CITY OF AUBURN
Community & Economic Development Department
Planning Division
1225 LINCOLN WAY • AUBURN, CA 95603 • PHONE (530) 823-4211

Notice Date: May 28, 2025

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Project Name: Auburn Industrial Park

In compliance with the California Environmental Quality Act (PRC § 21000 *et seq*), notification is hereby given to responsible and trustee agencies, interest groups and the general public that the City of Auburn proposes to adopt a Mitigated Negative Declaration for the project described below.

Project Location: The project site consists of a ± 315,893 portion (approximately 7.25 acres) of APN 001-051-049-0000 located on the north side of Merrow Street and south of Blocker Drive in the City of Auburn, California. The project site is currently undeveloped with no buildings or other on-site structures.

Project Description: The project proposes up to 100,633 square feet of flexible industrial and commercial space spread across two metal buildings. Building A is 60,633 square feet and Building B is 40,000 square feet. Both buildings are one-story and will be Type VB construction.

Buildings have been designed to be divisible into multiple tenant spaces and end uses would include office, research and development, warehousing, distribution, e-commerce fulfillment, flex spaces, light industrial, and manufacturing. Suites would range in size from 3,500 to 6,200 square feet in size and each would have a grade level sectional overhead door.

The Initial Study and draft Mitigated Negative Declaration are available for review at the following location:

City of Auburn, 1225 Lincoln Way Community Development Department, Auburn, CA or on the City of Auburn Website at www.auburn.ca.gov/421/Public-Notices

Comments: The draft Mitigated Negative Declaration will undergo a 30-day public review period during which comments may be submitted**. The review period begins on May 28, 2025 and ends on June 28, 2025.** Comments regarding the contents of the Mitigated Negative Declaration should be sent to: Tia Klumpp, 1225 Lincoln Way Community Development Department Auburn, CA 95603 or tklumpp@auburn.ca.gov.

A public hearing on the IS/MND and design review application will be noticed and heard at a regular hearing of the City of Auburn Planning Commission at a later date.

April 2025

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
Auburn Industrial Center

11500 Blocker Dr, Auburn, CA 95603 (APN: 001-051-049-000)

PREPARED BY:
THE INTERWEST GROUP
1613 Santa Clara Drive, Suite 100
Roseville, CA 95661
P (916) 781-6600

INTERWEST
A SAFEbuilt COMPANY

PREPARED FOR:
The City of Auburn Planning Department
1225 Lincoln Way
Auburn, CA 95603

AUBURN CA

1. **PROJECT TITLE:**

   Auburn Industrial Center (Case No. DRP 24-05)

2. **LEAD AGENCY NAME AND ADDRESS:**

   City of Auburn Planning Department

   1225 Lincoln Way

   Auburn, CA 95603

3. **CONTACT PERSONS:**

   Larch McNeill-Principal Planner, 916-539-0070, lmcneill@interwestgrp.com

4. **PROJECT LOCATION:**

   11500 Blocker Dr, Auburn, CA 95603 (APN: 001-051-049-000)

5. **PROPERTY OWNER NAME AND ADDRESS:**

   Blocker Drive Proper es LLC, c/o Steve Meade, P.O. Box 5053, Auburn, CA 95604.

6. **PROJECT DESCRIPTION:**

   Site: The project site is located on the west side of Merrow Street in the City of

   Auburn, California. The project scope includes two (2) new single story Metal Warehouse Buildings with associated site improvements. Building A is 60,633 square feet and Building B is 40,000 square feet. The project site (comprised of a portion of APN 001-051-049-000) has a gross square footage of approximately ± 315,893 S.F. = 7.25 AC. The site is currently undeveloped. Upon completion, it is estimated that between 100 to 150 will be employed on site depending on end users. The project would be developed in one or multiple phases.

   Buildings: The project plan proposes two metal warehouse buildings totaling 100,633 square feet. The metal buildings will be of Type VB construction. The areas around the main entries of the buildings are enhanced with tinted glazing in aluminum frames an overhead steel-framed painted canopy. The placement of these enhancements is focused at the locations most visible from the public roadways. The buildings have been designed to be divisible into multiple tenant spaces and end uses would include office, research and development, warehousing, distribution, e-commerce fulfillment, flex spaces, light industrial, and manufacturing. Suites would range in size from 3,500 to 6,200 square feet in size and each would have a grade level sectional overhead door. Suites could be combined based on tenant needs. It is estimated that approximately 30 percent of the building square footage would be office space and 70 percent would be warehousing and manufacturing use.

Site Access and Parking: There are two site entrance driveways along a proposed extension of Merrow Street. Truck access will be accommodated via the northern-most site access driveway, which will serve as a shared visitor, employee, and semi-truck access drive. The southern site entrance will be for vehicle access. The site plan proposes a total of 165 vehicle parking stalls for employees and or visitors. The northern portion of the site has been reconfigured with the adjacent lot (belonging to the City of Auburn) to provide shared access drives and more parking area for the City's light rail station.

Signage: The proposed signage in this environmental document is for reference only. Criteria for future tenant signage will be provided at a later and under a separate permit as required.

Landscaping: The project will be fully landscaped using plants appropriate for and indigenous to the City of Auburn. Low water use plants will be used extensively, while moderate water use plants will be concentrated at accent points, such as driveways and building entries.

Sustainable Materials & Construction Practices: The project will incorporate a variety of sustainable materials and construction practices to include the following: 1) A storm water pollution prevention plan to minimize contamination, erosion, and dust pollution during construction. 2) Storage and collection of recyclable materials. 3) Construction waste management. 4) Environmental tobacco smoke control. 5) Heat reflecting roof membranes. 6) Light pollution reduction. 7) Water efficient landscaping. 8) Water use reduction methods. 9) Low VOC emitting sealants, adhesives, coatings, floorings, and wood materials. 10) Roof structures designed to accommodate additional weight for roof-top photovoltaic electricity genera on panel arrays. 11) California Green Building Code compliant electric vehicle charging stations. 12) The project architect is a LEED accredited professional and will apply his knowledge of LEED techniques and practices to the project design and construction.

7. SURROUNDING LAND USES AND SETTING:

The project site is located on 11500 Blocker Drive in the City of Auburn, California. The property is bordered by suburban residential property to the west, south, and east, and by local businesses and a railway station with parking lots to the north.

The project site is undeveloped except for par al clearing, gravel, and dirt fire roads. Site topography varied from moderately sloping along the northern portion of the site, to steeply sloping in west and southwest portion of the site. The site is located on the western edge of Auburn, southwest of the Old Auburn Cemetery.

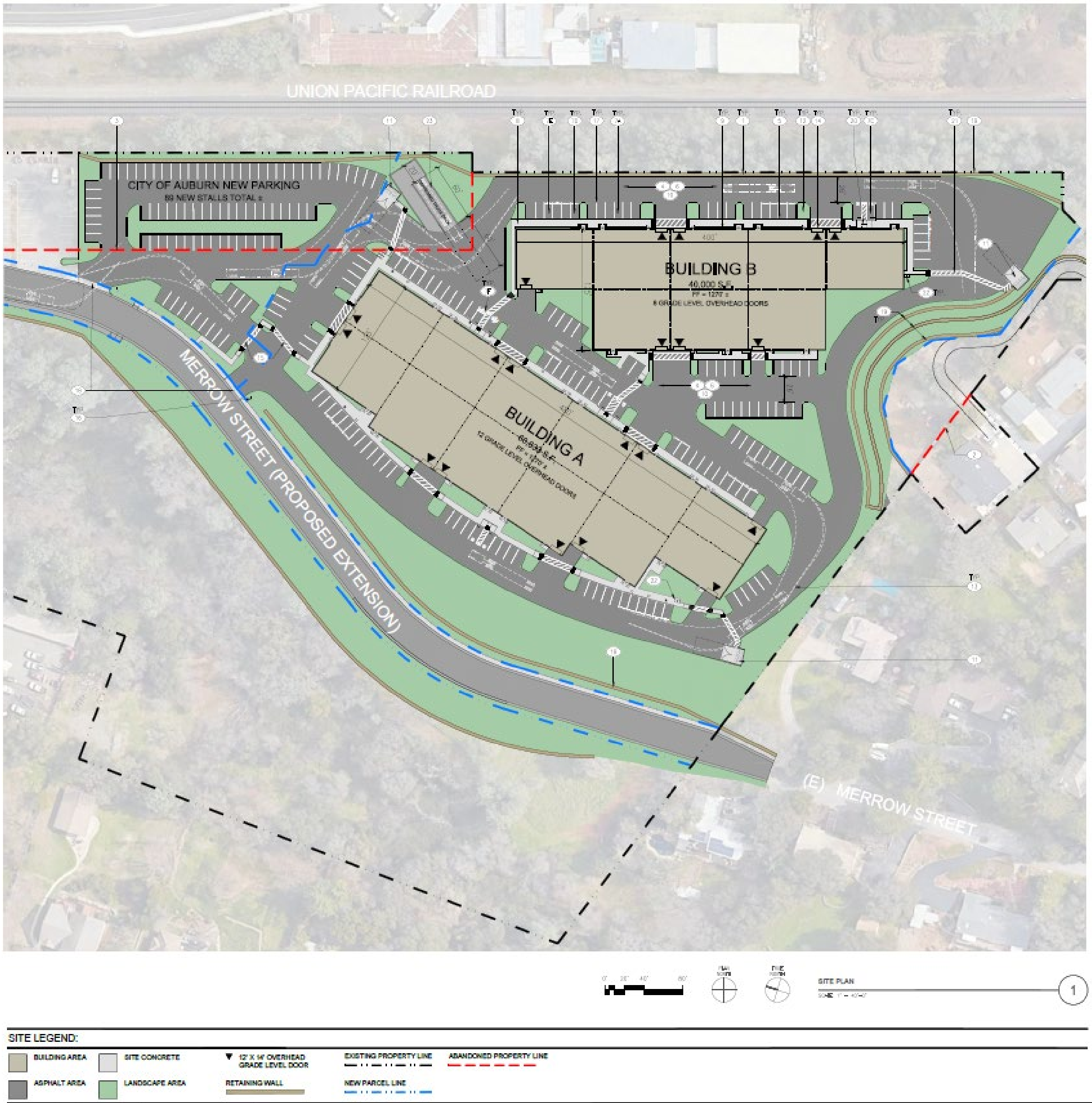
8. NECESSARY PUBLIC AGENCY APPROVALS:

The proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site that is zoned – Industrial Park

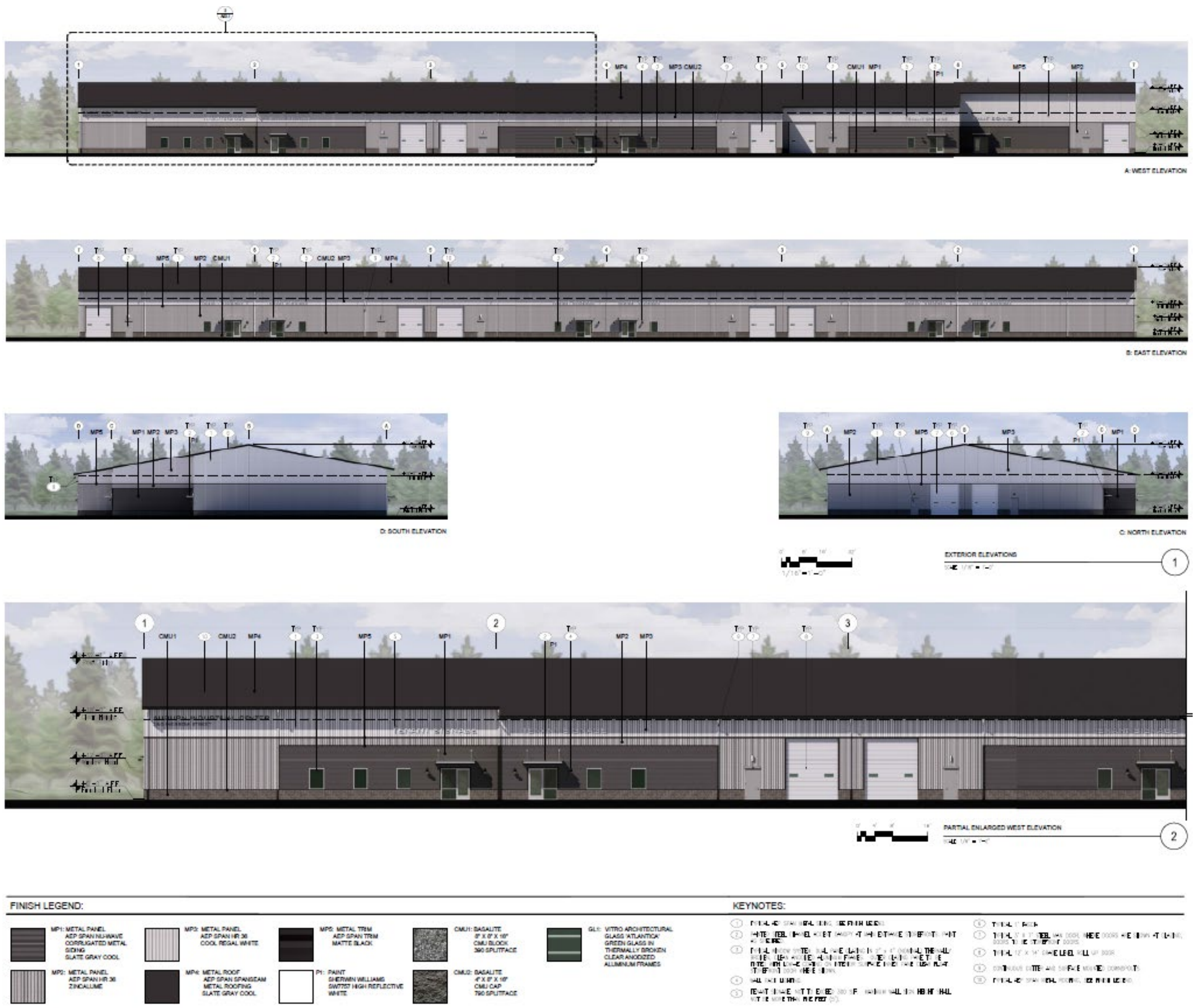
District/Single-Family Residential/Open Space & Conserva on (M-1/R1-10/OSC).

According to the City of Auburn Municipal Code sec on 159.036-Industrial Park District (M-1), warehouses are permitted in the M-1 zone, therefore the applicant is required to obtain a Design Review (Case No. DRP 24-05) approval for the proposed project.

Site and Vicinity Map


UNION PACIFIC RAILROAD
CITY OF AUBURN NEW PARKING
BUILDING B
40,000 S.F.
8 GRADE LEVEL OVERHEAD DOORS
BUILDING A
12 GRADE LEVEL OVERHEAD DOORS
MERROW STREET (PROPOSED EXTENSION)
(E) MERROW STREET
SITE PLAN
SITE LEGEND:
BUILDING AREA
SITE CONCRETE
12' X 14' OVERHEAD GRADE LEVEL DOOR
EXISTING PROPERTY LINE
ABANDONED PROPERTY LINE
ASPHALT AREA
LANDSCAPE AREA
RETAINING WALL
NEW PARCEL LINE

Site Plan



Building A – Elevations

FINISH LEGEND:

MP1:	METAL PANEL AEP SPAN NU-WAVE CORRUGATED METAL SIDING SLATE GRAY COOL
MP2:	METAL PANEL AEP SPAN HR 36 ZINCALUME
MP3:	METAL PANEL AEP SPAN HR 36 COOL REGAL WHITE
MP4:	METAL ROOF AEP SPAN SPANSEAM METAL ROOFING SLATE GRAY COOL
MP5:	METAL TRIM AEP SPAN TRIM MATTE BLACK
P1:	PAINT SHERWIN WILLIAMS SW7757 HIGH REFLECTIVE WHITE
CMU1:	BASALITE 8" X 8" X 16" CMU BLOCK 390 SPLITFACE
CMU2:	BASALITE 4" X 8" X 16" CMU CAP 790 SPLITFACE
GL1:	VITRO ARCHITECTURAL GLASS 'ATLANTICA' GREEN GLASS IN THERMALLY BROKEN CLEAR ANODIZED ALUMINUM FRAMES

KEYNOTES:

1. TYPICAL AEP SPAN METAL SIDING, SEE FINISH LEGEND.
2. PAINTED STEEL CHANNEL ACCENT CANOPY AT MAIN ENTRANCE STOREFRONTS. PAINT AS SPECIFIED.
3. TYPICAL WINDOW SYSTEM: DUAL PANE GLAZING IN 2" x 4" (NOMINAL) THERMALLY BROKEN, CLEAR ANODIZED ALUMINUM FRAMES. OUTER GLAZING PANE TO BE TINTED WITH LOW-E COATING ON INTERIOR SURFACE. INNER PANE CLEAR FLOAT. STOREFRONT DOOR WHERE SHOWN.
4. WALL PACK LIGHTING.
5. TENANT SIGNAGE: NOT TO EXCEED 300 S.F. MAXIMUM WALL SIGN HEIGHT SHALL NOT BE MORE THAN FIVE FEET (5').
6. TYPICAL 1" FASCIA
7. TYPICAL 3' X 7' STEEL MAN DOOR, WHERE DOORS ARE SHOWN AT GLAZING, DOORS TO BE STOREFRONT DOORS
8. TYPICAL 12' X 14' GRADE LEVEL ROLL UP DOOR
9. CONTINUOUS GUTTER AND SURFACE MOUNTED DOWNSPOUTS.
10. TYPICAL AEP SPAN METAL ROOFING, SEE FINISH LEGEND.

Building B - Elevations

ENVIRONMENTAL ANALYSIS

The sources relied upon to complete this CEQA Initial Study and Mitigated Negative Declaration (IS-MND) include the City of Auburn General Plan Final EIR as certified on November 29, 1993 (SCH No. 92042025), and the various site-specific technical studies that were completed for the project, that are cited in the applicable IS-MND sections below.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
I **AESTHETICS.** Would the Project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a)-c) The visual character of the City is currently defined by two linear, developed cores along Interstate 80 and Highway 49 with the City of Auburn as a focal point. It is surrounded by typical rural Sierra Nevada foothills landscape, which includes the American River canyon area to the east and rural residential lands to the north, south, and west. Approximately 39% of the properties within the City limits (Auburn General Plan, Table IV-2, p. IV-9) are developed with urban land uses, including commercial, office, industrial, and residential uses on properties that are less than two acres in size.

