached	BLOCK	TRACT	COUNCIL DISTRICT NO.: 2	DIST MAP: 7324 / CENSUS TRACT: 1436
2. PURPOSE OF BUILDING: (23 Wash Rack					ZONE: C2-1(1VL)
3. JOB ADDRESS: 11647 Ventura Blvd. S.C.					FIRE DIST.: 11
4. BETWEEN CROSS STREETS: Colfax Ave.	AND: Ventura Blvd.				LOT TYPE: Int
5. OWNER'S NAME: Studio City Motors				PHONE	LOT SIZE: Irreg .
6. OWNER'S ADDRESS: same	CITY: Studio City			ZIP	
7. ENGINEER: /	BUS. LIC. NO.	ACTIVE STATE LIC NO.		PHONE	ALLEY: /
8. ARCHITECT OR DESIGNER: Roger Maw	BUS. LIC NO.	ACTIVE STATE LIC NO.		PHONE	BLDG. LINE: 100'B.L.
9. ARCHITECT OR ENGINEER'S ADDRESS: /	CITY			ZIP	AFFIDAVITS: See Map
10. CONTRACTOR: Roger R. Maw Const.	BUS. LIC. NO. B 428718	ACTIVE STATE LIC. NO.		PHONE 343-6236	
11. SIZE OF NEW BLDG. WIDTH 21 LENGTH 20	STORIES 1	HEIGHT 14	NO. OF EXISTING BUILDINGS ON LOT AND USE 3)Ind.		
12. MATERIAL OF CONSTRUCTION ⇒	EXT. WALLS: wood frame	ROOF: tin	FLOOR: conc.		

1

13. JOB ADDRESS: 11647 Ventura Blvd. — STREET GUIDE — DISTRICT OFFICE: VN

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING: $ 2,000 — SEISMIC STUDY ZONE: /

GRADING: yes — FLOOD: / — HWY. DED.: yes — CONS: /

PURPOSE OF BUILDING: Wash Rack			STORIES: 1	HEIGHT: 14	ZONED BY: Kobosa
TYPE: V	GROUP OCC: G-1	FLOOR AREA	PLANS CHECKED: Tdy		FILE WITH
DWELL UNITS	MAX. OCC.	TOTAL	APPLICATION APPROVED:		TYPIST: rc
GUEST ROOMS	PARKING REQ'D.: nc	PARKING PROVIDED: STD. / COMP.	INSPECTION ACTIVITY: COMB. / GEN. / MAJ. S. / CONS.		INSPECTOR

P.C.: 16.15	G.P.I.	CONT INSP	
S.P.C.	P.M.		
B.P.: 19.00	E.I.: .50	Claims for refund of fees paid on permits must be filed: 1. Within one year from date of payment of fee, or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC	
I.F.	O.S.S.: 1.00		
O/S	S.O.S.S.		
DIST. OFFICE: VN	C/O	SPRINKLERS	
P.C. NO.		ENERGY: None	

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED

B & S B-1 (R 2.83)

CASHIER'S USE ONLY

C 16.15 B-PC
C 19.00 BP-R
C .50 E.I.
C 1.00 OSS
65259 0001
M5166 3 01/11/84 36.65 CAID

VN65259

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

15. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date 12/12/83 Lic. Class B-1 Lic. No 428718 Contractor's Signature Roger R. Maw

Contractor's Mailing Address 17605 Kittridge St. VAN NUYS CA. 91406

OWNER-BUILDER DECLARATION

16. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this reason _____

Date _____ Owner's Signature _____

WORKERS' COMPENSATION DECLARATION

17. I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. 235-671-72 Insurance Company State Farm Insur

☒ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. & Safety.

Date 12/12/83 Applicant's Signature Roger R. Maw

Applicant's Mailing Address SAME

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

18. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date _____ Applicant's Signature _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

19. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

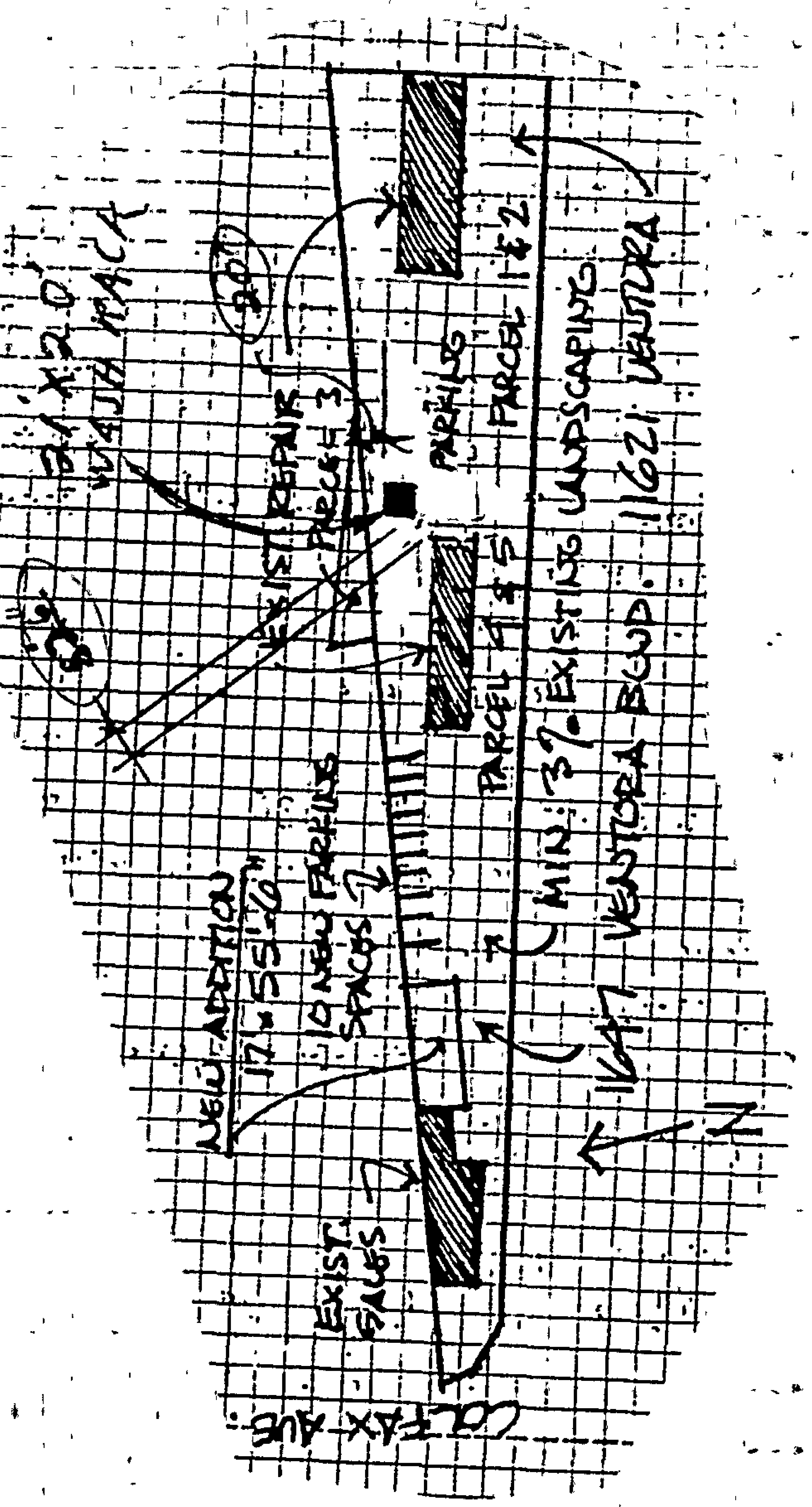
Lender's Name _____

Lender's Address _____

20. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec 91 0203 LAMC)