The General Plan EIR (GPEIR) does not include a list of scenic vistas within the city limits but does identify existing visual features and scenic corridors, as summarized below.

The City's unique high quality visual features are described as – "Certain visual features in the Plan area are unique or of particularly high visual quality, helping define the City's character." These features include:

- The American River canyon
- Rural open spaces
- Cultural and historic features

- Characteristic landforms, including rolling hills, steep slopes and backdrop ridgelines
- Woodlands
- Streams and riparian areas
- Scenic corridors and viewsheds of major roadways and others that are visually important to the character of the Auburn area including:
  - Interstate 80*
  - Highway 49 (south)*
  - Indian Hill Road*
  - Auburn Folsom Road*
  - Auburn Ravine Road
  - Marguerite Mine Road
  - Nevada Street*
  - Shirland Tract Road
  - Palm Avenue*

  * Indicates a heavily travelled road.

A search of the California State Scenic Highway System Map on 10/14/24 confirmed that there are no state scenic highways within Auburn City limits. There are two eligible state scenic highways within Auburn City limits which include a section of State Route 49 (SR 49) from Hwy 80 to SR 120 near Grass Valley, and a section of SR 49 from Elm Avenue to Jamestown, CA.

The proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site. The proposed project would not substantially degrade the visual character of public view of the site and the project is located in a mixed-use, urbanized area. Additionally, the proposed project will not impact scenic vistas, scenic resources, or visual character, therefore impacts will be **less than significant** and no mitigation measures are required.

d) The project site has a gross square footage of approximately 7.25-acres (315,893 SF). The site is currently undeveloped has the following General Plan land use designations – Industrial (IND) and Low-Medium Density Residential (LMDR), and the following zoning designations – Industrial Park District/Single-Family Residential/Open Space & Conservation (M-1/R1-10/OSC). The General Plan provides the following policy and implementation measure specific to lighting.

- Policy 6.4: Develop landscape maintenance and lighting districts in commercial zones.

- Policy 10.4, Implementation Measure D: The City shall adopt Landscape and Lighting Districts in residential and commercial areas.

The City of Auburn Municipal Code section 110.061 Installations Approval, and section 110.062 Installations Reports requires new developments to prove compliance with the code requirements to discourage excessive lighting of outdoor spaces, encourage energy conservation and promote exterior lighting that promotes safe vehicular and pedestrian access to and within a development while minimizing impacts on adjacent properties. The project will be required to prove compliance with all applicable codes prior to plans approval and therefore will have **no impact** specific to light and glare.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
II	**AGRICULTURE AND FORESTRY RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the Project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐
d)	Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☒	☐
e)	Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☒

a)-b) The County's Important Farmlands map for the Auburn/Bowman area (GPEIR, Figure 4-2) delineates one 40-acre area as Class I soils (Prime Agricultural lands), located north of Oak Road, which is designated for residential uses on the General Plan Land Use Map. Soils of statewide and local importance are located in the northern portion of the General Plan area, above Bell Road. Willamson Act lands are located in four areas within the General Plan area. The General Plan area does not include any mapped Important Grazing Lands.

A search at the California Department of Conservation (DOC) Important Farmland Finder confirmed that the project site and vicinity is designated as Urban and Built-Up Land, which is classified as "occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures (DOC, 11/1/24). Therefore, there will be **no impact** to important farmland or a Williamson Act contract.

c)-d) The GPEIR identifies areas of "limited timber production value located along the north wall of the American River canyon, which has stands of timber. However, this area is under the jurisdiction of the Bureau of Land Management and the Auburn Area Recreation District and is managed for recreation and scenic purposes; logging would not be allowed.

The site-specific Arborist Report & Tree Inventory (CalTLC, 2/2/22) (Attachment A) provides recommended mitigation measures for the protection and maintenance of the existing on-site trees. Furthermore, the applicant will be required to be in compliance with Municipal Code section 18.50.045-Preservation of significant trees as a project condition of approval. Therefore, compliance with applicable codes and recommended mitigation measures will result in a **less than significant impact**.

Recommended Mitigation Measures:

AGF-RMM-1: The Owner and/or Developer should ensure the project arborist's protection measures are incorporated into the site plans and followed.

- Identify the Root Protection Zones on the final construction drawings and show the placement of tree protection fencing pursuant to the City requirements and Exhibit C.
- The project arborist should inspect the fencing prior to grading and/or grubbing for compliance with the recommended protection zones.
- The project arborist should directly supervise the clearance pruning, irrigation, fertilization, placement of mulch and chemical treatments.
- All stumps within the root zone of trees to be preserved shall be ground out using a stump router or left in place. No trunk within the root zone of other trees shall be removed using a backhoe or other piece of grading equipment.
- Prior to any grading, or other work on the site that will come within 50' of any tree to be preserved, irrigation will be required from April through September and placement of a 4-6" layer of chip mulch over the protected root zone of all trees that will be impacted. Chips should be obtained from onsite materials and trees to be removed.
- Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site. The Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist.
- Clearly designate an area on the site outside the drip line of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the root zones of protected trees.
- Trenching inside the protected root zone shall be by a hydraulic or air spade, placing pipes underneath the roots, or boring deeper trenches underneath the roots.
- Include on the plans an Arborist inspection schedule to monitor the site during (and after) construction to ensure protection measures are followed and make recommendations for care of the trees on site, as needed.

- Follow all of the General Development Guidelines, Appendix 3, for all trees to remain.

e) The analyses completed in questions a) through d) above confirm that the proposed project will not result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use, and therefore will have **no impact**.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
III **AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in substantial emissions (such as odors or dust) adversely affecting a substantial number of people?	☐	☐	☒	☐

The analysis of Air Quality impacts and compliance requirements are provided by the site-specific Air Quality and Greenhouse Gas Impact Analysis prepared by Raney Planning & Management, (1/2025). (Attachment B)

a)-b) The project site is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter (PM2.5) and the State particulate matter 10 microns in diameter (PM10) standards, as well as for both the federal and State ozone standards. The federal Clean Air Act requires areas designated as federal nonattainment to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures for states to use to attain the federal ambient air quality standards (AAQS).

The current applicable air quality plan for the project area is the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan), updated October 17, 2023, and adopted by the California Air Resources Board (CARB) on October 26, 2023. The Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the Federal Clean Air Act requirements, including the federal AAQS.

The PCAPCD has adopted recommended thresholds of significance for emissions of PM10 and the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NOX). On October 13, 2016, the PCAPCD adopted updated significance thresholds for the aforementioned pollutants.

The significance thresholds, expressed in pounds per day (lbs/day), listed in Table 1 are the PCAPCD's current thresholds of significance for use in the evaluation of air quality impacts associated with proposed development projects. Thus, if the proposed project's emissions exceed the pollutant thresholds presented in Table 1, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Table 1
PCAPCD Thresholds of Significance (lbs/day)

Pollutant	Construction Threshold	Operational Threshold
ROG	82	55
NO_X	82	55
PM_{10}	82	82

Source: Placer County Air Pollution Control District. CEQA Handbook. 2017.

Construction Emissions

During construction of the proposed project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NOX, and PM10, intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

Table 2 presents the estimated unmitigated construction-related emissions for the proposed project.

Table 2
Maximum Unmitigated Construction Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	6.65	62.7	26.7
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, December 2024 (see Appendix A).

As shown in Table 2, the project's total construction-related emissions would be below the applicable PCAPCD thresholds of significance for ROG, NOX, and PM10. Additionally, the proposed project would be required to comply with all PCAPCD rules and regulations for construction, which would be noted on City-approved construction plans. The applicable rules and regulations would include, but not be limited to, the following:

- Rule 202 related to visible emissions;
- Rule 217 related to cutback and emulsified asphalt paving materials;
- Rule 218 related to architectural coatings;
- Rule 228 related to fugitive dust; and
- Rule 501 related to general permit requirements.

Because the proposed project's estimated unmitigated construction emissions would be below the applicable PCAPCD thresholds of significance, construction of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and a **less than significant impact** would occur associated with construction.

Operational Emissions

Operational emissions of ROG, NOX, and PM10 would be generated by the proposed project from both mobile and stationary sources. Day-to-day activities, such as the future vehicle trips to and from the project site, would make up the majority of the mobile emissions. Emissions would also occur from area sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). As stated above, the proposed project would be required to comply with all applicable PCAPCD rules and regulations, including the following related to operations:

- Rule 205 related to nuisances;
- Rule 231 or Rule 247 related to water heaters and boilers; and
- Rule 502 related to review of new sources of emissions.

Table 3 presents the estimated unmitigated operational emissions for the proposed project.

Table 3
Maximum Unmitigated Operational Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	7.40	4.52	5.76
PCAPCD Significance Threshold	**55.0**	**55.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, December 2024 (see Appendix A).

As shown in the table, the proposed project's operational emissions would be below the PCAPCD's thresholds of significance for ROG, NOX, and PM10. Accordingly, operations of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and a **less than significant impact** would occur associated with operations.

<u>Cumulative Emissions</u>

The PCAPCD recommends using the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS and thus result in a cumulative impact. As discussed above, the PCAPCD's recommended thresholds of significance for ozone precursors and PM10 are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM10 emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans and would not result in a cumulatively considerable contribution to a significant cumulative impact.

As shown in Table 3, operational emissions would be below the PCAPCD's project-level thresholds, and, thus, would be below the PCAPCD's cumulative-level thresholds as well. Accordingly, impacts related to the cumulative emissions of criteria pollutants for which PCAPCD is in non-attainment would be considered **less than significant**.

<u>Conclusion</u>

Because the proposed project would not result in construction-related or operational emissions of criteria air pollutants in excess of PCAPCD's thresholds of significance, the proposed project would not be considered to conflict with or obstruct the implementation of any applicable air quality plans. In addition, the proposed project would not result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is non-attainment under an applicable ambient air quality standard. Therefore, a **less than significant impact** would result.

c) Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors are single-family residences to the west and south, located approximately 278 and 64 feet from the project site boundaries, respectively.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and toxic air contaminant (TAC) emissions, as well as regional effects of emissions of criteria pollutants.

Conclusion

Based on the technical analysis, the operations of the proposed project would not be anticipated to result in the production of substantial concentrations of localized CO or criteria pollutants. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, and a **less than significant impact** would result.

d) Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emissions of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in questions 'a' through 'c' above. Therefore, the following discussion focuses on emissions of odors and dust during construction and operation of the project.

Odors

Certain land uses such as wastewater treatment facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. The proposed project would not allow any such uses.

Diesel fumes from construction equipment and heavy-duty trucks could be found to be objectionable; however, operation of construction equipment would be regulated by PCAPCD rules and regulations, restricted to certain hours pursuant to the City of Auburn Construction Noise Guidelines, and would occur intermittently throughout the course of a day. All construction equipment and operation thereof would be regulated per the statewide In-Use Off-Road Diesel Vehicle Regulation. In addition, construction is temporary, and construction equipment would operate intermittently throughout the course of a day and would likely only occur over portions of the improvement area at a time. For the aforementioned reasons and due to the distance between the project site and the nearest sensitive receptors, the project would not result in any noticeable objectionable odors associated with construction.

Dust

As noted previously, construction of projects within the City of Auburn are required to comply with all applicable PCAPCD rules and regulations. The aforementioned rules would act to reduce construction-related dust by implementing dust control measures.

Recommended Mitigation:

- **AQ-RMM-1:** Implement PCAPCD Rule 205 requires all odor or air quality complaints to be addressed and mitigated, as necessary.

- **AQ-RMM-2:** Implement PCAPCD Rule 228 requires implementation of dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas.

Conclusion

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors affecting a substantial number of people, and impacts would be **less than significant**.

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

The analyses of Biological Resources and recommended mitigation measures are provided by the site-specific Biological Resources Assessment and Aquatic Resources Delineation reports. (Salix Consulting Inc, 7/25/24) (Appendix E)

Methods

New queries were conducted of the California Department of Fish and Wildlife's Natural Diversity Data Base (2024) and occurrence data were plotted on a five-mile radius map to show the special status species locations in proximity to the study area.

A field assessment was conducted on July 9, 2024 to determine if the property has been altered or is different in any way that would adjust the determinations made in the previous analysis. Vegetation units and aquatic resources were observed for any changes that may have occurred. Surveys to determine the actual presence or absence of potentially occurring special-status species were not conducted during this evaluation.

a)-b) Habitat and Vegetation: The site has remained unaltered since 2017. The upper area near the railroad has roadcuts throughout the area and they are regraded each year. A review of historic photos shows these roadcuts dating back to at least 2009. The habitat configuration remains unchanged. The lower western area of the property is a broad drainage swale that supports expansive Himalayan blackberry cover under a canopy of primarily valley oak.

Wildlife Occurrence and Usage: The project site remains an important refugia for local wildlife species and some migratory birds due to the dense vegetative cover and availability of water in the lower western area. No notable changes have occurred to alter this setting or species composition.

Animals: The five-mile radius map showing special status animal species has occurrences of 12 different species. Five of these species are bees, snails and an aquatic insect. There is one bird, two are mammals, two are fish, one is an amphibian, and one is a reptile.

CNDDB Special-Status Wildlife Species

American peregrine falcon	Morrison bumble bee	northwestern pond turtle
An andrenid bee	North American porcupine	steelhead - Central Valley DPS
Cosumnes stripetail	Townsend's big-eared bat	tight coin (=Yates' snail)
Galile's cave harvestman	foothill yellow-legged frog - north Sierra DPS	western bumble bee

The two species that may occupy the site are western pond turtle and foothill yellow-legged frog. The western pond turtle occupies ponds but uses connecting waterways as movement corridors. This particular waterway is mostly under Himalayan blackberry so travel would be limited, but still possible. The foothill yellow-legged frog may occupy the stream. Foothill yellow-legged frog, north Sierra DPS, has no federal status but is listed at Threatened under the California Endangered Species Act and efforts to avoid any impacts to the stream should be exercised to prevent any negative effects on this species.

Recommended Mitigation Measures:

BIO-RMM-1: Special-Status Animals: Potentially occurring special status animals are limited to the stream, and larger trees. The stream may support western pond turtle and foothill yellow-legged frog. These species are limited to aquatic areas and would not venture too far from water. Best management practices should be installed before any ground disturbance due to the steep adjacent landscape and potential for soil to move down in the stream zone. Every effort should be made to prevent soil from moving into the stream zone.

c) Aquatic Resources: A perennial or near perennial urban creek flows through the swale bottom. The stream is not visible from the surrounding area because most of it flows under the blackberry. During the 2017 Aquatic Resources Delineation, swaths were cut through the blackberry to reach the stream in several transects up and down the stream. The flowline was surveyed, and the aquatic resources mapping was generated from this survey. There appears to be no changes to any of these habitats since the 2017 analysis. This is the only aquatic resource in the study area.

Recommended Mitigation Measures:

BIO-RMM-2: Aquatic Resources: The property has one aquatic resource, a perennial (or near perennial) stream that flows through the large swale/ravine in the western area of the property. This stream carries local runoff for all or most of the year and is "buried" under an expansive area of Himalayan blackberry. Avoidance of this stream is recommended to eliminate the need for wetland permits and potential impacts to aquatic species, including the foothill yellow-legged frog.

d) Wildlife Occurrence and Usage: The project site remains an important refugia for local wildlife species and some migratory birds due to the dense vegetative cover and availability of water in the lower western area. No notable changes have occurred to alter this setting or species composition.

Aquatic Resources: A perennial or near perennial urban creek flows through the swale bottom. The stream is not visible from the surrounding area because most of it flows under the blackberry. During the 2017 Aquatic Resources Delineation, swaths were cut through the blackberry to reach the stream in several transects up and down the stream. The flowline was surveyed, and the aquatic resources mapping was generated from this survey. There appears to be no changes to any of these habitats since the 2017 analysis. This is the only aquatic resource in the study area.

Recommended Mitigation Measures:

BIO-RMM-3: Nesting Raptors and Migratory birds: The property likely supports nesting birds and potentially nesting raptors. If site disturbance occurs during the nesting season (Feb. 15-Aug. 31), a pre-construction survey should be conducted by a qualified biologist no more than 15 days prior to initiation of development activities. If active nests are found on or immediately adjacent to the site, a no-work-zone buffer should be established by the biologist and confirmed by the City of Auburn and if necessary, CDFW. If no nesting is found to occur, necessary tree removal could then proceed. It is recommended that any tree and shrub removal be conducted in the non-nesting season.

e)-f) The City of Auburn General Plan EIR includes the following Goal and Policies specific to the protection of biological resources.

- Goal 3: Preserve all outstanding areas of natural vegetation or fish and wildlife habitat.

- Policies:
  - Identify all Important fish and wildlife areas within the plan area.
  - Retain all stream influence areas in their natural condition, Including flood plains and riparian vegetation.
  - Provide for the protection of all rare and endangered species.

The City also has a Heritage Tree Ordinance (Ordinance No. 583) which applies to trees which are 24-inches in diameter or greater. Approval of permits to remove trees is by the Director of Public Works.

Recommended Mitigation Measures:

BIO-RMM-4: Oak Resources Conservation Ordinance: Impacts to oak trees should be coordinated with the Auburn Planning Department.

Therefore, implementation of the recommended mitigation measures summarized in the Biological Resources Assessment and Aquatic Resources Delineation reports. (Salix Consulting Inc, 7/25/24) (Appendix E), impacts to Biological Resources will be **less than significant.**

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
V	**CULTURAL RESOURCES.** Would the Project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5, respectively?	☐	☐	☒	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource as defined in Public Resources Code Section 21083.2 and 21084.1, and CEQA Guidelines Section 15064.5, respectively?	☐	☐	☒	☐
c)	Disturb any Native American tribal cultural resources or human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

This IS-MND section relied on the findings provided by site-specific Cultural Resources Assessment prepared by Peak & Associates, 4/22/24. (Attachment C)

a)-c) The GPEIR identifies the historic sites which have been recorded by archaeologists. In addition to the historic sites which have been recorded by archaeologists, there are also features which have been recognized as State Landmarks, National Register properties or other points of special interest. GPEIR Table 9-2 identifies the Cultural Resources of particular concern within existing city limits.