Signed Roger R. Maw (Owner or agent having property owner's consent) Contractor (Position) 12/12/83 (Date)



11647 VENTURA BLVD NORTH HOL
LAND OF J B LANKERSHIM LOT EX OF ST COM
AT INTERSECTION OF E LINE OF COLFAX AVE
WITH NE LINE OF LOT 234 1/2 TH S 0°05' E
35 FT TH S 67°32'20" E 545.39 FT TH N
22°25'20" E 27 FT TH N 67°33'40" W 7 FT
TH N 22°25'20" E TO SD NE LINE OF LOT TH
NW THEREON TO BEG PART OF LOT 234 1/2

J 1 3 0 0 ~~E 8.0~~ Exist 7ED 12-12-83

To be determined.

X [signature] 12-12-83
~~X~~ ~~[signature] 1/11/84~~
~~[signature]~~
X [signature] 1/11/84
~~X~~

[signature] 12/12/83

4014 N Colfax Ave

Permit #: **04016 - 10000 - 09398**
Plan Check #:
Event Code:
Printed: 05/24/04 12:25 PM

Bldg-Alter/Repair
Commercial
Plan Check at Counter
No Submit Plan Check

City of Los Angeles - Department of Building and Safety

APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

Last Status: Ready to Issue
Status Date: 05/24/2004

1. TRACT	BLOCK	LOT(s)	ARB	COUNTY MAP REF #	PARCEL ID # (PIN #)	2. ASSESSOR PARCEL #
TR 6964	5	1	1	M B 78-2/3	162B169 341	2368 - 007 - 001

3. PARCEL INFORMATION

Area Planning Commission - South Valley
LADBS Branch Office - VN
Bldg. Line - 15.00
Bldg. Line - 17.00
Council District - 2
Cmpt. Fill Grd. - FG
Certified Neighborhood Council - Studio City
Community Plan Area - Sherman Oaks - Studio City - To
Census Tract - 1436.02
District Map - 162B169
Energy Zone - 9
Fire District - 2
Fire District - FBZ
Flood Haz. Zone - A D=N/A E=N/A PI
Earthquake-Induced Liquefaction Area - YES

ZONE(S): C2-1VL /

101071420047665

4. DOCUMENTS

ZI - ZI-1729
ZI - ZI-2323
ZI - ZI-520
ZA - ZA-15621
ZA - ZA-1979-5-CUB
ZA - ZA-1986-68-CUB
ZA - ZA-1987-489-CUB
ZA - ZA-1989-1183-CUB-CUX
SPA - Ventura / Cahuenga Boulevard Co
ORD - ORD-156378
ORD - ORD-171240
ORD - ORD-171241
ORD - ORD-174052
ICO - ORD-175536 Ventura Boulevard
CPC - CPC-1985-381
CPC - CPC-1999-1-SP

5. CHECKLIST ITEMS

6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION

Owner(s):
Larner, Robert Co Tr Robert Larner Pension T5564 El Canon Ave WOODLAND HLS CA 91367

Tenant:

7. EXISTING USE **PROPOSED USE**

(16) Record Tape Recording Stud

8. DESCRIPTION OF WORK

FIRE REPAIR: SISTER ROOF RAFTERS AT CUT ROOF DUE TO FIRE DEPT. REPLACE DAMAGED ROOF SHEATHING AND BUILT UP ROOF TO MATCH EXISTING. LESS THAN 10% DAMAGE. NEW CEILING GRID.

9. # Bldgs on Site & Use:

For information and/or inspection requests originating within LA County,
Call toll-free (888) LA4BUILD
Outside LA County, call (213) 482-0000. (LA4BUILD = 524-2845)

10. APPLICATION PROCESSING INFORMATION

BLDG. PC By: Joyce Mar
OK for Cashier: Julio Zafra
Signature:
DAS PC By:
Coord. OK:
Date: 5-24-04

For Cashier's Use Only W/0 #: **41609398**

```
LA Department of Buildings and Safety
LA 01 26 107302 05/24/04 12:32PM

BUILDING PERMIT COMM      $185.63
EI COMMERCIAL               $2.10
ONE STOP SURCH              $3.75
SYSTEMS DEVT FEE           $11.26
CITY PLANNING SURCH         $5.57
MISCELLANEOUS               $5.00
                     --
Total Due:                $213.31
Credit Card:              $213.31

04LA 58763
```

11. PROJECT VALUATION & FEE INFORMATION Final Fee Period

Permit Valuation: $10,000 PC Valuation:

FINAL TOTAL Bldg-Alter/Repair	213.31
Permit Fee Subtotal Bldg-Alter/Repa	185.63
Handicapped Access	
Plan Check Subtotal Bldg-Alter/Rep	0.00
Fire Hydrant Refuse-To-Pay	
E.Q. Instrumentation	2.10
O.S. Surcharge	3.75
Sys. Surcharge	11.26
Planning Surcharge	5.57
Planning Surcharge Misc Fee	5.00
Permit Issuing Fee	0.00

Sewer Cap ID: Total Bond(s) Due:

12. ATTACHMENTS

D.A. Hardship Exemption
Plot Plan

* P 0 4 0 1 6 1 0 0 0 0 0 9 3 9 8 F N *

13. STRUCTURE INVENTORY **04016 - 10000 - 09398**

14. APPLICATION COMMENTS

In the event that any box (i.e. 1-16) is filled to capacity, it is possible that additional information has been captured electronically and could not be printed due to space restrictions. Nevertheless, the information printed exceeds that required by Section 19825 of the Health and Safety Code of the State of California.

15. Building Relocated From:

16. CONTRACTOR, ARCHITECT, & ENGINEER NAME	ADDRESS		CLASS	LICENSE#	PHONE #
(C) Har-Bro Inc	2750 Signal Parkway,	Signal Hill, CA 90755	B	258441	562-528-8000
(E) Erstad, Gerald Lee	3165 Buckingham Road,	Glendale, CA 91206		S4470	

PERMIT EXPIRATION

This permit expires two years after the date of the permit issuance. This permit will also expire if no construction work is performed for a continuous period of 180 days (Sec. 98.0602 LAMC). Claims for refund of fees paid must be filed within one year from the date of expiration for permits granted by the Dept. of Building & Safety (Sec. 22.12 & 22.13 LAMC).

17. LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. If doing work on a residential property, I certify that I hold a valid certification as a Home Improvement contractor per Business and Professions Code, Section 7150.2c. The following applies to B contractors only: I understand the limitations of Section 7057 of the Business and Professional Code related to my ability to take prime contracts or subcontracts involving specialty trades.