Table 9-2 Auburn General Plan Cultural Resources of Concern	
Existing City Limits	**Land Use Designation**
Pioneer Trail Alignment	Varies
First Continental Railroad Alignment Canals and ditches	Varies, most OS but some in urban uses
Ravines (small ravines as well as major ravines such as Baltimore & Auburn)	Varies
Various sites within City Core identified in the two City Inventories.	Varies, but protected by specific policies in Plan.
Non-structural and other Historic Features, etc: stone walls, signs, flumes. fences orchard remnants, visible foundations and mining/agricultural operation re-mains. Outbuildings and barns.	Land use designations vary as these features are scattered through-out the Plan area.

The project site does not contain any of the Cultural Resources of particular concern within existing city limits, as listed in GPEIR Table 9-2 above.

<u>Research</u>

A review of the files maintained at the North Central Information Center of the California Historical Resources Information System was conducted on August 5, 2013 (PLA-13-78). The Southern Pacific Railroad line to the east of the project area has been recorded as P-31-001240 (CAPLA-982H). The remainder of the project area has never been systematically surveyed and there are no recorded sites in the project area.

<u>Field Inspection</u>

A complete, intensive pedestrian inspection of the project area was completed on April 17, 2015. Transect spacing averaged ten to fifteen meters in width and were systematic across the entire project area. One area was excluded from systematic coverage due to the presence of a dense thicket of blackberries paralleling an unnamed drainage located in the western portion of the property.

Scattered modern refuse, some metal poles from the adjacent Placer County yarding facility, and several homeless camps were discovered but otherwise historic and prehistoric period artifacts were absent as was evidence of prehistoric period or historic period use or habitation.

One of the buildings recorded in 1997, P-31-001804, is longer present near the project area, and a parking lot covers the former site of the building.

Recommended Mitigation Measures:

CULT-RMM-1: If, during construction activities, unusual amounts of non-native stone (obsidian, fine-grained silicates, basalt), bone, shell, or prehistoric or historic period artifacts (purple glass, etc.) are observed, or if areas that contain dark-colored sediment that do not appear to have been created through natural processes are discovered, then work should cease in the immediate area of discovery and a professionally qualified archeologist should be contacted immediately for an on-site inspection of the discovery.

CULT-RMM-2: If any bone is uncovered that appears to be human, then the Placer County Coroner must be contacted, according to state law. If the coroner determines that the bone most likely represents a Native American interment, then he must contact the Native American Heritage Commission in Sacramento so that they can identify the most likely descendants.

Mitigation Measures:

CULT-MM-1: Pursuant to the California Health and Safety Code Section 7050.5, and the CEQA Guidelines Section 15064.5, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. If the coroner determines the remains to be Native American or has reason to believe that they are Native American, the coroner shall contact by telephone within 24-hours of the Native American Heritage Commission to determine the Most Likely Descendent (MLD).

CULT-MM-2: If tribal cultural resources are discovered, Kara Perry-Director of Site Protection for the Shingle Springs Band of Miwok Indians must be notified by phone: 530-488-4049, and email: kperry@ssband.org.

Therefore, implementation of CULT-RMM-1, CULT-RMM-2, CULT-MM-1, and CULT-MM-2 will reduce impacts to Cultural Resources to **less than significant with mitigation.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
VI **ENERGY.** Would the Project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

a)-b) Energy use associated with operation of the proposed project would be typical of office, warehouse and light industrial uses, requiring electricity and natural gas for interior and exterior building lighting, HVAC, electronic equipment, machinery, appliances, and security systems. In addition, maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. While the proposed project would introduce new operational energy demands to the proposed project area, this demand does not necessarily mean that the proposed project would have an impact related to energy sources. The proposed project would result in an impact if a project would result in the inefficient use or waste of energy. The proposed project is required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable.

The proposed project will be reviewed by city departments for compliance with all applicable codes, including these City of Auburn Municipal Code Sections: 151.04 Solar Energy System Requirements; and 158 Solar Energy (Sections 158.320-158.322); and the 2022 California Green Building Standard Code. The proposed project will also require a Design Review Permit approval to ensure compliance with all required energy efficiency standards, including Low Impact Development (LID), solar, and electric vehicle charging, and other green/sustainable features that will be defined during the design review processes. Therefore, impacts to energy resources are expected to be **less than significant**.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
VII **GEOLOGY AND SOILS.** Would the Project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of injury, damage or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-	☐	☐	☒	☐

Priolo Earthquake Fault Map issued by the State Geologist for the area or based upon on other substantial evidence of a known fault?				
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

The analyses of Geology and Soils and recommended mitigation measures are provided by the site-specific Geotechnical Engineering Reports. (Holdredge & Kull, 6/15/17 and 3/5/24) (Appendix D)

Site Geology

The Geologic Map of California (California Division of Mines and Geology, 1977) determined that the area containing the project site is generally underlain by Jurassic age Mesozoic volcanic rocks.

ai)-aiv), c) The California Geological Survey Open File Report 96-08, Probabilistic Seismic Hazard Assessment for the State of California, and the 2002 update entitled California Fault Parameters indicate the property is located within the Foothills Fault System. The Foothills Fault System is designated as a Type C fault zone, with low seismicity and a low rate of recurrence. According to the Caltrans ARS online tool on the California Department of Transportation website, the site is located approximately 1/2 mile east of the Deadman Fault, and approximately one mile south of the DeWitt Fault.

The 6/15/17 Geotechnical Engineering Report, conclusion No. 3 states – “Based on our site observations, the geology of the region, and our experience in the area, our opinion is that the risk of seismically induced hazards such as slope instability, liquefaction, and surface rupture are remote at the project site.”

Recommended Mitigation Measures:

GEO-RMM1: Comply with report recommendations: 5.2-Structural Improvement Design Criteria; 5.2.1-Seismic Design Criteria; 5.2.2-Foundations; and 5.2.5-Retaining Wall Design Criteria.

Impacts are expected to be **less-than-significant** with recommended mitigation incorporated.

b) The online soil survey presented by the U.C. Davis Soil Resource Laboratory and the Soil Survey of Placer County, California, Western Part by the United States Department of Agriculture Soil Conservation Service (1980) indicates that the site is located in an area containing two distinct soil types. The property contains soils of the Auburn-Sobrante Silt Loams Complex, which is approximately 50% Auburn soil and 40% Sobrante soil. The Auburn-Sobrante Silt Loams (15 to 30 percent slopes) is described as having moderate permeability and a moderate to high erosion hazard.

Recommended Mitigation Measures:

GEO-RMM2: Comply with report recommendations: 5.1.2-Cut Slope Grading.

Impacts are expected to be **less-than-significant** with recommended mitigation incorporated.

d) The following recommended mitigation measures have been provided to limit the risks associated with expansive soil, as defined in Table 18-1-B of the Uniform Building Code.

Recommended Mitigation Measures:

GEO-RMM3: Comply with report recommendations: 5.1.1-Clearing and Grubbing; 5.1.4-Fill Placement; 5.1.8-Underground Utility Trenches; and 5.2.4-Slab-on-Grade Floor Systems.

Impacts are expected to be **less-than-significant** with recommended mitigation incorporated.

e) The proposed project includes two new single story Metal Warehouse Buildings with associated site improvements. Building A is 60,633 square feet and Building B is 40,000 square feet. The project site has a gross area of 7.25-acres (315,893 SF) and is currently undeveloped.

The project will connect to the existing City sewer services and will not include the use of septic tanks or alternative wastewater disposal systems. The applicant provided a sewer capacity determination dated 2/8/24 which determined that the City standard is 02. EDU/1,000 SF, therefore the 100,000 SF buildings would result in 20 EDUs and a net peak flow of 17,000 GPD. The sewer capacity determination concluded that there will be no sewer capacity issues. Furthermore, the applicant will be required to complete all required on-site improvements and pay the applicable City sewer connection fees. Therefore, there will be **no impact**.

f) The site-specific Geotechnical Engineering Reports (Holdredge & Kull, 6/15/17 and 3/5/24), relied on the findings of a field investigation completed on 5/2017 which determined that the site did not include a unique paleontological resource or site or unique geologic feature.

Furthermore, the Cultural Resources Assessment (Peak & Associates, 4/22/24) included a field investigation on 4/17/15 which concluded – "…historic and prehistoric period artifacts were absent as was evidence of prehistoric period or historic period use or habitation." Therefore, there will be **no impact**.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
VIII **GREENHOUSE GAS EMISSIONS.** Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The analysis of greenhouse gas emissions impacts and compliance requirements are provided by the site-specific Air Quality and Greenhouse Gas Impact Analysis prepared by Raney Planning & Management, (1/2025). (Attachment B)

a)-b) Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO2 equivalents (MTCO2*e*/yr).

Construction GHG Emissions

On October 13, 2016, the PCAPCD adopted GHG emissions thresholds for construction and operations in concert with the criteria pollutant threshold update. For project construction, the PCAPCD established a threshold of 10,000 MTCO2*e*/yr. Should construction of a proposed project emit GHG emissions in excess of 10,000 MTCO2*e*/yr, the project would be considered to have a cumulatively considerable contribution to global climate change.

The estimated unmitigated maximum construction-related emissions from the proposed project are presented in Table 5.

Table 5 Unmitigated Annual Construction GHG Emissions	
	Maximum GHG Emissions ($MTCO_2e$/yr)
Project Emissions	587
PCAPCD Significance Threshold	10,000.00
Exceeds Threshold?	**NO**
Source: CalEEMod, December 2024 (see Appendix A).	

As shown in the table above, the maximum annual emissions related to implementation would be well below the PCAPCD's construction threshold of 10,000 MTCO2*e*/yr, and project construction would not be considered to result in a cumulatively considerable contribution to global climate change.

Operational GHG Emissions

The PCAPCD's operational thresholds begin with a screening emission level of 1,100 MTCO2*e*/yr. Any project below the 1,100 MT CO2*e*/yr threshold is judged by the PCAPCD as having a less-than-significant impact on GHG emissions within the PCAPCD and, thus, would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in emissions above the 1,100 MT CO2*e*/yr threshold would not necessarily result in substantial impacts, if certain efficiency thresholds are met. The efficiency thresholds, which are based on service populations and square footage, are presented in Table 4.

Table 4 PCAPCD Operational GHG Efficiency Thresholds of Significance			
Residential ($MTCO_2e$/capita)		**Non-Residential ($MTCO_2e$/1,000 sf)**	
Urban	**Rural**	**Urban**	**Rural**
4.5	5.5	26.5	27.3
Source: Placer County Air Pollution Control District. CEQA Handbook. 2017.			

The GHG thresholds include a bright-line threshold for the construction and operational phases of land use projects and stationary source projects, a screening level threshold for the operational phase of land use projects, and efficiency thresholds for the operational phase of land use projects that result in GHG emissions that fall between the bright-line threshold and the screening level threshold.

The estimated operational GHG emissions at full buildout, in the year 2026, are presented Table 6. As shown in the table, the proposed project would result in operational GHG emissions above the PCAPCD's 1,100 MTCO2*e*/yr operational threshold of significance. Therefore, the resulting GHG emissions must remain below the efficiency thresholds for Urban Non-Residential Projects as listed in Table 7. The proposed project emissions would be 12.54 MTCO2e/yr/1,000 sf which remains below the efficiency threshold of 26.50 MTCO2e/yr/1,000 sf. Thus, operations of the proposed project would not be considered to result in a cumulatively considerable contribution to global climate change.

Table 6 Unmitigated Operational GHG Emissions	
Emission Source	**Maximum GHG Emissions ($MTCO_2e/yr$)**
Mobile	834
Area	1.48
Energy	368
Water	29.6
Waste	29.2
Refrigerants	0.04
TOTAL ANNUAL GHG EMISSIONS	**1,262.00**
PCAPCD Screening Level Threshold	**1,100.00**
Exceeds Screening Level Threshold?	**YES**
Note: Rounding may result in small differences in summation. ***Source: CalEEMod, December 2024 (see Appendix A).***	

Table 7 Unmitigated Maximum Annual Project Operational GHG Emissions Per Capita		
Project Emissions ($MTCO_2e/yr/1,000$ sf)	**PCAPCD Efficiency Threshold for Urban Non-Residential Projects ($MTCO_2e/yr/1,000$ sf)**	**Exceeds Threshold?**
12.54	26.5	**NO**
Notes: 1,262 $MTCO_2e/yr$ / 100.663 = 12.54		

Conclusion

Based on the information presented above, construction and operation of the proposed project would not be considered to generate GHG emissions that would have a significant impact on the environment and, thus, would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the project's impact would be **less than significant**.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
IX **HAZARDS AND HAZARDOUS MATERIALS.** Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, emission or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable	☐	☒	☐	☐

	upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

a) The proposed project includes two new single story metal warehouse buildings with associated site improvements. Building A is 60,633 square feet and Building B is 40,000 square feet. The two metal warehouse buildings totaling 100,633 square feet will be constructed on an undeveloped site that is 7.25-acres (315,893 SF) in area. The following uses, which are allowed within the Industrial District (M2), are proposed:

1. Animal hospitals and kennels
2. Bottling works
3. Building materials yards
4. Cabinet shops
5. Clothing manufacturing
6. Contractors yards and storage
7. Corporation yards
8. Design shops
9. Electrical distribution substations
10. Electronic assembly stores
11. Finished paper products
12. Furniture manufacturing
13. Greenhouses

14. Instrument manufacturing
15. Novelty manufacturing
16. Nurseries
17. Photographic processing shops
18. Precision machine shops
19. Printing and bookbinding shops
20. Professional offices
21. Research laboratories
22. Rugs, draperies, and other woven fabrics manufacturing
23. Sheet metal shops
24. Toy manufacturing
25. Warehouses

The proposed project uses are speculative in nature without known tenants and the nature of their operations. During project operation, allowed land uses could include the transport, use, and disposal of hazardous or potentially hazardous materials. General commercial and household hazardous materials are generally handled and transported in small quantities and would be required to comply with regulations covering the use, storage, and disposal of hazardous materials and wastes. The project applicant, builders, contractors, business owners, tenants, and others that would store hazardous materials and/or waste in regulated quantities would be required to submit business information and hazardous materials inventory forms contained in a Hazardous Materials Management Plan and Hazardous Materials Business Plan by the State of California Office of Emergency Services. The tenant would be required to notify the Placer County Department of Environmental Health Services, complete an electronic submittal to the California Environmental Reporting System (CERS) and pay required fees, and obtain an EPA ID number from the Department of Toxic Substances Control.

The project applicant, builders, contractors, business owners, tenants, and others would also be required to use, store, and transport any hazardous materials in accordance with regulations including Cal/OSHA standards in Title 8 of the CCR to conduct on-site evaluations and issue notices of violations to enforce necessary improvements to health and safety practices and Department of Toxic Substances Control requirements under the Resource Conservation and Recovery Act of 1976, to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow state and federal requirements. With adherence to existing regulatory requirements, impacts related to routine use or disposal of hazardous materials would be minimized; however, with implementation of the following Mitigation Measure, impacts to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant. (Chris Schmidt Senior Planner, King Engineering, 2/24/25)

Mitigation Measure:

MM-HAZ-1: "Hazardous materials" as defined in Health and Safety Code Division 20, Chapter 6.95 shall not be allowed on the premises in regulated quantities (55 gallons, 200 cubic feet, 500 pounds) without notification to Placer County Department of Environmental Health Services. A property owner/occupant who handles or stores regulated quantities of hazardous materials shall comply with the following within 30 days of commencing operations:

- Operator must complete an electronic submittal to California Environmental Reporting System (CERS) and pay required permit fees.

- If the business will generate hazardous waste from routine operations, obtain an EPA ID number from the Department of Toxic Substances Control (DTSC).

Therefore, compliance with MM-HAZ-1 will result in a **less than significant impact with mitigation.**

b) An EnviroStor search at the California Department of Toxic Substances Control (DTSC) confirmed that the there are no active clean-up sites within a 4,000-foot radius of the project site. The closest active DTSC clean-up site is the Black Forest Garage located at 140 Elm Avenue, Auburn, CA 95603 (Case No. 31750001), which is located approximately 5,000-feet from the project site. However, as stated in question a) above, the proposed project uses are speculative in nature without known tenants and the nature of their operations. During project operation, allowed land uses could include the transport, use, and disposal of hazardous or potentially hazardous materials which could result in the accidental release of hazardous materials into the environment.

The City of Auburn General Plan EIR (GPEIR) includes the following Goal and Policy specific to hazardous materials:

- Goal 3: Minimize hazards to public health, safety, and welfare resulting from natural and man-made hazards.

- Policy 3.2.E: The City shall review all new development proposals for conformance to standards for environmental protection, air pollution control, water quality, and hazardous waste disposal.