License Class: B Lic. No.: 258441 Contractor: _____

18. WORKERS' COMPENSATION DECLARATION

I hereby affirm, under penalty of perjury, one of the following declarations:

(__) I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

(X) I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: STATE FUND Policy Number: 1770187

(__) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

19. ASBESTOS REMOVAL DECLARATION

I certify that notification of asbestos removal is either not applicable or was sent to the AQMD or EPA as per section 19827.5 of the Health and Safety Code.

20. CONSTRUCTION LENDING AGENCY DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's name (if any): _____ Lender's address: _____

21. FINAL DECLARATION

I certify that I have read this application **INCLUDING THE ABOVE DECLARATIONS** and state that the above information **INCLUDING THE ABOVE DECLARATIONS** is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes. I realize that this permit is an application for inspection and that it does not approve or authorize the work specified herein, and it does not authorize or permit any violation or failure to comply with any applicable law. Furthermore, neither the City of Los Angeles nor any board, department officer, or employee thereof, make any warranty, nor shall be responsible for the performance or results of any work described herein, nor the condition of the property nor the soil upon which such work is performed. I further affirm under penalty of perjury, that the proposed work will not destroy or unreasonably interfere with any access or utility easement belonging to others and located on my property, but in the event such work does destroy or unreasonably interfere with such easement, a substitute easement(s) satisfactory to the holder(s) of the easement will be provided (Sec. 91.0106.4.3.4 LAMC).

By signing below, I certify that:

(1) I accept all the declarations above namely the Licensed Contractor's Declaration, Workers' Compensation Declaration, Asbestos Removal Declaration, Construction Lending Agency Declaration and Final Declaration; and
(2) This permit is being obtained with the consent of the legal owner of the property.

Print Name: ALLSUP Sign: _____ Date: 5-24-04 ☐ Contractor ☑ Authorized Agent

Permit Application #: **04016 - 10000 - 09398**

Plan Check #:

Initiating Office: METRO

Printed on: 05/19/04 12:32:31

4014 N Colfax Ave

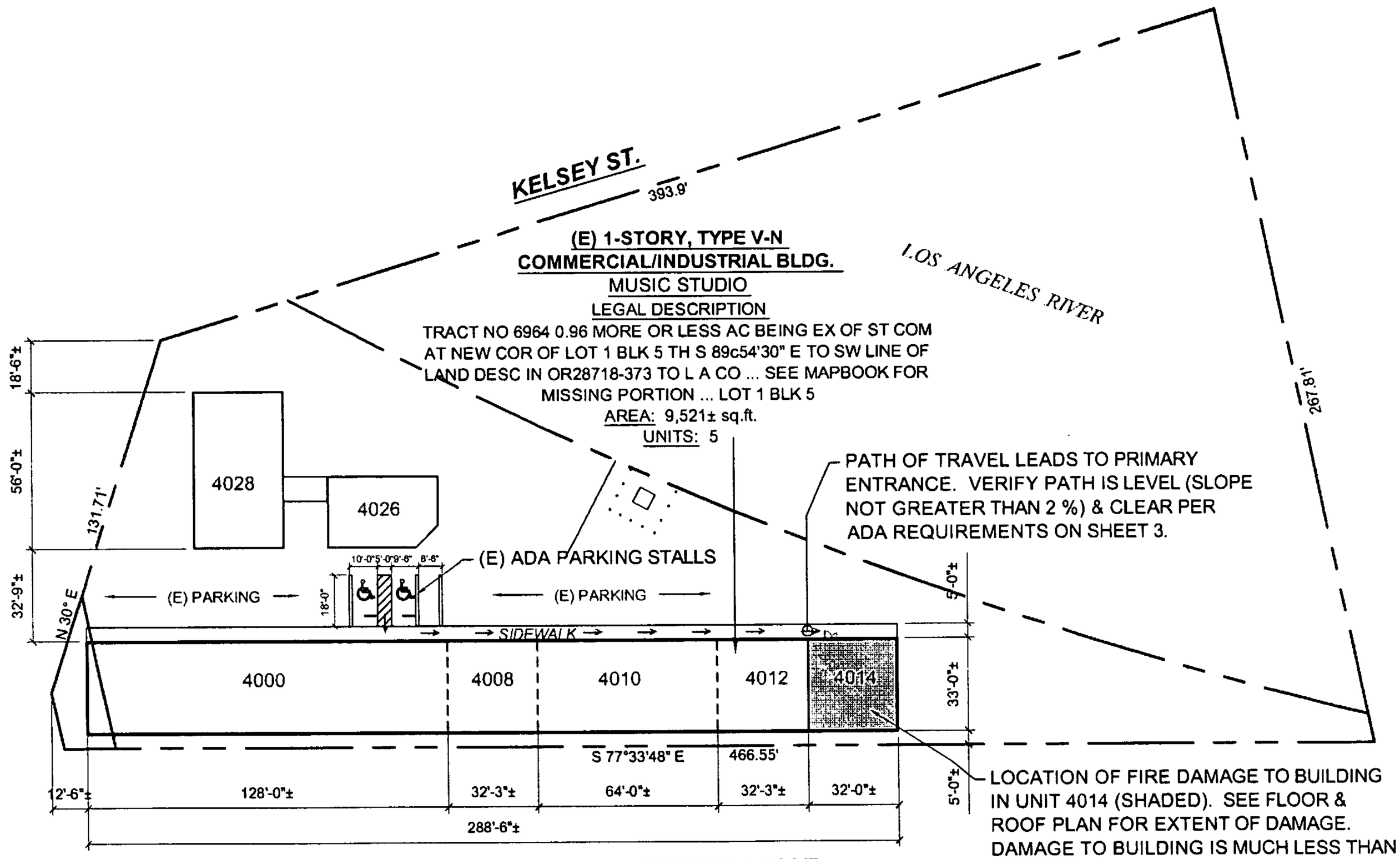
Bldg-Alter/Repair

Commercial

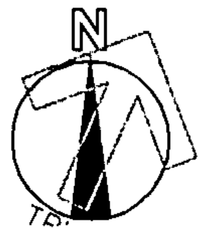
No Submit Plan Check

City of Los Angeles - Department of Building and Safety

PLOT PLAN ATTACHMENT



LOCATION OF FIRE DAMAGE TO BUILDING IN UNIT 4014 (SHADED). SEE FLOOR & ROOF PLAN FOR EXTENT OF DAMAGE. DAMAGE TO BUILDING IS MUCH LESS THAN 10% OF REPLACEMENT COST OF BUILDING. UNIT 4014 APPROX. AREA = 1,009 sq.ft.