The City of Auburn Municipal Code Chapter 96-Hazardous Materials requires the filing of Hazardous Materials Disclosure Forms and other compliance requirements to prevent the upset and accident conditions involving the release of hazardous materials into the environment

Therefore, compliance with the City GPEIR, Municipal Code, and MM-HAZ-1 will result in a **less than significant impact with mitigation.**

c) There are no schools located within 0.25-miles (1,320-ft) from the project site. The closest school, Pathways Charter iLearn Academy is located 0.4-mile from the project site. As stated above, the project involves the construction of two metal warehouse buildings totaling 100,633 square feet on an undeveloped site that is 7.25-acres (315,893 SF) in area. The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, there will be **no impact**.

d) As stated in question b) above, an EnviroStor search at the California Department of Toxic Substances Control (DTSC) confirmed that the there are no active clean-up sites within a 4,000-foot radius of the project site. Therefore, the project site will not create a significant hazard to the public or the environment and there will be **no impact**.

e) The project site is not located within an airport land use plan. The airport closest to the project site is the Auburn Municipal Airport, approximately 4.4-miles north of the project site. Therefore, there will be **no impact**.

f) The project site is located on the west side of Merrow Street in the City of Auburn, California. There are two site entrance driveways along a proposed extension of Merrow Street. Truck access will be accommodated via the northern-most site access driveway, which will serve as a shared visitor, employee, and semi-truck access drive. The southern site entrance will be for vehicle access. The site plan proposes a total of 165 vehicle parking spaces for employees and or visitors. The northern portion of the site has been reconfigured with the adjacent lot (belonging to the City of Auburn) to provide shared access drives and more parking area for the Auburn Train Station. The proposed project will require a Design Review Permit approval to ensure compliance with all applicable design guidelines and development standards. Therefore, the project will not impair or interfere with an emergency response plan and will have **no impact**.

g) A search of the fire hazard severity zones viewer at CalFire confirmed that the project site located outside of the State Responsibility Area (SRA) and is not located within, or within proximity to a Very High Fire Hazard Severity Zone (VHFHSZ). The closest VHFHSZ is located on the southern edge of the Auburn Ravine area, approximately 1.75-miles southwest of the project site. The project site is in a Local Responsibility Area (LRA), and the site and structures will be constructed in compliance with applicable fire codes and standards. Therefore, there will be **no impact**.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
X **HYDROLOGY AND WATER QUALITY.** Would the Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise	☐	☐	☒	☐

	substantially degrade surface or ground water quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course or a stream or river or through the addition of impervious surfaces, in a manner that would:				
	i) result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
	iv) impeded or redirect flood flows?	☐	☐	☒	☐
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) The following City of Auburn General Plan goal and policies apply to hydrology and water quality.

- Goal 2: Protect the high quality of air and water resources consistent with adopted federal, state and local standards.

- Policy 1: Continue to monitor and control existing land uses that could deteriorate air and water quality.

- Policy 2: Review proposed developments for their potential adverse effect on air and water quality.

Grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, sedimentation, and soil compaction. The proposed project will be reviewed by city departments for compliance with all applicable codes, including the City of Auburn Municipal Code Title 53.001-Stormwater Management and Control Ordinance which provides for the regulation and reduction of pollutants discharged into the waters of the United States by extending National Pollutant Discharge Elimination System (NPDES) requirements to stormwater and urban runoff discharge into the city's municipal separate storm sewer system (MS4). The city's Stormwater

Management Program, as approved by the California Regional Water Quality Control Board for the Central Valley, requires the city to effectively prohibit non-stormwater discharges from the incorporated area of the city into the city's MS4 except as otherwise permitted by law.

Furthermore, the project site is greater than 1-acre in area and is required to prepare a detailed project specific drainage plan, Water Quality Management Plan, and a Storm Water Pollution Prevention Plan (SWPPP) that will control storm water runoff and erosion, both during and after construction. The SWPPP will include project specific best management measures that are designed to control drainage and erosion. Therefore, compliance with all applicable policies and codes will result in a **less than significant** impact.

b) The GPEIR states that groundwater is in sufficient quantities to supply domestic requirements which occurs along open fractures within metamorphic and granitic rock units. Terrace deposits are of insufficient occurrence to provide a significant groundwater supply, although there may be a few water wells producing from these surficial deposits along Dry Creek. The predominant rock type in the planning areas is metamorphic. The depth at which groundwater flows occur in metamorphic rock varies significantly. About 25% of domestic wells are completed at less than 90 feet and 75% at less than 160 feet. There is also a significant amount of granitic rock in·the plan area. The most common depth intervals at which ground water is encountered in the granitic rocks are 60- to 70-feet. The average production for granitic rock well within the planning area is 9- to 10-gpm.

The proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site that is zoned – Industrial Park District/Single-Family Residential/Open Space & Conservation (M-1/R1-10/OSC). The site will be fully serviced and connect to all existing utilities that abut the site. Therefore, the proposed project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, and therefore will have a **less than significant impact**.

c) The proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site that is zoned – Industrial Park District/Single-Family Residential/Open Space & Conservation (M-1/R1-10/OSC). As stated in response a) above, the project is required to prepare a detailed project specific drainage plan, Water Quality Management Plan, and a Storm Water Pollution Prevention Plan (SWPPP) that will control storm water runoff and erosion, both during and after construction.

Furthermore, no stream or rivers exist near the site whose courses could be altered by alterations to the drainage pattern of the site. Therefore, the project will not alter the existing drainage pattern of the site or area which would result in erosion or siltation on- or off-site. Therefore, there will be a **less than significant impact**.

d) According to the FEMA Flood Insurance Rate Map (FIRM No. 06061C0764H), the project site is located in flood zone X, described as an area of minimal flood hazard. The project site is not located within a 100-year flood hazard area and none of the structures or buildings surrounding the site are within a 100-year flood hazard. The project is required to comply with the city stormwater management requirements cited in question a) above. Therefore, the project will have a **less than significant impact**.

e)-h) As stated above, the project will be constructed in compliance with all applicable water quality control plans, including the National Pollutant Discharge Elimination System (NPDES), California Storm Water Best Management Practices Handbook and corresponding Best Management Practices (BMPs), applicable General Plan policies and municipal codes. Therefore, there will be a **less than significant impact**.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XI	**LAND USE AND PLANNING.** Would the Project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

a) The proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site that is zoned – Industrial Park District/Single-Family Residential/Open Space & Conservation (M-1/R1-10/OSC). According to the City of Auburn Municipal Code section 159.036-Industrial Park District (M-1), warehouses are a permitted use in the M-1 zone, therefore the applicant is required to obtain a Design Review approval for the proposed project. The Design Review approval process will ensure that the project has been designed in full compliance with all applicable codes, design guidelines, and development standards and will be compatible with and enhance the surrounding land uses and will include linkages to adjacent uses. Therefore, the project will not physically divide an established community and there will be **no impact**.

b) The Design Review submittal for the proposed project includes the following project narrative.

<u>Site:</u> The project site is located on the west side of Merrow Street in the City of Auburn, California. The project scope includes two (2) new single story Metal Warehouse Buildings with associated site improvements. Building A is 60,633 square feet and Building B is 40,000 square feet. The project site (comprised of a portion of APN; 001-051-049-000) has a gross square footage of approximately ± 315,893 S.F. = 7.25 AC. The site is currently undeveloped.

Building: The project plan proposes two metal warehouse buildings totaling 100,633 square feet. The metal buildings will be of Type VB construction. The areas around the main entries of the buildings are enhanced with tinted glazing in aluminum frames an overhead steel-framed painted canopy. The placement of these enhancements is focused at the locations most visible from the public roadways.

Site Access and Parking: There are two site entrance driveways along a proposed extension of Merrow Street. Truck access will be accommodated via the northern-most site access driveway, which will serve as a shared visitor, employee, and semi-truck access drive. The southern site entrance will be for vehicle access. The site plan proposes a total of 165 vehicle parking stalls for employees and or visitors. The northern portion of the site has been reconfigured with the adjacent lot (belonging to the City of Auburn) to provide shared access drives and more parking area for the Auburn Train Station.

Signage: The proposed signage in this submittal included is for reference only. Criteria for future tenant signage will be provided at a later and under a separate permit as required.

Landscaping: The project will be fully landscaped using plants appropriate for and indigenous to the City of Auburn. Low water use plants will be used extensively, while moderate water use plants will be concentrated at accent points, such as driveways and building entries.

Sustainable Materials & Construction Practices: The project will incorporate a variety of sustainable materials and construction practices to include the following: 1) A storm water pollution prevention plan to minimize contamination, erosion, and dust pollution during construction. 2) Storage and collection of recyclable materials. 3) Construction waste management. 4) Environmental tobacco smoke control. 5) Heat reflecting roof membranes. 6) Light pollution reduction. 7) Water efficient landscaping. 8) Water use reduction methods. 9) Low VOC emitting sealants, adhesives, coatings, floorings, and wood materials. 10) Roof structures designed to accommodate additional weight for roof-top photovoltaic electricity generation panel arrays. 11) California Green Building Code compliant electric vehicle charging stations. 12) The project architect is a LEED accredited professional and will apply his knowledge of LEED techniques and practices to the project design and construction.

Therefore, the project will fulfill the following goals and policies of the General Plan Land Use Element.

- Goal 1: Guide development in a pattern that will minimize land use conflicts between adjacent land users.

- Policy 1.1: Design industrial / commercial business uses to be compatible with adjacent land uses, including, but not limited to, siting, height, orientation, materials, landscaping, circulation, grading, setbacks proportion, and architecture.

- Goal 4: Enhance air quality.

- Policy 4.1: Review proposed development projects for their potential adverse impacts on air quality.

- Goal 8: Provide for the development of industrial areas where suitable land and services exist and with a minimum of land use conflicts.

- Policy 8.1: Designate lands for a variety of industrial land uses such as:

  - Warehousing/storage facilities for supplies serving other businesses.
  - Industrial parks providing space for research and product development firms.
  - Other light industrial businesses.

Therefore, the proposed project will not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and therefore will have **no impact**.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XII **MINERAL RESOURCES.** Would the Project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a)-b) The GPEIR states that a number of mineral resources can be found in the Auburn area; including lode and placer gold, chromite, copper, asbestos, zinc, talc and limestone. However, the Mineral Land Classification of the Auburn 15' Quadrangle prepared by the California Division of Mines and Geology (CDMG) does not map any mineralized areas of statewide or regional significance (MRZ-2) in the City's planning area. In general, the State recognizes the infeasibility of extracting minerals in already urbanized areas.

The area of most concern noted in the CDMG study is the area to the southwest of Auburn's city boundaries where chromite resources are inferred. Industrial grade limestone deposits classed MRZ-2 are located outside the city boundaries in the Middle Fork of the American River canyon.

The Open Space Element of the General Plan includes the following goal and policy specific to mineral resources.

- Goal 4: Provide for the conservation, utilization, and development of mineral, geologic and soil resources in keeping with sound conservation practices.

- Policy 4.1: The City should Identify all economically valuable resources, including mineral deposits, soils conducive to agricultural uses, and those open space areas which add to the overall attractiveness of the region.

Placer County's aggregate resources are classified as one of several different mineral resource zone categories (MRZ1, MRZ-2, MRZ-3, MRZ-3(a), and MRZ-4). These classifications are generally based upon the relative knowledge concerning the resource's presence and the quality of the material. Of the five classifications listed, only MRZ-1 occurs within the project site. MRZ-1 zones are where available geologic information indicates there is little likelihood for the presence of mineral resources. Therefore, the proposed project will have **no impact** on mineral resources.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XIII	**NOISE.** Would the Project:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b)	Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The analyses of noise impacts and compliance requirements are provided by the site-specific Environmental Noise Assessment. (Saxelby Acoustics, 3/19/24) (Appendix F)

a) The Noise Element of the City of Auburn General Plan includes the following policies specific to noise.

- Policy 1.1 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table VIII-1 (Table 3) at existing or planned noise-sensitive uses, an acoustical; analyses shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

- Policy 2.2 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table VIII-1 (Table 3) as measured immediately within the property line of lands designated for noise-sensitive uses. This policy does not apply to noise sources associated with agricultural operations on lands zoned for agricultural uses.

TABLE 3: NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS AFFECTED BY OR INCLUDING NON-TRANSPORTATION SOURCES

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Leq, dB	55	45
Maximum level, dB	75	65

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed amenities, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation.

Operational Noise at Existing Sensitive Receptors

The project is predicted to expose adjacent noise sensitive receptors at the closest parcel line to noise levels up to 51 dBA, Leq during daytime (7:00 a.m. to 10:00 p.m.) and 45 dBA, Leq during nighttime (10:00 p.m. to 7:00 a.m.) hours. The predicted project noise levels would meet the City of Auburn daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise standard for non-transportation noise sources of 55 dBA, Leq and 45 dBA, Leq, respectively.

It should be noted that maximum noise levels generated by the light industrial operations, HVAC units, and on-site vehicle circulation are predicted to be 20 dBA, or less, than the average (Leq) values. The City of Auburn maximum (Lmax) nighttime noise level standard is 75 dBA Lmax, which is 20 dBA higher than the Leq standard. Therefore, where average noise levels are in compliance with the Leq standards, maximum noise levels will also meet the City's standards. Based upon the predicted average noise levels of 51 dBA, the maximum noise levels will be 71 dBA, Lmax during daytime (7:00 a.m. to 10:00 p.m.) hours and comply with the City maximum standards.

The Environmental Noise Assessment concluded that the proposed project is predicted to comply with the City of Auburn noise level standards with no additional noise control measures. Therefore, there will be **no impact**.

b) The General Plan requires acoustical studies and any necessary vibration mitigation where development is proposed within proximity to an existing railroad. The proposed warehouse multi-family residential development is not located within proximity to an existing railroad.

Temporary construction noise will have less than significant noise and vibration impacts. The Auburn Municipal Code, Chapter 93-Loud and Unusual Noises prohibits making and creation of loud, unnecessary or unusual noises within the city, and limits construction noise as follows:

<u>Construction or repair of buildings</u>

Construction of the proposed project improvements include tree removal, grubbing, grading, trenching, paving of driveway, turnabout and parking spaces, and construction of the warehouse which would cause a temporary increase in ambient noise levels, and groundborne vibration.

1. The performance of any construction, alteration or repair activities which require the issuance of any building, grading or other permit may occur only during the following hours:
   a. Monday through Friday: 7:00 a.m. to 6:00 p.m. For the period of June 1 through September 30 of each year the permissible hours for masonry and roofing work hereunder shall be from 6:00 a.m. to 6:00 p.m.;
   b. Saturdays: 9:00 a.m. to 5:00 p.m.
   c. Sundays and observed holidays: 10:00 a.m. to 6:00 p.m.

2. Any noise from the above activities, including from any equipment used therewith, shall not produce noise levels in excess of the following:
   a. Saturdays: 80 dba when measured at a distance of 25 feet;
   b. Sundays and observed holidays: 70 dba when measured at a distance of 25 feet.

Compliance with the noise regulations of the municipal code will result in less than significant noise and vibration impacts from construction activities. Therefore, impacts will be **less than significant.**

c) The project site is not located within an airport land use plan. The airport closest to the project site is the Auburn Municipal Airport, approximately 4.4-miles north of the project site. Therefore, the project will not expose people residing or working in the project area to excessive airport noise levels, and there will be **no impact**.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XIV **POPULATION AND HOUSING.** Would the Project:				
a) Induce substantial unplanned population growth in an area, either directly (for example,	☐	☐	☐	☒

	by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

The Population and Housing data is provided by the City of Auburn Housing Element 2021-2029 (5/24/21).

a)-b) Population Trends

According to Department of Finance (DOF) estimates, as of 2019, the City of Auburn had a population of 14,392; this was a population growth of eight percent since 2010. This growth rate was significantly lower than Placer County's growth, which was 14 percent from 2010 to 2019 (Table A-1). In comparison to other cities located in south Placer County, Auburn has not experienced the same growth and has retained a small-town atmosphere.

SACOG provided population projections through 2040. Based on these numbers, the city is expected to grow by less than one percent between 2019 and 2040. The County as a whole is expected to have a 27 percent increase by 2040.

Table A-1 – Population Growth

	2010	2019	2040	Percent Change 2019 - 2040
Auburn	13,330	14,392	14,454	<1%
Placer County	348,432	396,691	505,083	27%

Sources: 2010 US Census; 2019 DOF.

As stated above, the City of Auburn growth rate is significantly lower than Placer County's growth rate, and the percent change in population from 2019 through 2040 is projected to be less than one percent (1 %).

The proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site that is zoned – Industrial Park District/Single-Family Residential/Open Space & Conservation (M-1/R1-10/OSC). Any increase in population due to new employees moving to the city would be de minimis.

The proposed project would not increase the supply of available housing which would be expected to increase population in the area. In addition, the project would not directly or indirectly induce substantial population growth in the area nor would it displace housing or require construction of replacement housing. Therefore, the proposed project will have **no impact** on population and housing.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XV **PUBLIC SERVICES.** Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

<u>a)-e)</u> <u>Fire</u>

Fire protection services are currently provided to the Plan area by the City of Auburn Volunteer Fire Department (AFD), the California Department of Forestry, the Placer Foothills Consolidated Fire Protection District (Consolidated), and the Newcastle Fire District (NFD).

The Auburn Fire Department provides primary response to all areas within the City limits except the recently annexed Oak Ridge Way/Luther Road area. The four fire stations currently serving the City of Auburn are:

1. Martin Park Station, 485 High Street and El Dorado Street.
2. Gietzen Station, 226 Sacramento Street.
3. Maidu Station, 901 Auburn Folsom Road and Maidu Drive.
4. Airport/Industrial Station, New Airport Road and Earhart Avenue.

The AFD stations have been situated throughout the City limits to allow the primary response station to be within a five-mile driving distance to all parts of the City. This travel distance standard has allowed the City to maintain an Insurance Service Organization (ISO) Rating of 4 (on a scale of 1-10, with 1 being the best rating) for all areas serviced by community water systems.

The Department operates 12 fire engines, one aerial ladder based on an engine chassis (Quint) and one rescue truck. The AFD is staffed by two full-time fire service personnel, a Fire Chief/Fire Marshall and an Assistant Fire Chief. In addition to the Fire Chief/Fire Marshall and Assistant Fire Chief, there are 45 volunteer fire suppression personnel. All AFC staff are trained in emergency medical techniques (EMTs).

Auburn Fire has reviewed the project proposal and determined that the property would be served by the Fire District. The project would not increase the amount of fire protection services needed to serve this site and would not result in a significant demand for construction of new fire protection facilities, nor would it significantly impair service ratios, response times or other performance objectives. According to AFD Chief Howard Leal, the Department has been able to offset impacts from incremental growth by requiring payment of an impact mitigation fee, strictly enforcing building standards, maintaining fire flow requirements for new development, requiring use of fire-retardant construction material, enforcing the City's sprinkler ordinance, requiring minimum street widths and maintaining mutual aid agreements with neighboring fire districts.

Police

The Auburn Police Department has a permanent staff of 28 full time employees, of which 20 are sworn positions and 8 are civilians. The staff Includes one police chief, one captain, one lieutenant, four patrol sergeants, two detectives, eleven police officers and eight civilians who perform the duties of secretary, parking enforcement, dispatcher/clerks, and animal control. Department staff is augmented by a reserve officer working vacation relief and two part-time employees, a police services aide, who works 20 hours a week, and a part-time dispatcher who works one day a week. The City population served is approximately 10,500 and covers 4,148 acres.

The City of Auburn Police Department staffing levels exceeds established standards with approximately 1.8 officer per 1,000 population. ln addition, the number of non-sworn personnel (eight) currently on staff exceeds the standard of one non-sworn personnel for every four sworn officers. Implementation of policies contained in the General Plan that require the City to prepare and maintain a five-year capital improvement program for public facilities will avoid significant impacts.

Schools

The project would not result in an increased demand for construction of new schools or related administrative facilities. Schools are provided in the Plan area through two elementary districts, one high school district and one community college district. The following table outlines the total number of schools in each district and the number of schools within each district that are physically located in the Plan area

Table 13-2 – Existing City of Auburn School Facilities

School District (SD)	Total School Facilities	District Capacity
Ackerman (K-8) Elementary SD	1	126%
Auburn (K-8) Union SD	4	155%
Placer {9-12) Union High SD	4	119%
Sierra Community College SD	3	N/A

Parks

The project would not result in an increased demand for parks or requirements for improvements to existing park facilities. The current inventory of parks and recreation facilities totals approximately 3.2 acres per 1,000 residents in the Auburn Recreation District (ARD). However, within the existing City limits the ARD administers approximately 4.2 acres of developed parkland per 1,000 City residents based on existing developed parks. When the turf areas of the four schools in the City limits along with the undeveloped Railhead park site are added into the calculation, the ARD administers approximately 5.0 acres of parkland per resident within existing City limits.

Table 13-10 – Existing City of Auburn Park Sites

Proposed Parks within ARD	Acreage
Lone Star Road Park	44
Halsey Forbay Park	88
Bell & Dry Creek Road Park	55
Dry Creek Park	69
Atwood Road Park	50
Park Square Lane Park	11
Bell & New Airport Road Park	30
Bell Road Park	121
TOTAL	568

New subdivisions and commercial complexes typically have impacts on public services, however the proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site that is zoned – Industrial Park District/Single-Family Residential/Open Space & Conservation (M-1/R1-10/OSC).

The site is adequately served and will require no increase in the amount of fire or police services needed to serve the site, no demand for new construction of schools or administrative facilities, no increased demand for parks or park improvements, and no increased demand for other government services creating the need to physically alter or construct facilities.

The Design Review approval process will ensure that the project has been designed in full compliance with all applicable codes, design guidelines, and development standards and pay all applicable impact mitigation fees to offset all potential impacts to public services. Therefore, there will be a **less than significant** impact.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XVI **RECREATION.** Would the Project:				
a) Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐

The current inventory of parks and recreation facilities totals approximately 3.2 acres per 1,000 residents in the Auburn Recreation District (ARD). However, within the existing City limits the ARD administers approximately 4.2 acres of developed parkland per 1,000 City residents based on existing developed parks. When the turf areas of the four schools in the City limits along with the undeveloped Railhead park site are added into the calculation, the ARD administers approximately 5.0 acres of parkland per resident within existing City limits.

Table 13-10 – Existing City of Auburn Park Sites

Proposed Parks within ARD	Acreage
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Halsey Forbay Park	88
Bell & Dry Creek Road Park	55
Dry Creek Park	69
Atwood Road Park	50
Park Square Lane Park	11
Bell & New Airport Road Park	30
Bell Road Park	121
TOTAL	568

New subdivisions and multifamily housing projects typically have impacts on recreation services and facilities, however the proposed project will construct two warehouse buildings (100,633 SF) on an undeveloped 7.25-Ac (315,893 SF) site that is zoned – Industrial Park District/Single-

Family Residential/Open Space & Conservation (M-1/R1-10/OSC). The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The project does not include residential units which require public recreational facilities.

The Design Review approval process will ensure that the project has been designed in full compliance with all applicable codes, design guidelines, and development standards and pay all applicable impact mitigation fees to offset all potential impacts to recreation services. Therefore, there will be a **less than significant** impact.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XVII **TRANSPORTATION.** Would the Project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?	☐	☒	☐	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curve or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☒	☐	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

The analyses of transportation impacts and compliance requirements are provided by the site-specific Transportation Impact Study. (W-Trans, 1/21/25) (Appendix G)

a) Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 11th Edition, 2021, for General Light Industrial space (LU #110), as this description most closely matches the proposed project. Based on the application of these rates, the proposed project is expected to generate an average of 487 trips per day, including 74 a.m. peak hour trips and 65 trips during the p.m. peak hour. These results are summarized in Table 2.

Table 2 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
General Light Industrial	100 ksf	4.87	487	0.74	74	65	9	0.65	65	9	56

Note: ksf = 1,000 square feet

Trip Distribution

The pattern used to allocate new project trips to the street network was based on the one used for the Meade-Blocker traffic study, adjusted to reflect an employment-based use versus residential. The assumptions shown in Table 3 were applied.

Table 3 – Trip Distribution Assumptions

Route	Percent
From/To the West via I-80	25
From/To the East via I-80	20
From/To the East via Fulweiler Ave-Elm Ave	5
From/To the South via SR 49	10
From/To the South via Placer St-Union St-Maple St	10
From/To the North via SR 49	20
From/To the North via Nevada St	10
TOTAL	**100**

Existing and Planned Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps northeast of the proposed project site provide access for pedestrians in the vicinity of the site; however, sidewalk gaps and lack of crosswalks can be found along some or all of the roadways connecting to the project site. Existing gaps and obstacles along the connecting roadways impact convenient and continuous access for pedestrians and present safety concerns in those locations where appropriate pedestrian infrastructure would address potential conflict points.

- **Blocker Drive** – Sidewalk coverage is provided on both sides of Blocker Drive, with an approximate 100-foot gap on the south side where the Union Pacific railroad tracks pass through the street. Lighting Is provided by overhead streetlights.

- **Merrow Street** – Currently, Merrow Street terminates in a cul-de-sac approximately 1,200 feet south of Blocker Drive. In the existing stretch of Merrow Street, sidewalks do not exist on either side of the road. Streetlighting is generally not provided.

- **Fulweiler Avenue** – Sidewalks are provided on both sides of Fulweiler Avenue, with gaps on the south side of the street between Nevada Street and approximately 100 feet west of

Carson Avenue, as well as between Sterling Avenue and SR 49. Lighting is provided by overhead streetlights.

Pedestrian Safety

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue for pedestrians. Collision records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports were reviewed for the most current five-year period available, which was October 1, 2018, through September 30, 2023 at the time of the analysis. During the five-year study period there were no reported collisions involving pedestrians at any of the study intersections.

Pedestrian Project Impacts on Pedestrian Facilities

Given the proximity of the nearby train station and residential homes to the northeast of the proposed project site, it is reasonable to assume that some project patrons and employees will want to walk or bicycle to reach the project site. However, due to the rural character of the area, limited pedestrian trips are expected.

Project Site – As part of the project, sidewalks would be built along the project frontage on the east side of the Merrow Street extension past the southern driveway. Slightly south of the northern driveway, the sidewalk on the east side would terminate and would instead continue on the west side of the street to Blocker Drive. As designed, the project would provide a disconnected system and would not provide direct access to the train station. The project should be modified to include a continuous sidewalk on the east side of Merrow Street all the way to Blocker Drive.

Finding – Existing pedestrian facilities serving the project site are considered adequate for the area. While sidewalks would be provided as part of the project, as proposed they are discontinuous and are therefore inadequate to serve pedestrian trips.

Existing and Planned Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2020, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

In the project area, Class II bike lanes exist on Nevada Street between Fulweiler Avenue and Placer Street. Class III bike routes are proposed nearby on Placer Street, Maple Street, and Union Street. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. Table 4 summarizes the existing and planned bicycle facilities in the project vicinity, as contained in the *City of Auburn Bikeway Master Plan*, 2002.

Table 4 – Bicycle Facility Summary

Status Facility	Class	Length	Begin Point	End Point
Existing				
Nevada St	II	0.47 mi	Fulweiler Ave	Placer St
Planned				
Placer St	III	350 ft	Nevada St	Union St
Maple St	III	875 ft	Lincoln Wy W	Lincoln Wy E
Union St	III	315 ft	Placer St	Maple St

Source: *City of Auburn Bikeway Master Plan*, Placer County Transportation Planning Agency, 2002

<u>Bicyclist Safety</u>
Collision records for the study area were reviewed to determine if there had been any bicyclist-involved crashes. During the five-year study period stated above, there were no reported collisions involving bicyclists at any of the study intersections.

<u>Project Impacts on Bicycle Facilities</u>
Existing bicycle facilities, including bike lanes on Nevada Street, together with shared use of minor streets provide adequate access for bicyclists.

<u>Bicycle Storage</u>
The project site plan does not identify the provision of bicycle parking or storage facilities. Additionally, the City of Auburn Municipal Code does not identify bicycle parking requirements. The California Green Building Standards Code recommends that new construction provide bike parking spaces at a rate of at least five percent of the number of vehicular parking spaces proposed. As 165 vehicular parking spaces are proposed as part of the project, a minimum of nine bicycle parking spaces should be provided.
Finding – Off-site bicycle facilities serving the project site are adequate, but the project does not provide parking for bicycles.

Recommendation – The project site plan should be modified to include nine bike parking spaces near the entrance of the building.

Existing Transit Facilities

Auburn Transit services provides bus services in the City of Auburn, which include the Auburn Loop Route and Confluence Route, which operates between April 1 and October 1 each year. The closest stop for the Auburn Loop is at the southwest corner of Lincoln Way/Sacramento Street and the Confluence Route stops at the Auburn Firehouse in Old Town. Both stops are approximately 0.8 miles southeast of the proposed project site, which is considered to be beyond what is a comfortable walking distance. Transit use would, however, be feasible using a bicycle for a part of the trip if bicycle parking were to be provided at the project site.

Placer County Transit provides several routes that stop at the Auburn Station 0.2 miles north of the proposed project site. Additionally, the Amtrak Capital Corridor southbound train to San Jose leaves from the Auburn Station daily. Existing transit routes and their operations are summarized in Table 5.

Table 5 – Transit Routes

Transit Agency Route	Distance to Stop (mi)[1]	Service			Connection
		Days of Operation	Time	Frequency	
Auburn Transit Services					
Loop Route	0.8	Mon – Sat	9:00 a.m. – 5:00 p.m.	On-Demand[2]	Nevada Station, Old Town, and Downtown to North and South Auburn
Confluence Route	0.8	Apr 1 – Oct 1 Fri – Sat	9:00 a.m. – 5:00 p.m.	On-Demand[2]	North Auburn, Old Town, and Downtown to American River Confluence
Placer County Transit					
Light Rail Express Route	0.2	Mon – Fri Sat	5:00 a.m. – 7:00 p.m. 8:00 a.m. – 8:00 p.m.	1 hour 1 hour	Auburn to Sacramento Watt/I-80 Light Rail Station
Highway 49 Route	0.2	Mon – Fri Sat	7:00 a.m. – 9:00 p.m. 8:00 a.m. – 7:00 p.m.	1 hour 1 hour	Auburn Station to Auburn District Regional Park
Alta Colfax	0.2	Mon – Fri	7:00 a.m., 3:15 p.m.	Once per day	Auburn Station to Colfax Depot and Alta Store
Taylor Rd Shuttle	0.2	Mon – Fri Sat	6:35 a.m. – 4:35 p.m. 8:35 a.m. – 4:35 p.m.	2 hours 2 hours	Auburn Station to Sierra College
Commuter Express	0.2	Mon – Fri	5:43 a.m., 6:23 a.m. to Roseville 5:49 p.m., 6:43 p.m. to Colfax	Once per day Once per day	Roseville to Colfax
Amtrak					
Capital Corridor	0.2	Mon – Fri Sat - Sun	6:35 a.m., *10:15 a.m., 4:10 p.m.* 7:55 a.m., *9:15 a.m., 4:10 p.m.*	Once per day Once per day	Auburn to San Jose

Note: [1] Defined as the shortest walking distance between the project site and the nearest bus stop; [2] Rides are scheduled on the Transloc app or by calling the Transit Dispatcher; *Italics* = Via Amtrak Thruway Connecting Bus and one or two transfers

Sources: auburn.ca.gov; placercountytransit.com; amtrak.com

Auburn OnDemand is a rideshare service provided by the City to travel directly to and from desired locations within Auburn City limits and some parts of surrounding Placer County. These rides can also be scheduled through the Transloc app or by calling the Transit Dispatcher.

A separate paratransit service for those who are unable to independently use the transit system due to a physical or mental disability is not provided. However, all buses within Auburn Transit Services are equipped with lifts so they are accessible to riders with disabilities. Additional arrangements for riders with disabilities include allowing service animals on the bus, an additional passenger for free, priority seating, and reduced fares.

Impact on Transit Facilities

Transit load factors are expected be spread out across multiple rides; therefore, the volume of transit riders expected to be generated by the project is not anticipated to exceed the carrying capacity of the existing transit services near the project site and existing transit routes are adequate to accommodate project-generated transit trips. The Auburn Station, which serves the Placer County Transit bus routes as well as the daily Amtrak trains, is within an acceptable walking distance of the site, located about 0.2 miles away.

Finding – Transit facilities serving the project site are adequate.

Vehicles

The project as proposed would result in the extension of Merrow Street to Blocker Drive. As proposed, the roadway would be approximately 32 feet wide. According to the City of Auburn Municipal Code, Chapter 100.84; Roadway and Emergency Access Requirements, all roads must be constructed to provide a minimum of two 10-foot traffic lanes providing two-way traffic flow. Additionally, there must be an unobstructed vertical clearance of 15 feet along the entire length and the maximum grade shall not exceed 15 percent. The proposed Merrow Street extension appears to meet City requirements based on the information provided in the site plan.

Significance Finding – The project would not conflict with any policies regarding transit or vehicular facilities but would provide a disconnected and therefore inadequate sidewalk system and does not include bike parking.

Mitigation Measures:

TRANS-RMM-1: It is recommended that the sidewalk between the northerly end of the site and Blocker Drive be located on the east side of Merrow Street to provide a continuous pedestrian path.

TRANS-RMM-2: The project site plan should be modified to include nine bike parking spaces near the entrance to the building.

TRANS-MM-3: The design for the Merrow Street extension should be modified to provide a connected sidewalk by extending the facility along the easterly side of the street to Blocker Drive rather than requiring a mid-block crossing near the northly driveway.

b) The potential for the project to conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) was evaluated based the project's anticipated Vehicle Miles Traveled (VMT). Senate Bill (SB) 743 established VMT as the metric to be applied for determining transportation impacts associated with development projects. Like many other jurisdictions in California, the City of Auburn has not yet adopted a policy or thresholds of significance regarding VMT so the project-related VMT impacts were assessed based on guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018. This document identifies several criteria that may be used by jurisdictions to identify certain types of projects that are unlikely to have a VMT impact and can be "screened" from further VMT analysis. As indicated in the Technical Advisory, projects that are located within one-half mile of a rail transit stop or a bus stop on a high-frequency transit line can generally be presumed to have a less than significant VMT impact; the proposed project is adjacent to the Amtrak station so it meets this criterion.

It is noted that the parking provided by the project to serve the Amtrak station would also support the use of nonvehicle transportation and reduced VMT. Currently the existing parking spaces at the Amtrak station are not open for general use; they are designated for tenants of the station building, short-term parking, and people with disabilities. The 61 spaces that would be provided by the project would be available to users of the Auburn Amtrak station, where passengers can access train service as well as six bus routes. Among the bus routes are Route 20 from Amtrak's Thruway service, which includes two weekday trips to the Sacramento Amtrak station and five return trips. In addition, Placer County Transit Route 10 provides hourly express service from the Auburn station to the Watt/I-80 light rail station in North Highlands, providing additional service to Sacramento. Given the potential for future users to park at this location and use regional transit services, the additional parking spaces proposed as part of the project have the potential to eliminate regional trips, thereby reducing VMT.

Significance Finding – The project would be expected to screen out from quantitative analysis and have a **less than significant** impact on VMT.

c) Safety Issues

The potential for the project to impact safety was evaluated in terms of the adequacy of sight distance and need for turn lanes at the project accesses as well as the adequacy of stacking space in dedicated turn lanes at the study intersections to accommodate additional queuing due to adding project-generated trips and need for additional right-of-way controls. This section addresses the third transportation bullet on the CEQA checklist which is whether or not the project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Site Access

The proposed project would be accessible via two new driveways on Merrow Street, which would be extended north to Blocker Drive.

Sight Distance

Sight distances along Blocker Drive at the proposed location of the Merrow Street extension were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance at intersections of public streets is based on corner sight distances, with more sight distance needed for making a left turn versus a right turn, while recommended sight distances for minor street approaches that are either a private road or a driveway are based on stopping sight distance. Both use the approach travel speeds as the basis for determining the recommended sight distance. Additionally, the stopping sight distance needed for a following driver to stop if there is a vehicle waiting to turn into a side street or driveway is evaluated based on stopping sight distance criterion and the approach speed on the major street.

Blocker Drive does not have a posted speed limit, so the *prima facie* speed of 25 mph applies for the residential neighborhood condition. Actual speeds were sampled on Blocker Drive and indicate 85th percentile speeds of 21 mph westbound and 27 mph eastbound. For speeds of 25 mph, the minimum corner sight distance needed is 275 feet for left turns and 240 feet for right turns. Field measurements were obtained to and from the position of a vehicle waiting on the proposed Merrow Street approach of the intersection and were determined to extend approximately 300 feet to the west, which is adequate for anticipated travel speeds. To the east, sight lines extend approximately 260 feet. Therefore, sight lines would be adequate at the proposed Blocker Drive/Merrow Street intersection.

Consideration was also given to the adequacy of sight lines along the Merrow Street extension at the project driveways; however, the roadway does not currently exist and the site plan is still preliminary so the exact positions and details of the driveways have not yet been determined, though it is anticipated that the roadway extension and the connections to the project driveways would be designed in accordance with applicable design standards. For the *prima facie* speed limit of 25 mph on Merrow Street, the minimum stopping sight distance needed is 150 feet; therefore, it is recommended that the roadway extension be designed to provide a minimum of 150 feet of stopping sight distance at the project driveways. Additionally, any new signage or monuments should be placed outside of the vision triangles of a driver waiting on the project driveways, which is denoted graphically in Plate 1.