PLOT PLAN

SCALE: 1/60" = 1' - 0"

(DO NOT DRAW, WRITE, OR PASTE ATTACHMENTS OUTSIDE BORDER)

10107142004766 3

PLOT PLAN ATTACHMENT

COUNCIL DISTRICT: 2

LA DBS
DEPARTMENT OF BUILDING AND SAFETY

LARUCP

Application for Unreasonable Hardship to Disabled Access Requirements (Form A)

(For Existing Buildings Where Cost of Construction does not exceed $101,000 (rev. 1-2004) Sec. 1124B.2. Exc. 1)

Project Address: 4014 Colfax Ave.	Plan Check # 04016-10000-09398
Project Description: Commercial Fire Repair Damage Less than 10%	Total Construction Cost (project valuation) $ 10,000

It is requested that the above project be granted an exemption from the requirements of the State of California Title 24, Accessibility Regulations, as specifically listed below. The specific accessibility features that create a hardship may be exempted but not all of them. **The area of alteration itself may not be exempted.**

Access Features item Provide description below	Does this feature meet latest edition of Title 24?	If not, is this feature going to be made accessible as part of this permit?	If so, cost of making feature accessible? (Documentation may be required)
1. Path of travel to entrance	yes		$
2. Entrance to Building	no	yes	$ 1,800-
3. Path of travel within building / facility to area remodel	no	yes	$ 500-
4. Elevator			$
5. Restrooms	none		$
6. Public telephones if provided			$
7. Drinking fountains if provided			$
8. Other (parking, etc.)			$
Total Cost of access features provided (A)			$ 2,300
Total cost of construction (B)			$ 10,000
(A ÷ B) x 100% (20% minimum expenditure is required)			.23
Has the same tenant performed work in the same tenant space, within the last three years?			

Description of access features to be provided 1) (N) 3⁰ x 8⁰ ± custom Entry Door w/ ADA Hrdwr.
2) (N) Int. 3⁰ x 7⁰ ± ADA door

Applicant Information

I certify that the above noted information is true and correct.

Name (print) Irene Masharo Signature

Firm Address 301 E. Glenoaks, #8 Position agent for engineer
Glendale, CA 91207

FOR DEPARTMENT USE ONLY

Approved by _____ Title _____ Date _____

Denied by _____ Title _____ Date _____

2

CITY OF LOS ANGELES — APPLICATION FOR INSPECTION OF NEW BUILDING AND FOR CERTIFICATE OF OCCUPANCY — B&S B-1 — R.8.76 DEPT. OF BUILDING AND SAFETY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only. 2. Plot Plan Required on Back of Original.

Item	Field	Entry
1. LEGAL DESCR.	LOT	See attached / PTN 234½
	BLK	5
	TRACT	Lankershim Ranch ~~6964~~ LEW
2.	PURPOSE OF BUILDING	(48) Auto Body Shop
3.	JOB ADDRESS	11621 Ventura Blvd NH
4.	BETWEEN CROSS STREETS	Colfax AND Tujunga
5.	OWNER'S NAME	Studio City ~~XXXXXX XXXX~~ Motors
	PHONE	
6.	OWNER'S ADDRESS	11621 Ventura Blvd
	CITY	Studio City
	ZIP	
7.	ENGINEER	James E. Pace
	BUS. LIC. NO.	
	ACTIVE STATE LIC. NO.	C12217
	PHONE	870-0384
8.	ARCHITECT OR DESIGNER	None
9.	CONTRACTOR	Fenster Const
	PHONE	556-1411
10.	BRANCH LENDER	Not Determined
	ADDRESS	
	CITY	
11.	SIZE OF NEW BLDG.	WIDTH 25 LENGTH 120
	STORIES	1
	HEIGHT	12
	NO. OF EXISTING BUILDINGS ON LOT AND USE	2 New Car Sales; Makeready Shop
12.	MATERIAL OF CONSTRUCTION	EXT. WALLS Steel; ROOF Steel; FLOOR Conc
13.	JOB ADDRESS	11621 Ventura Blvd
14.	VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING	$ 20,000.00

Field	Entry
DIST. MAP	E 7324
CENSUS TRACT	1438.02
ZONE	C-2
FIRE DIST.	#2
LOT (TYPE)	Int
LOT SIZE	95X120
ALLEY	—
BLDG. LINE	20' B/L
AFFIDAVITS	Comp File; LooseFill; CU Prior 7-29-62
SEISMIC STUDY ZONE	/
DIST. OFFICE	VN
CRIT. SOIL	/
GRADING	/
HIGHWAY DED.	Yes
FLOOD	/
CONS.	/
ZONED BY	[signature]
FILE WITH	
INSPECTOR	

Field	Entry
PURPOSE OF BUILDING	Auto Body Shop (enclosed bldg.)
STORIES	1
HEIGHT	12'
TYPE	IV
GROUP OCC.	F-1
BLDG. AREA	3125
PLANS CHECKED	[signature]
DWELL. UNITS	0
MAX. OCC.	1/100
TOTAL	31
PLANS APPROVED	V. Cerni [signature]
GUEST ROOMS	0
PARKING REQ'D	5/13
PARKING PROVIDED	STD. 13 COMP.
APPLICATION APPROVED	V. Cerni [signature]
SPRINKLERS REQ'D SPECIFIED	
CONT. INSP.	
INSPECTION ACTIVITY	COMB / (GEN) / MAJ. S. / CONS

P.C.	S.P.C.	B.P.	T.I.	P.M.	I.F.	G.P.I.	C/O	O.S.
107.95		127.00	—	5.00	—	—	—	

P.C. No. N2882

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED.

TYPIST ds

CASHIER'S USE ONLY

DEC-29-76 13268 Ck VN • E — 6 107.95

MAR-30-77 53770 Ca VN 54682 I — 1 132.00

STATEMENT OF RESPONSIBILITY

I certify that in doing the work specified herein I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

"This permit is an application for inspection, the issuance of which is not an approval or an authorization of the work specified herein. This permit does not authorize or permit, nor shall it be construed as authorizing or permitting the violation or failure to comply with any applicable law. Neither the City of Los Angeles, nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or soil upon which such work is performed." (See Sec. 91.0202 L.A.M.C.)

Signed James E. Pace (Owner or Agent having Property Owner's Consent)

Agency	Item	Signature/Date
Bureau of Engineering	ADDRESS APPROVED	[signature] 12-30-76
	DRIVEWAY Per Drwy Ord.	[signature] 3-30-77
	HIGHWAY DEDICATION [X] REQUIRED	[signature] 12-31-76
	[X] COMPLETED	[signature] 3-30-77
	FLOOD CLEARANCE	
NO NEW PLUMBING	SEWERS Not available if plumbing is req'd. [signature] 12-30-76	SEWERS AVAILABLE (see note) [signature] 12-30-76
		NOT AVAILABLE
	NO SEWER/PLUMBING REQ'D.	SFC PAID
	SFC NOT APPLICABLE	SFC DUE
Conservation	APPROVED FOR ISSUE ☐ NO FILE ☐	
Fire	APPROVED (TITLE 19) (L.A.M.C.-5700)	[signature] 3/10/77
Housing	HOUSING AUTHORITY APPROVAL	
Planning	APPROVED UNDER CASE #	
Traffic	APPROVED FOR	

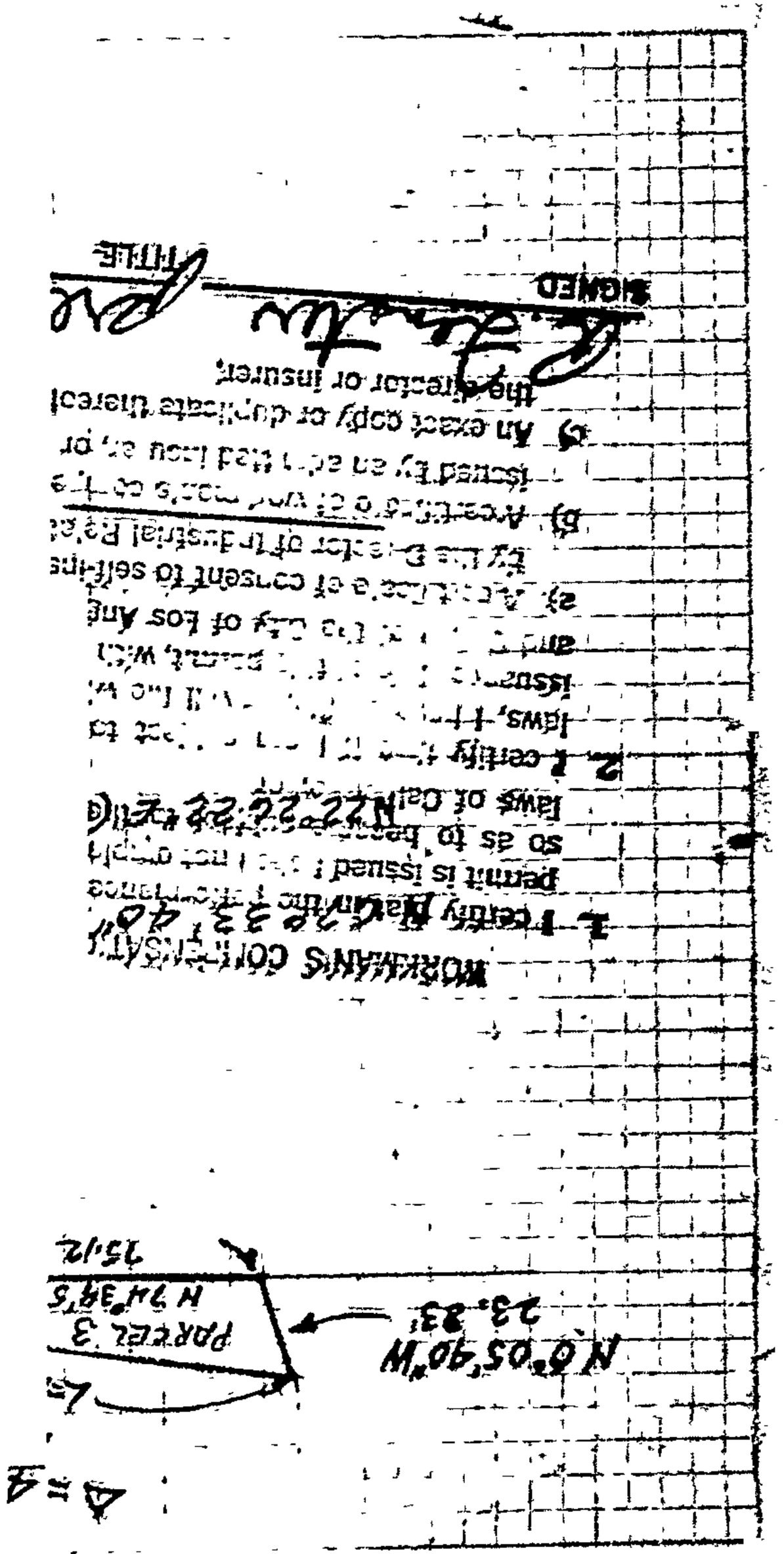
PARCEL 1:

THE EAST 105.215 FEET, MEASURED ALONG THE SOUTHERLY LINE OF THAT PORTION OF LOT 234 1/2 OF "PLAT SHOWING DIVIDING LINE BETWEEN THE LAND OF J. [illegible] LANKERSHIM AND LOTS 234, 235, 236 237, AND 238 OF LANKERSHIM RANCH LAND AND WATER CO., IN THE CITY OF LOS ANGELES, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 83 PAGES 11 AND 12 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY LINE OF VENTURA BOULEVARD (FORMERLY LOS ANGELES & VENTURA ROAD), WITH THE EASTERLY LINE OF COLFAX AVENUE (FORMERLY EUCALYPTUS AVENUE) AS BOTH ARE SHOWN ON SAID MAP; THENCE ALONG SAID NORTHEASTERLY LINE OF VENTURA BOULEVARD, SOUTH 67 DEGREES 33 MINUTES 40 SECONDS EAST 546.79 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 22 DEGREES 26 MINUTES 20 SECONDS EAST 27 FEET; THENCE NORTH 67 DEGREES 33 MINUTES 40 SECONDS WEST 7 FEET; THENCE NORTH 22 DEGREES 26 MINUTES 20 SECONDS EAST 76.23 FEET TO THE NORTHEASTERLY LINE OF SAID LOT 234 1/2; THENCE ALONG SAID NORTHEASTERLY LINE SOUTH 74 DEGREES 39 MINUTES 55 SECONDS EAST 307.42 FEET TO A LINE THAT BEARS NORTH 21 DEGREES 38 MINUTES 53 SECONDS EAST FROM A POINT IN SAID NORTHEASTERLY LINE OF VENTURA BOULEVARD THAT IS DISTANT THEREON NORTH 68 DEGREES 21 MINUTES 07 SECONDS WEST 443 FEET FROM AN ANGLE POINT IN SAID NORTHEASTERLY LINE; THENCE SOUTH 21 DEGREES 38 MINUTES 53 SECONDS WEST 139.00 FEET TO SAID POINT IN SAID NORTHEASTERLY LINE OF VENTURA BOULEVARD; THENCE ALONG SAID NORTHEASTERLY LINE NORTH 68 DEGREES 21 MINUTES 07 SECONDS WEST 105.215 FEET TO AN ANGLE POINT IN SAID NORTHEASTERLY LINE; THENCE CONTINUING ALONG SAID NORTHEASTERLY LINE NORTH 67 DEGREES 33 MINUTES 40 SECONDS WEST 194.79 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THAT PORTION LYING NORTHEASTERLY OF THE SOUTHWESTERLY LINE OF THE LOS ANGELES COUNTY FLOOD CONTROL CHANNEL, AS DESCRIBED IN PARCEL 343 OF CASE NO.