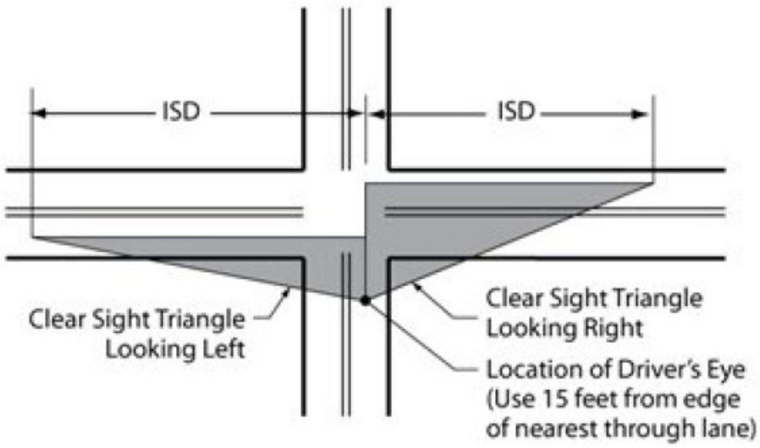


Plate 1 Vision Triangle Graphic

Finding – Sight lines at the new Blocker Drive/Merrow Street intersection are anticipated to be adequate for the assumed design speed. Sight lines along Merrow Street at the project driveways could not be evaluated but will need to be designed to meet applicable design criteria.

Mitigation Measures

TRANS-MM-4: To preserve existing sight lines, any new signage, monuments, or other structures to be placed near the project entrances should be positioned outside of the vision triangles of a driver waiting on the driveway approaches. Landscaping should be planned or trimmed to be lower than three feet in height or above seven feet.

<u>Access Analysis</u>

Left-Turn Lane Warrants

The need for a left-turn lane on Blocker Drive at the future intersection with Merrow Street was evaluated based on criteria contained in the *Intersection Channelization Design Guide*, National Cooperative Highway Research Program (NCHRP) Report No. 279, Transportation Research Board, 1985, as well as an update of the methodology developed by the Washington State Department of Transportation and published in the *Method For Prioritizing Intersection Improvements*, January 1997. The NCHRP report references a methodology developed by M. D. Harmelink that includes equations that can be applied to expected or actual traffic volumes to determine the need for a left-turn pocket based on safety issues.

With project-generated trips, a left-turn lane is not warranted on Blocker Drive at the future intersection with Merrow Street during either of the peak periods evaluated. A left-turn lane is also not warranted on Merrow Street at the project driveways since the volumes on the future extension of Merrow Street are expected to be lower than volumes on Blocker Drive. The left-turn lane warrants are provided in Appendix B.

Queuing

The City of Auburn does not prescribe thresholds of significance regarding queue lengths. However, an increase in queue length due to project traffic was considered a potentially significant impact if the increase would cause the queue to extend out of a dedicated turn lane into a through traffic lane, or the back of queue into a visually restricted area, such as a blind corner. If queues would already be expected to extend past a dedicated turn lane or into a visually restricted area without project traffic, the addition of project traffic was considered to constitute a potentially adverse effect only if it would cause a new unacceptable conditions; in other words, if the queue were already beyond the turn lane and the project would cause it to stack into an adjacent intersection or a visually restricted area, and that would not occur without the project, that would be considered an impact.

Under each scenario, the projected maximum queues in dedicated turn pockets at the study intersections were determined using the SIMTRAFFIC application of Synchro and averaging the 95th percentile projected queue for each of ten runs. Summarized in Table 6 are the predicted queue lengths for all dedicated turn lanes.

Table 6 – 95th-Percentile Queues in Dedicated Turn Lanes

Study Intersection Approach	Available Storage	95th Percentile Queues							
		AM Peak Hour				PM Peak Hour			
		B	B+P	F	F+P	B	B+P	F	F+P
1. Mt. Vernon Rd-Palm Ave/Nevada St									
NB Left Turn	150	75	82	90	93	133	143	**177**	**182**
SB Left Turn	250	49	46	44	42	44	44	36	71
2. SR 49/Palm Ave									
NB Left Turn	250[1]	130	148	172	181	216	206	200	197
SB Left Turn	350[1]	138	93	249	253	195	202	**391**	**397**
SB Right Turn	450	52	75	144	120	33	36	**552**	**538**
3. Nevada St/Blocker Dr-Fulweiler Ave									
NB Left Turn	150	112	133	117	139	55	76	126	146
SB Left Turn	180[1]	82	87	118	116	129	152	**217**	**248**
WB Through/Left Turn	145	100	115	105	122	91	91	**151**	**205**
4. SR-49/Fulweiler Ave-Elm Ave									
NB Left Turn	200	183	186	**239**	**242**	**232**	**235**	**269**	**282**
NB Right Turn	280	143	159	220	210	183	239	**416**	**419**
SB Left Turn	290[2]	**292**	**292**	**408**	**409**	**376**	**392**	**409**	**417**
SB Right Turn	370[3]	122	191	274	294	173	177	269	281
WB Left Turn	180	87	89	123	133	142	134	**186**	**181**
5. I-80 West Ramps-Nevada St/Andrews St-Placer St									
NB Left Turn	75	3	0	2	0	0	2	6	4

Notes: All distances are measured in feet; B = baseline conditions; B+P = baseline plus project conditions; F = future conditions; F+P = future plus project conditions; NB = Northbound; SB = Southbound; WB = Westbound; **Bold** text = queue length exceeds available storage; [1]Available storage is measured to the point where vehicles could queue before queueing in the two-way left-turn lane; [2]There are two SB Left-turn lanes and the longer queue of the two was reported; [3]Storage was measured to the end of the bicycle conflict markings

During the a.m. peak hour, the northbound left-turn pocket is expected to exceed capacity at SR 49/Fulweiler Avenue-Elm Avenue under Future volumes with and without project-generated trips, and the southbound leftturn pocket is expected to exceed capacity under all scenarios evaluated. During the p.m. peak hour under Future and Future plus Project volumes the following turn pockets are expected to exceed capacity: the northbound leftturn pocket at Mt Vernon Road-Palm Avenue/Nevada Street, southbound left-turn and right-turn pockets at SR 49/Palm Avenue, southbound left-turn and westbound through/left-turn pockets at Nevada Street/Blocker Drive-Fulweiler Avenue, and northbound right-turn and westbound left-turn pockets at SR 49/Fulweiler Avenue-Elm Avenue. The northbound left-turn and southbound left-turn pockets at SR-49/Fulweiler Avenue-Elm Avenue are expected to exceed storage capacity under all scenarios evaluated during the p.m. peak hour.

The queues on several movements are predicted to decrease slightly with project traffic added compared to without-project conditions. This is attributed to the stochastic nature of the modeling wherein traffic is randomly seeded and the average of ten runs is reported, occasionally resulting in shorter queues with project traffic than without it. However, as these reductions are relatively small, the practical effect of the project is negligible.

Finding – The project does not cause any queues to exceed available storage that would not do so without the project, so the impact is considered **less than significant**.

Significance Finding – The project would not result in any changes to the physical or operational conditions of the roadway that would introduce any hazards.

d) Emergency Access

The final transportation bullet on the CEQA checklist requires an evaluation as to whether the project would result in inadequate emergency access or not.

Adequacy of Site Access

City of Auburn Municipal Code Section 100.84 sets forth requirements to ensure that developments provide adequate access for emergency vehicles. Applicable requirements identified in these plans include a minimum roadway width of 20 feet for one-way and two-way traffic, minimum driveway widths of 12 feet, and minimum inside turn radii of 50 feet. Additionally, the City of Auburn Fire Department *Planning and Development Guidelines* require fire and emergency access to be a minimum of 26 feet in width. According to the preliminary site plan, the internal drive aisles are 26 feet wide and the driveway widths are at least 25 feet wide. The proposed access point dimensions appear to be in accordance with City standards; however, the roadway turning radius is not denoted in the site plan. Review and approval of all on-site turning radii from the fire code official would be required. The site would have two access points, so should one access be compromised during an emergency, responders would be able to use one of the other access points to reach the site.

Effect on Emergency Response Times

As detailed in the following section, the addition of project-generated traffic would have a limited effect on traffic operation and would therefore potentially result in only a nominal increase in response times. However, as all traffic is required by law to pull to the side to allow emergency responders traveling with their lights and sirens operating to pass, response times would not be expected to change as a result of the project.

Finding – The proposed site access and on-site circulation would function acceptably for emergency response vehicles and the project would not increase emergency response times.

Significance Finding – The project would be expected to have a **less than significant** impact on emergency access.

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

a) As stated in Section V-Cultural Resources above, the project site does not contain any of the Cultural Resources of particular concern within existing city limits, as listed in GPEIR Table 9-2 above. Furthermore, the findings provided by the site-specific Cultural Resources Assessment prepared by Peak & Associates, 4/22/24 (Attachment C), confirmed that implementation of CULT-RMM-1, CULT-RMM-2, and CULT-MM-1 will reduce impacts to Cultural Resources to **less than significant with mitigation.**

b) The United Auburn Indian Community (UAIC) is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members who are traditionally and culturally affiliated with the project area. The Tribe has a deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the Tribe's goal to ensure the preservation and continuance of their cultural heritage for current and future generations. (UAIC Tribal Historic Preservation Department)

California Assembly Bill (AB 52) requires public agencies to consult with tribes during the CEQA process. The Auburn, CA Native American Heritage Commission Tribal Consultation List for Placer County is current as of the date of this document and is based on the information available to the Commission on the date it was produced as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Tribal consultation with the 18 tribes was initiated on 12/3/24 (Appendix C), and as of the date of this MND not one request for tribal consultation was received by the lead agency, however Kara Perry-Director of Site Protection for the Shingle Springs Band of Miwok Indians requested to be notified if tribal cultural resources are discovered, as summarized in mitigation measure **CULT-MM-2.**

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XIX	**UTILITIES AND SERVICE SYSTEMS.** Would the Project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d)	Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure?	☐	☒	☐	☐
e)	Comply with federal, state and local management and reduction statutes and regulations related to solid waste?	☐	☒	☐	☐

a) The project site will connect to existing utilities for water, sewer, electric power, natural gas, telecommunications, and storm water drainage services. The project does not require any significant relocation or construction of electric, gas, or telecommunication facilities that would cause significant environmental effects. As stated on the project plans, all services will be installed in compliance with all applicable codes, specifications, BMPs and CVRWQCB standards. The project will also be required to pay all applicable impact fees to the City of Campbell associated with the connections to services and utilities. Therefore, there will be a **less than significant impact**.

b) Domestic water service for the City of Auburn is provided by the Placer County Water Agency (PCWA). Residents and businesses within the City contract directly with PCWA for service. PCWA purchases its raw water supply from PG&E's Yuba-Bear water system and has current contracts to purchase up to 55,000-acre feet of water annually from this system. The Bowman and Auburn Water Treatment Plants provide water clarification and chlorine treatment prior to delivery in the Upper Zone One and City of Auburn service areas. The combined production capacity of these two plants is 12 million gallons per day (MGO). During 1992, the maximum daily water demand on the Upper Zone One system was 10.94 MGD, resulting in an excess system capacity of approximately 9%.

In addition to PCWA, the Nevada Irrigation District (NID) serves approximately 1800 customers in the North Auburn area, both east and west of Highway 49. This area includes land within the existing and proposed Sphere of Influence area. The District itself covers portions of three counties and provides both agricultural and domestic water service. The District's Locksley Lane treatment plant has a current capacity of treating 4.0 million gallons per day. The expansion of the plant to 6 MGD is being designed and should be complete in 1994 (Vern Smith, personal communication 5/4/92). The District system is intertied at two locations with the PCWA system.

The Water Supply section of the GPEIR provides the following conclusions – "It appears that adequate supplies are available to serve the City of Auburn and the Auburn/Bowman water system area per the proposed Land Use Plans. It appears that adequate facilities are planned to serve area growth by PCWA. It appears that new development fees are adequate to fund capital improvements needed as a direct result of new growth. Based on the impact evaluation criteria and the analysis above, buildout of the City of Auburn General Plan area is not expected to have a significant impact on the Placer County Water Agency." Therefore, impacts will be **less than significant**.

c) The proposed project includes two new single story Metal Warehouse Buildings with associated site improvements. Building A is 60,633 square feet and Building B is 40,000 square feet. The project site has a gross area of 7.25-acres (315,893 SF) and is currently undeveloped.

The project will connect to the existing City sewer services and will not include the use of septic tanks or alternative wastewater disposal systems. The applicant provided a sewer capacity determination dated 2/8/24 which determined that the City standard is 02. EDU/1,000 SF, therefore the 100,000 SF buildings would result in 20 EDUs and a net peak flow of 17,000 GPD. The sewer capacity determination concluded that there will be no sewer capacity issues.

Furthermore, the applicant will be required to complete all required on-site improvements and pay the applicable City sewer connection fees. Therefore, there will be **no impact**.

d)-e) Solid waste generated in the City of Auburn General Plan area is collected by the Auburn Placer Disposal Service (APDS), a licensed private disposal company. Solid waste from the Plan area is transported to the company's transfer station located on Shale Ridge Road and then long-hauled to the Western Regional Landfill located near Highway 65 at Industrial Boulevard and Athens Road. The Western Regional Landfill is a 320-acre Class Ill facility owned by Placer County and operated by the Western Placer Recovery Company, a licensed private landfill operator, under a contract with the Western Regional Landfill Authority (a joint powers authority consisting of Placer County, Lincoln, Roseville, and Rocklin).

Based on an overall solid waste generation factor of 6.8 lbs/capita/day, total waste generation including residential, industrial, institutional, construction, demolition and wastewater treatment sludge/septage is expected to be 29,565 tons per year (based on 23,870 population at 6.8 lbs/day/person) within City limits and 38,325 tons per year (based on 30,780 population at 6.8 lbs/day/person) at buildout of the General Plan. The existing Plan would result in approximately 51,936 tons/year (based on 41,851 population at 6.8 lbs/day/person).

The Solid Waste section of the GPEIR provides the following conclusions – "Based on the impact evaluation criteria and discussion above, impacts resulting from an increased demand on solid waste disposal facilities are not expected to be significant. However, it would be appropriate for the Plan to include a policy requiring implementation of the City of Auburn Source Reduction and Recycling Element (SRRE)." Therefore, impacts will be **less than significant with mitigation**.

Mitigation Measure:

USS-RMM-1: Requiring implementation of the City's SRRE.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XX **WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
a) Impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope. Prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or uncontrolled spread of wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water resources, power lines or other utilities) that may exacerbate	☐	☐	☐	☒

	fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

a)-c) The City of Auburn provides fire prevention, fire suppression, and life safety services to the project site. The project site is located in an area that is classified as "Moderate" risk for wildland fires. The project site is located in an environment with oak woodland landcover, which is subject to wildfires. The area's topography, type and amount of fuel climate, and the availability of water for firefighting are the primary factors influencing the degree of fire risk. Under dry, windy conditions, fires can spread rapidly unless immediately addressed by fire services. Direct fire vehicle access to the site would be required via the entrances off Merrow Street, with fire turnaround.

A search of the fire hazard severity zones viewer at CalFire confirmed that the project site located outside of the State Responsibility Area (SRA) and is not located within, or within proximity to a Very High Fire Hazard Severity Zone (VHFHSZ). The closest VHFHSZ is located on the southern edge of the Auburn Ravine area, approximately 1.75-miles southwest of the project site. The project site is in a Local Responsibility Area (LRA), and the site and structures will be constructed in compliance with applicable fire codes and standards. Therefore, there will be **no impact**.

d) According to the FEMA Flood Insurance Rate Map (FIRM No. 06061C0764H), the project site is located in flood zone X, described as an area of minimal flood hazard. The project site is not located within a 100-year flood hazard area and none of the structures or buildings surrounding the site are within a 100-year flood hazard. The project is required to comply with the city stormwater management requirements cited in question a) above. Therefore, the project will have a **less than significant impact**.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Measures Incorporated	Less Than Significant Impact	No Impact
XXI	**MANDATORY FINDINGS OF SIGNIFICANCE**				
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate	☐	☒	☐	☐

	important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) The project site has a gross square footage of approximately 7.25-acres (315,893 SF). The site is currently undeveloped has the following General Plan land use designations – Industrial (IND) and Low-Medium Density Residential (LMDR), and the following zoning designations – Industrial Park District/Single-Family Residential/Open Space & Conservation (M-1/R1-10/OSC).

The project site is not on or near any migratory wildlife corridors nor would construction impede access to any native wildlife nursery sites since there are none near the site. The site is not within a habitat conservation plan area and does not contain any natural drainage courses or wetlands. The project site is not near any sensitive natural community identified in local or regional plans, policies, and regulations or by any state or by the California Department of Fish and Game or US Fish and Wildlife Service. Therefore, the project will have a **less than significant impact with mitigation** on habitats or wetlands or interfere with migratory fish or wildlife.

b) None of the standards for mandatory findings of significance are met. With regard to cumulative impacts, development of the industrial warehouse project would not result in any significant environmental impacts. Likewise, the project would not result in any incremental effects that would be cumulatively considerable when viewed in combination with past and probably future projects. Thus, the cumulative impacts of this project are **less than significant**.

c) The project will implement 20 mitigation measures to reduce impacts to a less than significant level. Of those mitigation measures, 13 are recommended mitigation measures and are not required to mitigate a known environmental impact. Therefore, the project will have **no impact** on human beings, either directly or indirectly.

Auburn Industrial Center IS/MND

Appendices

A. Arborist Report and Tree Inventory

B. Air Quality and Greenhouse Gas Impact Analysis

C. Cultural Resource assessment

D. Geotechnical Engineering Report

E. Biological Resources Assessment and Aquatic Resources Delineation Reports

F. Environmental Noise Assessment

G. Transportation Impact Study

H. Tribal Cultural Resources

Appendix A

California Tree and Landscape Consulting, Inc.