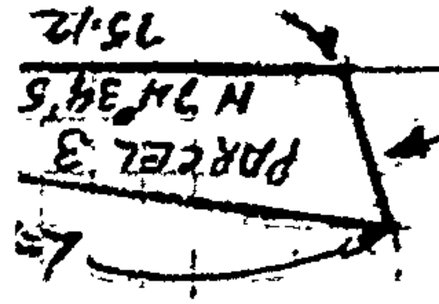
751978



THAT PORTION OF LOT 234-1/2 OF "PLAT SHOWING DIVIDING LINE BETWEEN THE LAND OF J. J. LANKERSHIM AND LOTS 234, 235, 236, 237 AND 238 OF THE LANKERSHIM RANCH LAND AND WATER CO." IN THE CITY OF LOS ANGELES, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 83 PAGES 11 AND 12 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHEASTERLY LINE OF VENTURA BOULEVARD, FORMERLY LOS ANGELES AND VENTURA ROAD, WITH THE EASTERLY LINE OF COLFAX AVENUE, FORMERLY EUCALYPTUS AVENUE, AS BOTH ARE SHOWN ON SAID MAP; THENCE ALONG SAID NORTHEASTERLY LINE OF VENTURA BOULEVARD, SOUTH 67 DEGREES 33 MINUTES 40 SECONDS EAST 246.79 TO THE TRUE POINT OF BEGINNING; THENCE NORTH 22 DEGREES 26 MINUTES 20 SECONDS EAST 27 FEET; THENCE NORTH 67 DEGREES 33 MINUTES 40 SECONDS WEST 7 FEET; THENCE NORTH 22 DEGREES 26 MINUTES 20 SECONDS EAST 76.23 FEET TO THE NORTHEASTERLY LINE OF SAID LOT 234-1/2; THENCE ALONG SAID NORTHEASTERLY LINE, SOUTH 74 DEGREES 39 MINUTES 55 SECONDS EAST 307.42 FEET TO A LINE THAT BEARS NORTH 21 DEGREES 38 MINUTES 53 SECONDS EAST FROM A POINT IN SAID NORTHEASTERLY LINE OF VENTURA BOULEVARD THAT IS DISTANT THEREON NORTH 68 DEGREES 21 MINUTES 07 SECONDS WEST 443 FEET FROM AN ANGLE POINT IN SAID NORTHEASTERLY LINE; THENCE SOUTH 21 DEGREES 38 MINUTES 53 SECONDS WEST 139.81 FEET TO SAID POINT IN SAID NORTHEASTERLY LINE OF VENTURA BOULEVARD; THENCE ALONG SAID NORTHEASTERLY LINE, NORTH 68 DEGREES 21 MINUTES 07 SECONDS WEST 105.219 FEET TO AN ANGLE POINT IN SAID NORTHEASTERLY LINE; THENCE CONTINUING ALONG SAID NORTHEASTERLY LINE, NORTH 67 DEGREES 33 MINUTES 40 SECONDS WEST 194.79 FEET TO THE TRUE POINT OFC BEGINNING.

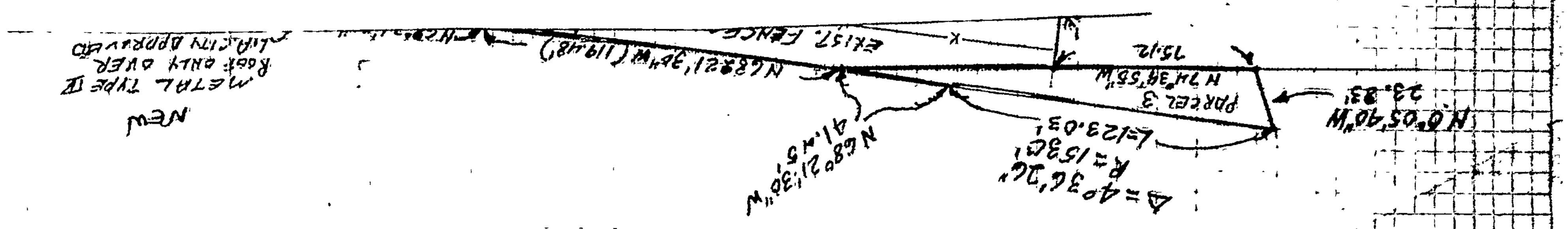
EXCEPT THE WEST 105.219 FEET, MEASURED ALONG THE SOUTHERLY LINE.

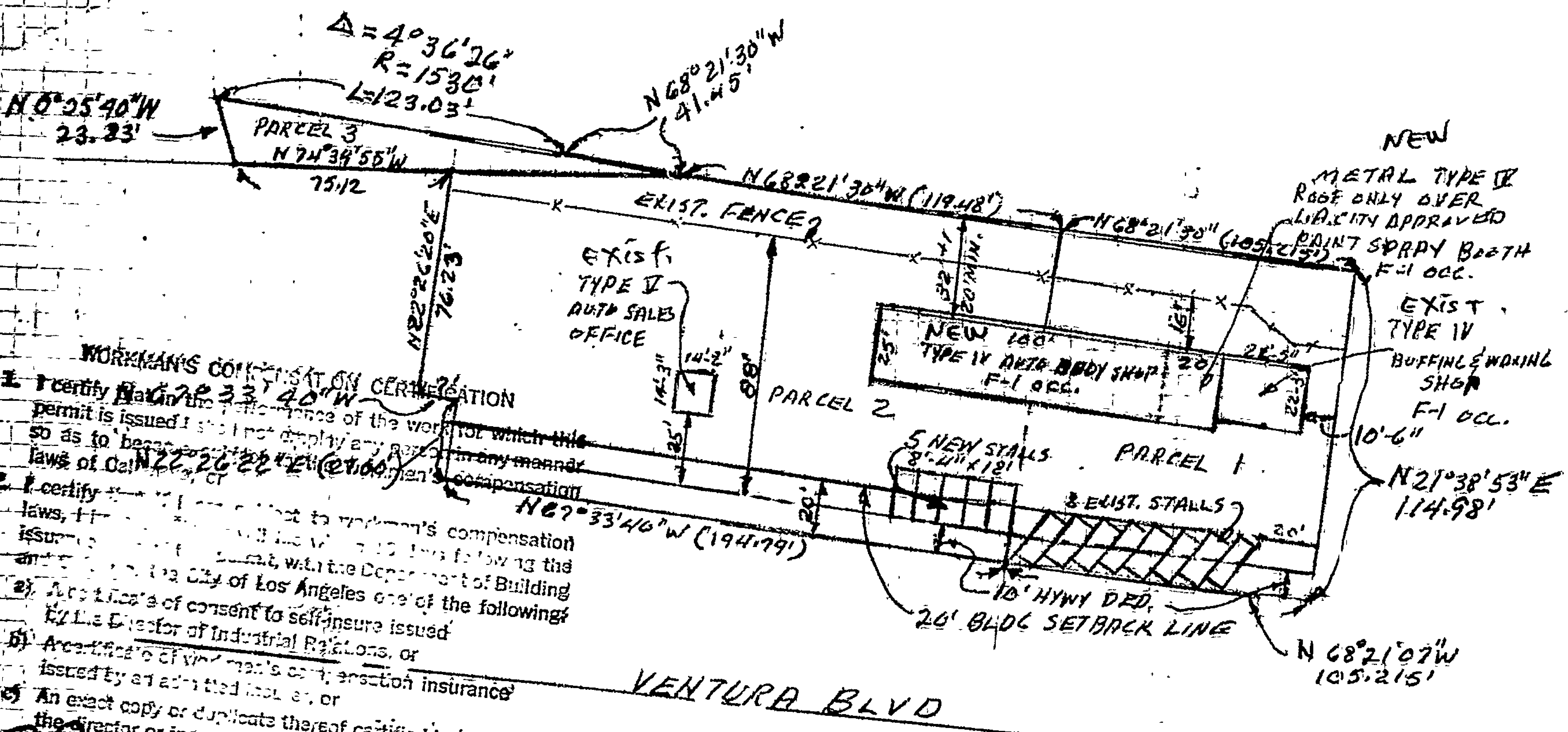


ALSO EXCEPT THAT PORTION LYING NORTHEASTERLY OF THE SOUTHWESTERLY LINE OF THE LOS ANGELES COUNTY FLOOD CONTROL CHANNEL, AS DESCRIBED IN PARCEL 343 OF CASE NO. 542717, SUPERIOR COURT, OF SAID COUNTY.

PARCEL 3:

THAT PORTION OF LOT 2 IN BLOCK 5 OF TRACT NO. 6964, IN THE CITY OF LOS ANGELES, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 78 PAGES 2 AND 3 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, LYING SOUTHERLY OF THE SOUTHERLY LINE OF LOS ANGELES COUNTY ROAD FLOOD CONTROL CHANNEL, AS DESCRIBED IN PARCEL 343 OF CASE NO. 542717, SUPERIOR COURT, OF LOS ANGELES COUNTY.





WORKMAN'S COMPENSATION CERTIFICATION

1. I certify that in the performance of the work for which this permit is issued I shall not employ any person in any manner so as to become subject to the workmen's compensation laws of California, or

2. I certify [illegible] laws, [illegible] issu[illegible] and [illegible] the City of Los Angeles one of the following:

a) A certificate of consent to self-insure issued by the Director of Industrial Relations, or

b) A certificate of workmen's compensation insurance issued by an admitted insurer, or

c) An exact copy or duplicate thereof certified by the director or insurer.

SIGNED R. Lester TITLE pres DATE 3/30/77.

Addresss of Buildingg 4028 Colfax Ave.

CITY OF LOS ANGELES

Certificate of Occupancy

NOTE:: Any change of use or occupancy must be approved by the Department of Building and Safety.

This certifiifies that, so far as ascertained by or made known to the undersigned, the building at the above address complies with the applicable requiremenents of the Municipal Code, as follows: Ch. 1, as to permitted uses; Ch. 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State HHousing Act—for following occupancies:

Issued April 17,1963 Permit No. and Year LA 30288/63

11-Story, Type V, 11' x 18' Office Building;
GG-1 Occupancy.

Owner Carl Howard
Owner's s Address 4475 Vineland Ave.
N. Hollywood, Calif.

J.B. COCHRANE-vr

Form B-9515b—2M Sets—3-62 (C-10)

J. C. MONNING, Superintendent of Building—By _____

Address of Building 4028 Colfax Avenue

CITY OF LOS ANGELES

CERTIFICATE OF OCCUPANCY

NOTE: Any change of use or occupancy must be approved by the Department of Building and Safety.

This certifies that, so far as ascertained by or made known to the undersigned, the building at the above address complies with the applicable requirements of the Municipal Code, as follows: Ch. 1, as to permitted uses, Ch. 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State Housing Law—for following occupancies:

Issued 10-21-70

Permit No. and Year LA 75539/68, LA 80581/69
LA 73180/68, LA 75089/68

1 Story, Type V, 22' x 22' Echo Chambers and Storage Building.
G-1 Occupancy

EXCEPT FOR DEVIATIONS APPROVED BY BOARD OF BLDG. & SAFETY COMMISSIONERS

Owner Carl C. Howard

Owner's Address 4475 Vineland Avenue
No. Hollywood, Calif. 91602

E. Spitzer/sm

Form B-95b—6M Sets—8-70 (C-10)

By_____

Address of Building 11621 Ventura Blvd.

CITY OF LOS ANGELES

CERTIFICATE OF OCCUPANCY

NOTE: Any change of use or occupancy must be approved by the Department of Building and Safety.

This certifies that, so far as ascertained by or made known to the undersigned, the building at the above address complies with the applicable requirements of the Municipal Code, as follows: Ch. 1, as to permitted uses, Ch. 9, Arts. 1, 3, 4, and 5; and with applicable requirements of State Housing Law—for following occupancies:

Issued 6-9-77 Permit No. and Year VN 54682/77

1-Story, Type IV, 25' x 125' Auto Body Shop.
5 additional required parking spaces provided.
F-1 Occupancy.

0 1 9 0 0 2 0 0 0 3 4

Owner Studio City Motors

Owner's Address 11621 Ventura Blvd.
Studio City, Calif. 91604

Form B-95b

BY W. Lau-dg

APPLICATION FOR INSPECTION

CITY OF LOS ANGELES DEPT OF BUILDING AND SAFETY

0 7 4 0 L 3 0 0 3 2 7

TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY

INSTRUCTIONS: 1. Applicant to Complete Numbered Items Only.

1. LEGAL DESCR.	LOT 15-2-28 See Attached	BLOCK	TRACT	COUNCIL DISTRICT NO. 2	DIST MAP 7324 / CENSUS TRACT 1436
2. PRESENT USE OF BUILDING	22) Storage	NEW USE OF BUILDING ( ) Demo.			ZONE C2-1IVL
3. JOB ADDRESS	11647 Ventura Blvd.				FIRE DIST. 11
4. BETWEEEN CROSS STREETS	Colfax	AND Tujunga			LOT TYPE Int
5. OWNER'S NAME	William J. Hirste		PHONE 766-3847		LOT SIZE Irreg.
6. OWNER'S ADDRESS	same as above	CITY Studio City	ZIP		
7. ENGINEER	/	BUS. LIC. NO.	ACTIVE STATE LIC. NO.	PHONE	ALLEY /
8. ARCHITECT OR DESIGNER	/	BUS. LIC. NO.	ACTIVE STATE LIC. NO.	PHONE	BLDG. LINE 100'BL
9. ARCHITECT OR ENGINEER'S ADDRESS	/	CITY	ZIP		AFFIDAVITS See Map
10. CONTRACTOR	Owner	BUS. LIC. NO.	ACTIVE STATE LIC. NO.	PHONE	

11. SIZE OF EXISTING BLDG.	STORIES	HEIGHT	NO. OF EXISTING BUILDINGS ON LOT AND USE
WIDTH 18 LENGTH 20	1	12	2) Industrial

12. CONST. MATERIAL OF EXISTING BLDG. →	EXT. WALLS	ROOF	FLOOR
	stucco	compo.	

3

13. JOB ADDRESS 11647 Ventura Blvd. — STREET GUIDE — DISTRICT OFFICE VN

14. VALUATION TO INCLUDE ALL FIXED EQUIPMENT REQUIRED TO OPERATE AND USE PROPOSED BUILDING $ 1,000 — SEISMIC STUDY ZONE /