CalTLC
TENDER LOVING CARE FOR YOUR TREES

ARBORIST REPORT & TREE INVENTORY

November 15, 2021 (Revised January 7, 2022 and February 2, 2022)

Stephen Meade
Blocker Drive Properties, LLC
Auburn, CA 95603
Via Email: scmeade@pacbell.net

RE: Blocker Drive – Original Abacus Report combined with Annex Data, Riparian Data and City Parcel 001-051-041-000, City of Auburn jurisdiction, California

Executive Summary:

Stephen Meade contacted California Tree and Landscape Consulting, Inc. to inventory and evaluate the protected trees on the site or within 25' for purposes of providing an inventory of the protected trees on the property in the land annex[1], which is now a portion of 11500 Blocker Drive, APN #001-051-049-000. In addition, this data is to be combined with the old inventory data provided by Abacus Consulting Arborists, dated May 29, 2017. Both parcels are subject to the jurisdiction of the City of Auburn, California. See Supporting Information Appendix 1 –Tree Location Maps. Pursuant to City comments, additional trees were added from the riparian area of 11500 Blocker Drive and City Parcel -000.

Nicole Harrison, ISA Certified Arborist #WE-6500AM, TRAQ, Julie McNamara, ISA Certified Arborist #WE-11439A, and Nicholas McNamara, arborists assistant, collected the original data on April 17th to May 23rd, 2017. Nicole Harrison, ISA Certified Arborist #WE-6500AM, and/or Gordon Mann, ISA Certified Arborist #WE-0151AM, collected the annex data on July 25th, 2019. In addition, the riparian area was visually evaluated[2] for protected trees and included within this data by Nicole Harrison on January 15th and 22nd, 2022. Trees located on the parcel 001-051-041-000 were inventoried by R. Cory Kinley, ISA Certified Arborist #WE-9717A, on January 19th, 2022, and are also included.

TABLE 1 – PROTECTED TREES

Tree Species	Trees Inventoried	Trees Located on the Parcel[3]	Trees proposed for Removal	Mitigation Inches[4]	Mitigation Plan – Trees to be Planted, Species & Size	Mitigation Inches
Blue Oak, *Quercus douglasii*	34	34	34	356	0	0
Interior Live Oak, *Quercus wislizeni*	113	109	96	713	0	0
Valley Oak, *Quercus lobata*	51	48	47	549	0	0
California Black Walnut, *Juglans sp.*	7	7	6	50	0	0
California Buckeye, *Aesculus californica*	1	1	1	9	0	0
Fremont Cottonwood, *Populus fremontii*	1	1	1	11	0	0
Incense Cedar, *Calocedrus decurrens*	1	1	1	7	0	0
Pacific Willow, *Salix sp.*	7	7	7	54	0	0

[1] BLA 18-02, Exhibit B sheet 2 of 4, prepared by Andregg Psomas, dated March 16, 2018. Attached hereto as Appendix 4.

[2] Trees were evaluated at a distance from the access road. Assessment of the trees was from one-side. None of the trees were measured. It is my best guess as to the location, condition, and size of these trees. After site clearing, a reevaluation can be conducted.

[3] CalTLC is not a licensed land surveyor. Tree locations are approximate and we do not determine tree ownership. Trees which appear to be on another parcel are listed as off-site and treated as the property of that parcel. Tree ownership inside this report was determined by others.

[4] Twenty-One (21) Trees are rated by the arborist as Dead or Poor and do not require mitigation. These trees are not included in the mitigation summary.

Tree Species	Trees Inventoried	Trees Located on the Parcel[3]	Trees proposed for Removal	Mitigation Inches[4]	Mitigation Plan – Trees to be Planted, Species & Size	Mitigation Inches
White Alder, *Alnus rhombifolia*	2	2	2	24	0	0
Totals	**216**	**210**	**195**	**1773**	**IN Lieu Fees to be Paid**	

See Appendices for specific information on each tree and mitigation determination

METHODS

Appendix 2 in this report is the detailed inventory of the trees. The following terms will further explain our methods and findings.

The protected trees evaluated as part of this report have a numbered tag that was placed on each one that is 1-1/8" x 1-3/8", green anodized aluminum, "acorn" shaped, and labeled with a pre stamped number.

A Level 2 – Basic Visual Assessment was performed in accordance with the International Society of Arboriculture's best management practices. This assessment level is limited to the observation of conditions and defects which are readily visible. Additional limiting factors, such as blackberries, poison oak, and/or debris piled at the base of a tree can inhibit the visual assessment.

Tree Location: The GPS location of each tree was collected using the ESRI's ArcGIS collector application on an Apple iPhone or Samsung. The data was then processed in ESRI's ArcMap by Julie McNamara, M.S. GISci, to produce the tree location map.

Tree Measurements:
DBH (diameter breast high) is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted. A Biltmore stick or steel diameter tape was used to measure the DBH for all trees.

Canopy radius measurements were estimated due to tree density and obstructions, such as steep slopes or other trees.

Terms

Field Tag # — The pre-stamped tree number on the tag which is installed at approximately 6 feet above ground level on the north side of the tree.

Species — The species of a tree is listed by our local and correct common name and botanical name by genus (capitalized) and species (lower case). Oaks frequently cross-pollinate and hybridize, but the identification is towards the strongest characteristics.

DBH — Diameter breast high' is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted in the next column "measured at"

Measured at — Height above average ground level where the measurement of DBH was taken

Canopy radius — The farthest extent of the crown composed of leaves and small twigs. Most trees are not evenly balanced. This measurement represents the longest extension from the trunk to the outer canopy. The dripline measurement is from the center point of the tree and is shown on the Tree Location Map as a circle. This measurement can further define a protection zone if specified in the local ordinance as such or can indicate if pruning may be required for development.

Arborist Rating — Subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead) as in Chart A. The rating was done in the field at the time of the measuring and inspection.

No problem(s)	Excellent	**5**	No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect
No apparent problem(s)	Good	**4**	The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.
Minor problem(s)	Fair	**3**	The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated and/or health can be improved.
Major or uncorrectable problems (2)	Poor	**2**	The tree has major problems. If the option is taken to preserve the tree, additional evaluation to identify if health or structure can be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. Additionally, risk should be evaluated as a tree rated 2 may have structural conditions which indicate there is a high likelihood of some type of failure. Tree rated 2 should be removed if these additional evaluations will not be performed.
Extreme problem(s)	Hazardous	**1**	The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.
Dead	Dead	**0**	This indicates the tree has no significant sign of life.

Notes: Provide notable details about each tree which are factors considered in the determination of the tree rating including: (a) condition of root crown and/or roots; (b) condition of trunk; (c) condition of limbs and structure; (d) growth history and twig condition; (e) leaf appearance; and (f) dripline environment. Notes also indicate if the standard tree evaluation procedure was not followed (for example - why dbh may have been measured at a location other than the standard 54”). Additionally, notes will list any evaluation limiting factors such as debris at the base of a tree.

Discussion

Trees need to be protected from normal construction practices if they are to remain on the site and are expected to survive long term. While construction damage in the root zone is often the death of a tree, the time from when the damage occurs to when the symptoms begin and/or the tree dies can be years. Our recommendations are based on experience and the local ordinance requirements to enhance tree longevity. It requires the calculated root zone must remain intact as an underground ecosystem despite the use of heavy equipment to install foundations, driveways, underground utilities, and landscape irrigation systems. Simply walking and driving on soil can have serious consequences to tree health. The Tree Preservation Requirements and General Development Guidelines should be incorporated into the site plans and enforced onsite. The project arborist should be included in the development team during construction to provide expertise and make additional recommendations if additional impacts occur or tree response is poor.

Root Structure

The majority of a tree's roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6" to 3' of soil. It is a common misconception that a tree underground resembles the canopy. The correct root structure of a tree is in the drawing below. All plants' roots need both water and air for survival. Poor canopy development or canopy decline in mature trees after development is often the result of inadequate root space and/or soil compaction.

The reality of where roots are generally located

Pruning Mature Trees for Risk Reduction and/or Development Clearance

There are few good reasons to prune mature trees. Removal of deadwood, directional pruning, removal of decayed or damaged wood, and end-weight reduction as a method of mitigation for structural faults are the only reasons a mature tree should be pruned. Live wood over 3" should not be pruned unless absolutely necessary. Pruning cuts should be clean and correctly placed. Pruning should be done in accordance with the American National Standards Institute (ANSI) A300 standards.

Pruning causes an open wound in the tree. Trees do not "heal" they compartmentalize. It is far better to use more small cuts than a few large cuts as small pruning wounds reduce risk while large wounds increase risk. Any wound made today will always remain, but a healthy tree, in the absence of decay in the wound, will 'cover it' with callus tissue. Large, old pruning wounds which did not close with callous tissue often have advanced decay. These wounds are a likely failure point. Mature trees with large wounds have a high risk of failure.

Overweight limbs are a common structural fault in suppressed trees. There are two remedial actions for over- weight limbs (1) prune the limb to reduce the extension of the canopy, or (2) cable the limb to reduce movement. Cables do not hold weight they only stabilize the limb and additionally require annual inspection.

Arborist Classifications

There are different types of Arborists:

Tree Removal and/or Pruning Companies: These companies may be licensed by the State of California to do business as a tree removal company, but they do not necessarily know anything about trees biology.

Arborists: Arborist is a broad term intended to mean someone with specialized knowledge of trees, but it is often used to imply knowledge that is not there.

ISA Certified Arborist: An International Society of Arboriculture Certified Arborist is someone who has trained, met the qualifications for application, and been tested to have specialized knowledge of trees. You can look up certified arborists at the International Society of Arboriculture website: isa-arbor.org.

Consulting Arborist: An American Society of Consulting Arborists Registered Consulting Arborist is someone who has been trained and then tested to have specialized knowledge of trees; and trained and tested to provide high quality reports and documentation. You can look up registered consulting arborists at the American Society of Consulting Arborists website: ASCA-consultants.org.

Decay in Trees

Decay (in General): Fungi cause all decay of living trees. Decay is considered a disease because cell walls are altered, wood strength is affected, and living sapwood cells may be killed. Fungi decay wood by secreting enzymes. Different types of fungi cause different types of decay through the secretion of different chemical enzymes. Some decays, such as white rot, cause less wood strength loss than others because they first attack the lignin (causes cell walls to thicken and reduces susceptibility to decay and pest damage) secondarily the cellulose (another structural component in a cell walls). Others, such as soft rot, attack the cellulose chain and cause substantial losses in wood strength even in the initial stages of decay. Brown rot causes wood to become brittle and fractures easily with tension. Identification of internal decay in a tree is difficult because visible evidence may not be present.

According to Evaluation of Hazard Trees in Urban Areas (Matheny, 1994) decay is a critical factor in the stability of the tree. As decay progresses in the trunk, the stem becomes a hollow tube or cylinder rather than a solid rod. This change is not readily apparent to the casual observer. Trees require only a small amount of bark and wood to transport water, minerals and sugars. Interior heartwood can be eliminated (or degraded) to a great degree without compromising the transport process. Therefore, trees can contain significant amounts of decay without showing decline symptoms in the crown. Compartmentalization of decay in trees is a biological process in which the cellular tissue around wounds is changed to inhibit fungal growth and provide a barrier against the spread of decay agents into additional cells. The weakest of the barrier zones is the formation of the vertical wall. Accordingly, while a tree may be able to limit decay progression inward at large pruning cuts, in the event that there are more than one pruning cut located vertically along the main trunk of the tree, the likelihood of decay progression and the associated structural loss of integrity of the internal wood is high.

Oak Tree Impacts

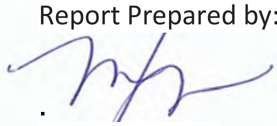
Our native oak trees are easily damaged or killed by having the soil within the Protected Root Zone (PRZ) disturbed or compacted. All of the work initially performed around protected trees that will be saved should be done by people rather than by wheeled or track type tractors. Oaks are fragile giants that can take little change in soil grade, compaction, or warm season watering. Don’t be fooled into believing that warm season watering has no adverse effects on native oaks. Decline and eventual death can take as long as 5-20 years with poor care and inappropriate watering. Oaks can live hundreds of years if treated properly during construction, as well as later with proper pruning, and the appropriate landscape/irrigation design.

RECOMMENTATIONS: SUMMARY OF TREE PROTECTION MEASURES

The Owner and/or Developer should ensure the project arborist's protection measures are incorporated into the site plans and followed. Tree specific protection measures can be found in Appendix 2 – Tree Information Data.

- Identify the Root Protection Zones on the final construction drawings and show the placement of tree protection fencing pursuant to the City requirements and Exhibit C.
- The project arborist should inspect the fencing prior to grading and/or grubbing for compliance with the recommended protection zones.
- The project arborist should directly supervise the clearance pruning, irrigation, fertilization, placement of mulch and chemical treatments.
- All stumps within the root zone of trees to be preserved shall be ground out using a stump router or left in place. No trunk within the root zone of other trees shall be removed using a backhoe or other piece of grading equipment.
- Prior to any grading, or other work on the site that will come within 50' of any tree to be preserved, irrigation will be required from April through September and placement of a 4-6" layer of chip mulch over the protected root zone of all trees that will be impacted. Chips should be obtained from onsite materials and trees to be removed.
- Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site. The Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist.
- Clearly designate an area on the site outside the drip line of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the root zones of protected trees.
- Trenching inside the protected root zone shall be by a hydraulic or air spade, placing pipes underneath the roots, or boring deeper trenches underneath the roots.
- Include on the plans an Arborist inspection schedule to monitor the site during (and after) construction to ensure protection measures are followed and make recommendations for care of the trees on site, as needed.
- Follow all of the General Development Guidelines, Appendix 3, for all trees to remain.

Report Prepared by:



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Nicole Harrison
ISA Certified Arborist #WC-6500AM, TRAQ
Member: American Society of Consulting Arborists

Appendix 1 – Tree Location Map

Appendix 2 – Tree Data
Appendix 3 – General Development Guidelines
Appendix 4 – Annex Descriptive Map of Property

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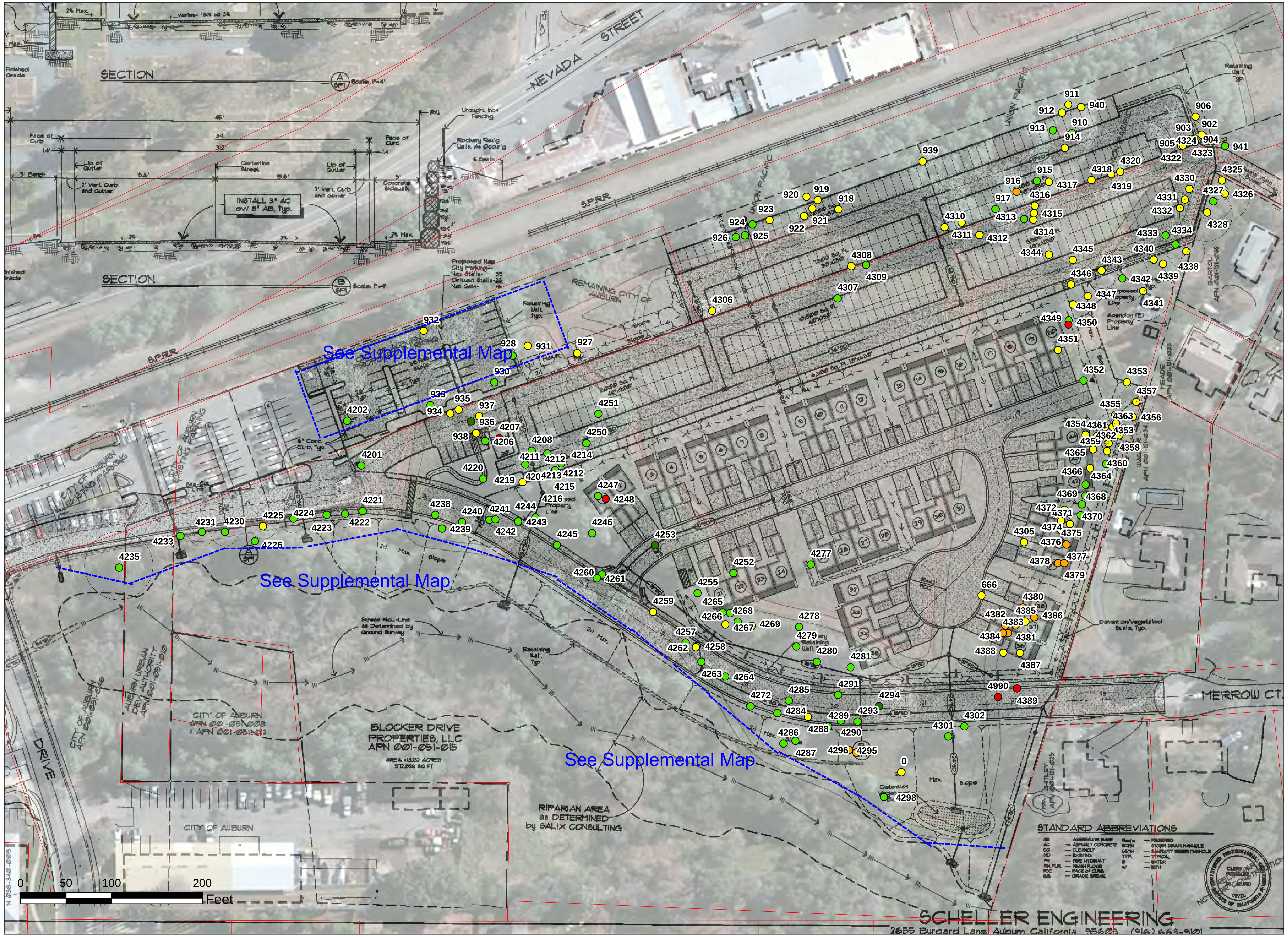