15. NEW WORK (Describe) Demo. Handwreck — GRADING / — FLOOD /

SC# L1589 — HWY. DED. yes — CONS. /

NEW USE OF BUILDING	SIZE OF ADDITION	STORIES	HEIGHT	ZONED BY
Demo.				Kobosa

TYPE	GROUP OCC.	FLOOR AREA	PLANS CHECKED	FILE WITH
V	G1			

DWELL UNITS	MAX OCC.	TOTAL	APPLICATION APPROVED	TYPIST
—				rc

GUEST ROOMS	PARKING REQ'D	PARKING PROVIDED STD.	COMP.	INSPECTION ACTIVITY COMB	GEN.	MAJ. S.	CONS.	INSPECTOR

P.C.	G.P.I.	CONT. INSP.
11.05		
S.P.C.	P.M.	
B.P.	E.I.	Claims for refund of fees paid on permits must be filed. 1. Within one year from date of payment of fee; or 2. Within one year from date of expiration of extension for building or grading permits granted by the Dept. of B. & S. SECTIONS 22.12 & 22.13 LAMC.
13.00	.50	
I.F	O.S.S.	
1.00		
O/S	S.O.S.S.	
DIST OFFICE	C/O	SPRINKLERS REQ'D SPEC.
VN		
P.C. NO.		ENERGY
42626		

PLAN CHECK EXPIRES ONE YEAR AFTER FEE IS PAID. PERMIT EXPIRES TWO YEARS AFTER FEE IS PAID OR 180 DAYS AFTER FEE IS PAID IF CONSTRUCTION IS NOT COMMENCED

CASHIER'S USE ONLY

B & S B-3 (R 1.83)

11.05 B-PC
13.00 BP-B
.50 E-I
1.00 OSS
80873 00
L1590 2 127 1784 25.55 CHTD

VN 80873

DECLARATIONS AND CERTIFICATIONS

LICENSED CONTRACTORS DECLARATION

16. I hereby affirm that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Date _____ Lic. Class _____ Lic. Number _____ Contractor _____
(Signature)

OWNER-BUILDER DECLARATION

17. I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____, B. & P. C. for this re

Date 12/6/84 Owner's Signature

WORKERS' COMPENSATION DECLARATION

18. I hereby affirm that I have a certificate of consent to self-insure, a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. B10733 Insurance Company Univer

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the Los Angeles City Dept. of Bldg. &

Date 12/6/84 Applicant's Signature

Applicant's Mailing Address

OFFICIAL SEAL
MELVIN B. JANOFF
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY
My Commission Exp. Aug. 27 1985

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

19. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date _____ Applicant's Signature _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

20. I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).

Lender's Name _____ Lender's Address _____

21. I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

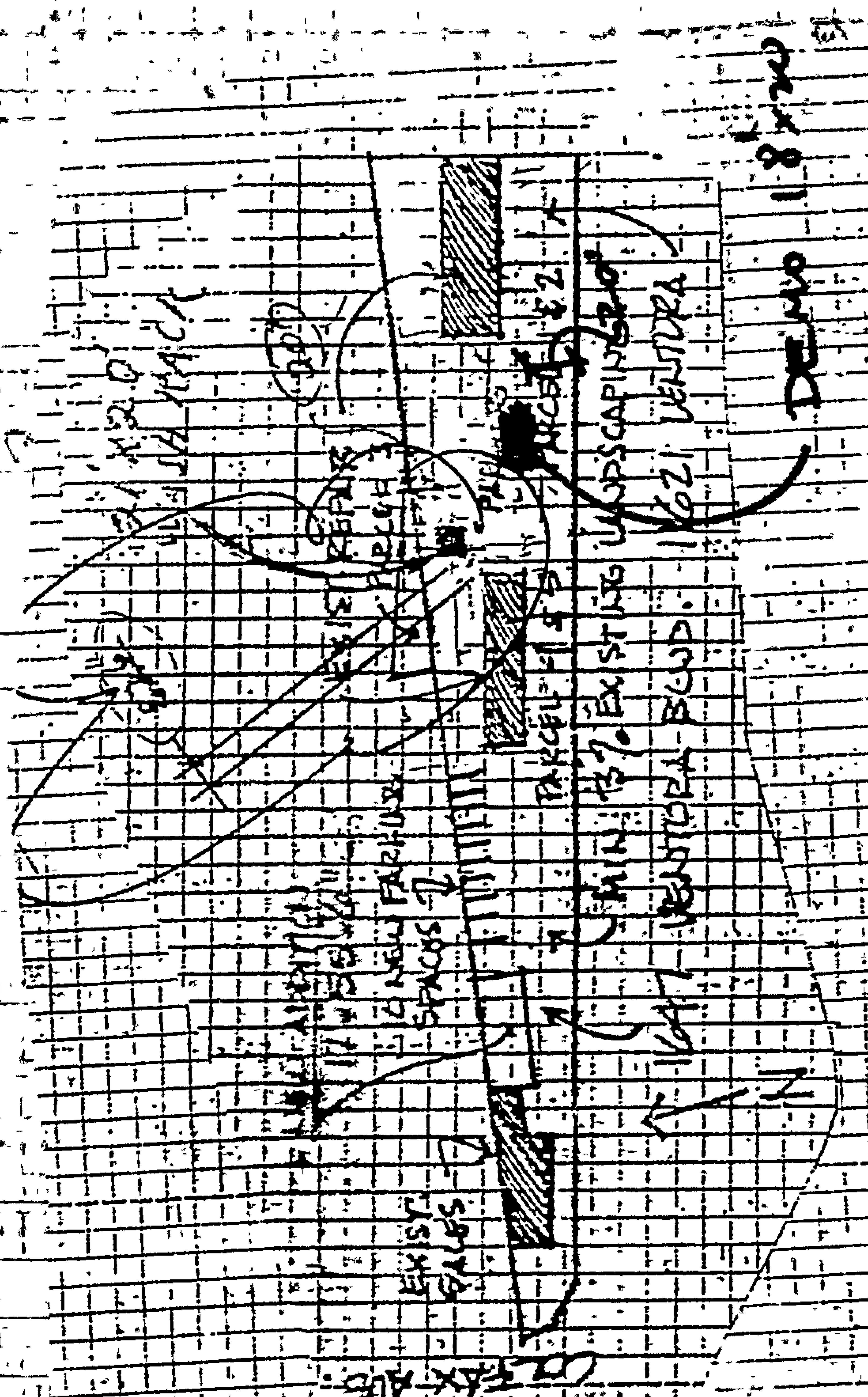
I realize that this permit is an application for inspection, that it does not approve or authorize the work specified herein, that it does not authorize or permit any violation or failure to comply with any applicable law, that neither the city of Los Angeles nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein or the condition of the property or soil upon which such work is performed. (See Sec. 91.0202 LAMC)

Signed _____ (Owner or agent having property owner's consent) Position owner Date 12/6/84

1 300 328

11547 VENTURA BLVD — NORTH HOL

LAND OF J B LANKERSHIM LOT EX OF ST COR AT INTERSECTION OF E LINE OF COLFAX AVE WITH NE LINE OF LOT 234 1/2 TH S 0°05' E ... FT TH S 67°33'20" E 545.39 FT TH N 22°25'20" E 27 FT TH N 57°33'30" W 7 FT TH N 22°25'20" E TO SD NE LINE OF LOT TH NW THEREON TO BEG PART OF LOT 233 1/2



DEMOLITION BY OWNER

I, William Hirsty

am the owner of the ... located at

11627 Ventura Blvd. Studio City

12-5-84

Date