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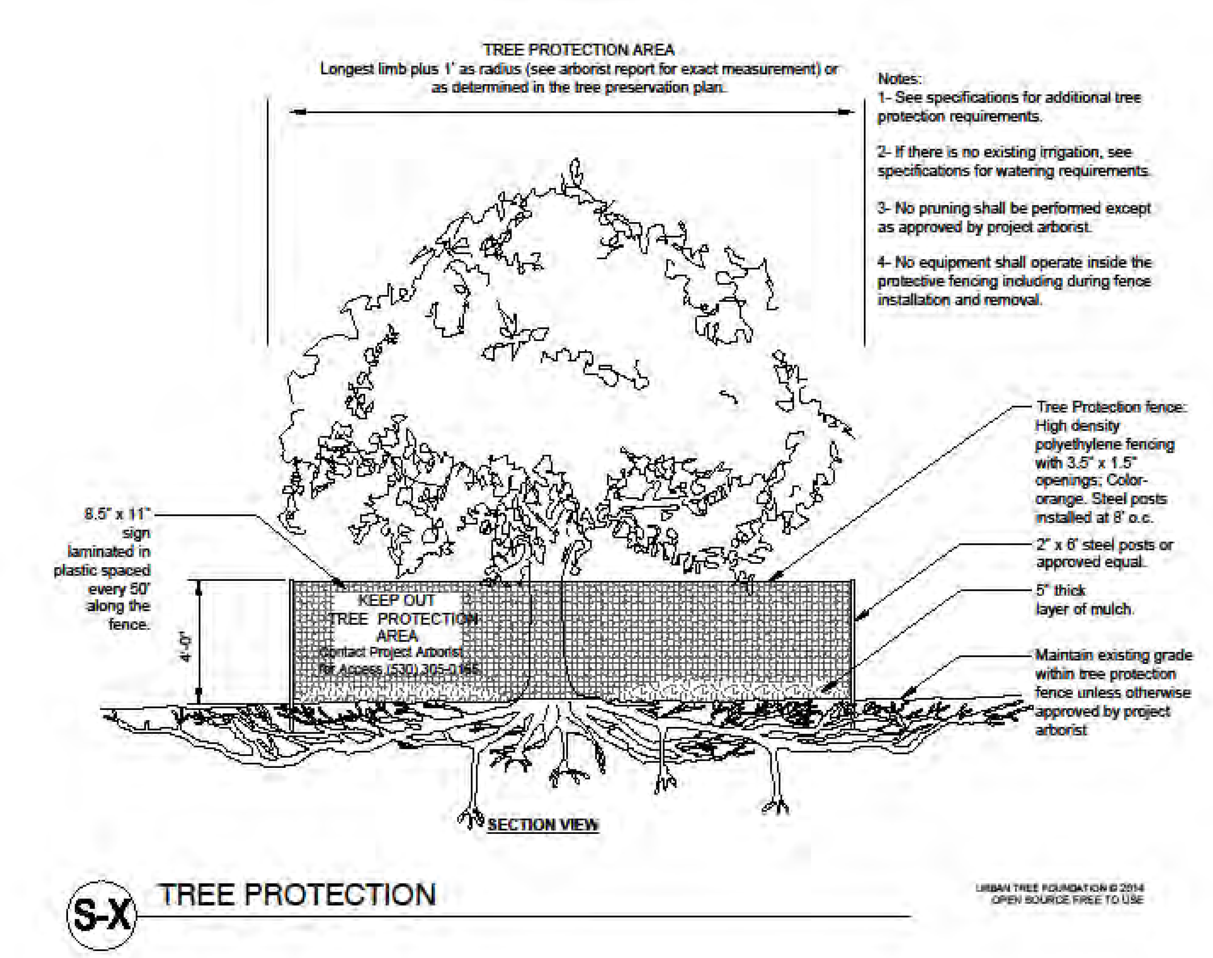
California Tree &
Landscape Consulting, Inc.

359 Nevada Street, Suite 201
Auburn, CA 95603

TREE PROTECTION GENERAL REQUIREMENTS

1. The project arborist for this project is California Tree & Landscape Consulting. The primary contact information is Nicole Harrison (530) 305-0165. The project arborist may continue to provide expertise and make additional recommendations during the construction process if and when additional impacts occur or tree response is poor. Monitoring and construction oversight by the project arborist is recommended for all projects and required when a final letter of assessment is required by the jurisdiction.
2. The project arborist should inspect the exclusionary root protection fencing installed by the contractors prior to any grading and/or grubbing for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.
3. The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site.
4. No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
5. Clearly designate an area on the site that is outside of the protection area of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the protection zones of any trees on or off the site.
6. Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
7. Trenching, if required, inside the protected root zone shall be approved and/or supervised by the project arborist and may be required to be performed by hand, by a hydraulic or air spade, or other method which will place pipes underneath the roots without damage to the roots.
8. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.



TREE INVENTORY MAP

Root Protection Area is Shown for PROTECTED Trees to Remain

Exclusion Area Boundary is Approximate

>Tree locations are approximate and were collected using apple iOS products.
>Property line information was downloaded from Placer County on 10/20/2021.
>Development plans provided by Scheller Engineering dated 07/20/2019.

Property Line

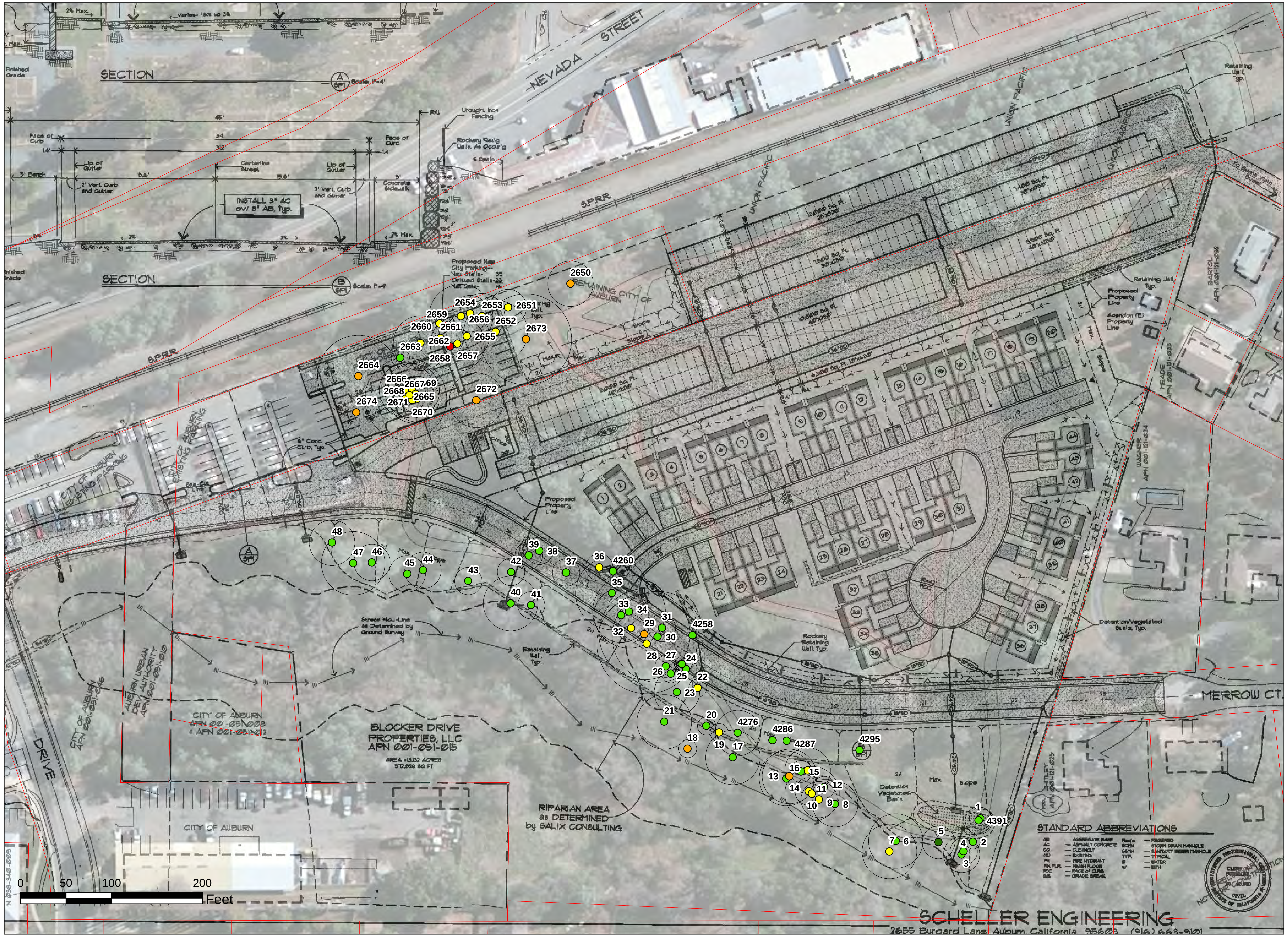
Arborist Rating AS OF Last Survey, 2017 or 2019
- 0 Dead
- 1 Extreme Structure or Health Problems
- 2 Major Structure or Health Problems
- 3 Fair - Minor Problems
- 4 Good - No Apparent Problems
- 5 Excellent

Sheet No.
TPP 1.0

BLOCKER DRIVE

Blocker Drive
Auburn, Placer County, CA

Date: 11/15/2021



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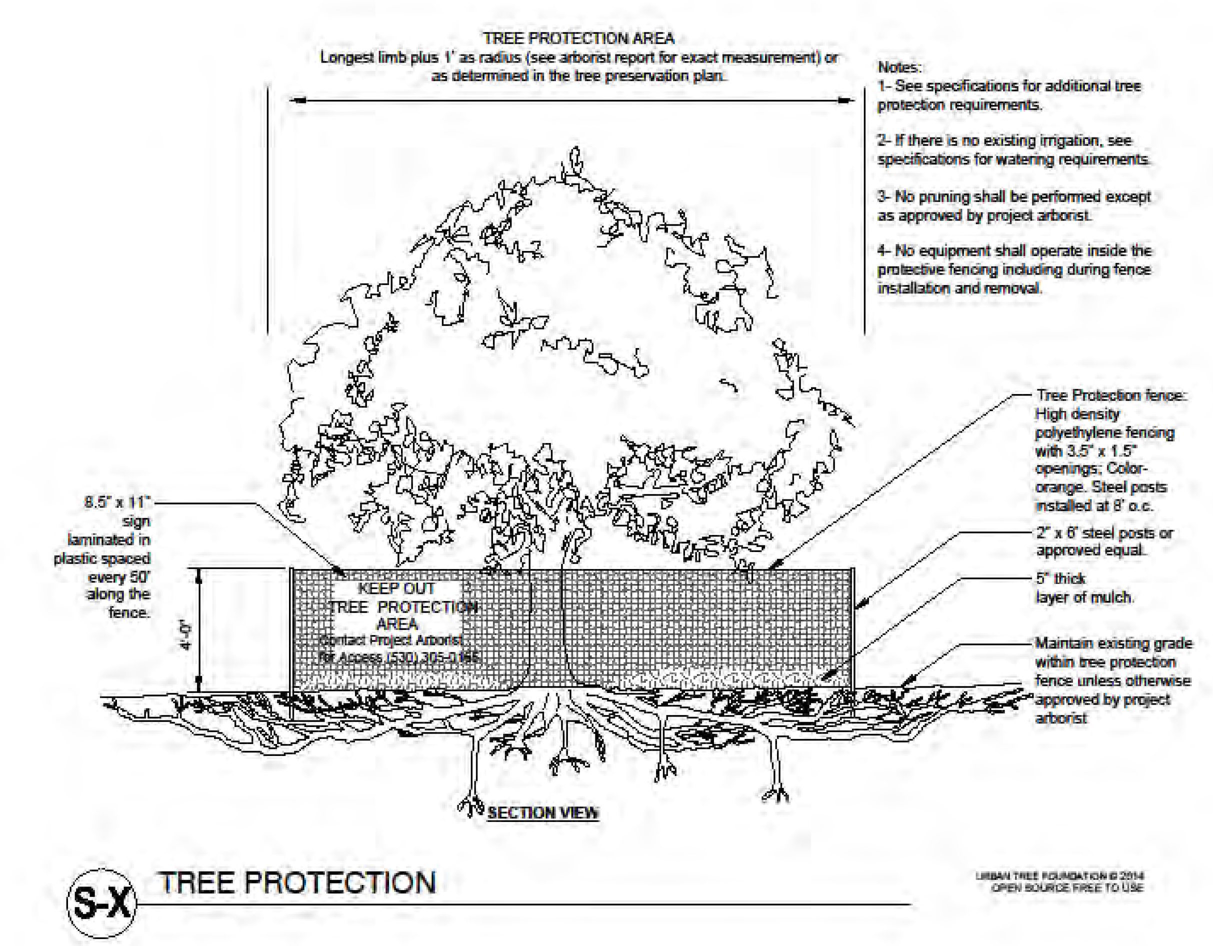
California Tree & Landscape Consulting, Inc.

359 Nevada Street, Suite 201
Auburn, CA 95603

TREE PROTECTION GENERAL REQUIREMENTS

1. The project arborist for this project is California Tree & Landscape Consulting. The primary contact information is Nicole Harrison (530) 305-0165. The project arborist may continue to provide expertise and make additional recommendations during the construction process if and when additional impacts occur or tree response is poor. Monitoring and construction oversight by the project arborist is recommended for all projects and required when a final letter of assessment is required by the jurisdiction.
2. The project arborist should inspect the exclusionary root protection fencing installed by the contractors prior to any grading and/or grubbing for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.
3. The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site.
4. No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
5. Clearly designate an area on the site that is outside of the protection area of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the protection zones of any trees on or off the site.
6. Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
7. Trenching, if required, inside the protected root zone shall be approved and/or supervised by the project arborist and may be required to be performed by hand, by a hydraulic or air spade, or other method which will place pipes underneath the roots without damage to the roots.
8. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.



TREE INVENTORY MAP

>Tree locations are approximate and were collected using apple iOS products.
>Property line information was downloaded from Placer County on 10/20/2021.
>Development plans provided by Scheller Engineering dated 07/20/2019.

Legend	Arborist Rating
Property Line	0 Dead
Measured Tree Canopy	1 Extreme Structure or Health Problems
	2 Major Structure or Health Problems
	3 Fair - Minor Problems
	4 Good - No Apparent Problems
	5 Excellent

BLOCKER DRIVE

Blocker Drive
Auburn, Placer County, CA

Sheet No.
TPP 1.0

Date: 2/2/2022

APPENDIX 2 – TREE INFORMATION DATA

Tag	Old Tag #	Protected by Code	Offsite	Species Common Name	*Species Botanical Name*	DBH	DSH	Canopy radius	Notes	Preserve/ Remove	Arborist Rating	Mitigation Rate	Mit Inches	Evaluation Date
1		Yes		Interior Live Oak	*Quercus wislizeni*	7	7	12	At Fenceline, leans out from under tree 4391	Proposed for Removal	3 Fair - Minor Problems	100%	7	Riparian, 1-2022
2		Yes	Yes	Valley Oak	Quercus lobata	6	6	8	10' offsite	Proposed for Removal	3 Fair - Minor Problems	100%	6	Riparian, 1-2022
3		Yes	Yes	Valley Oak	Quercus lobata	8	8	15	3' offsite, slight lean with correction	Proposed for Removal	3 Fair - Minor Problems	100%	8	Riparian, 1-2022
4		Yes	Yes	Valley Oak	Quercus lobata	10	10	20	5' offsite 15' of canopy over development site. Codon included bark at 4'. Measured at 18 inches	Proposed for Removal	3 Fair - Minor Problems	100%	10	Riparian, 1-2022
5		Yes		Valley Oak	Quercus lobata	10	10	18	Surrounded by blackberries, otherwise open grown canopy	Proposed for Removal	4 Good - No Apparent Problems	100%	10	Riparian, 1-2022
6		Yes		Valley Oak	Quercus lobata	20	20	30	20' off into blackberries, 30' to channel?	Proposed for Removal	3 Fair - Minor Problems	100%	20	Riparian, 1-2022
7		Yes		Pacific Willow (?)	*Salix sp.*	25	25	30	45', other side of channel	Proposed for Removal	2 Major Structure or Health Problems	50%	13	Riparian, 1-2022
8		Yes		Valley Oak	Quercus lobata	18	18	25	10' into berries some branch stubs but overall fair	Proposed for Removal	3 Fair - Minor Problems	100%	18	Riparian, 1-2022

9	Yes	Pacific Willow (?)	*Salix sp.*	12	12	20	30' into berries, large failures, leans	Proposed for Removal	2 Major Structure or Health Problems	50%	6	Riparian, 1-2022
10	Yes	Pacific Willow (?)	*Salix sp.*	20	20	30	30' into berries, large failures, leans With correction toward road	Proposed for Removal	2 Major Structure or Health Problems	50%	10	Riparian, 1-2022
11	Yes	Pacific Willow (?)	*Salix sp.*	10	10	15	35' into berries, Fairly upright with upper canopy die back	Proposed for Removal	2 Major Structure or Health Problems	50%	5	Riparian, 1-2022
12	Yes	Valley Oak	Quercus lobata	9	9	12	8' into berries, Upright, fair taper	Proposed for Removal	3 Fair - Minor Problems	100%	9	Riparian, 1-2022
13	Yes	Valley Oak	Quercus lobata	28	28	30	25' from Road, almost at channel, good canopy structure, stems may not be connected	Proposed for Removal	3 Fair - Minor Problems	100%	28	Riparian, 1-2022
14	Yes	Pacific Willow (?)	*Salix sp.*	13	13	30	20' from road, 10' to channel? At base of 13, significant lean toward road	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Riparian, 1-2022
15	Yes	California Buckeye	Aesculus californica	9	9	12	good farm for species, less than 10' from Road, 2' from fill	Proposed for Removal	3 Fair - Minor Problems	100%	9	Riparian, 1-2022
16	Yes	Blue Oak	Quercus douglasii	16	16	25	Trunk has fill from Road, bug bark large failure at 10'	Proposed for Removal	2 Major Structure or Health Problems	50%	8	Riparian, 1-2022

							and other dead stems in lower canopy					
17	Yes	Valley Oak	Quercus lobata	20	20	30	35' into berries, edge of channel must be close	Proposed for Removal	3 Fair - Minor Problems	100%	20	Riparian, 1-2022
18	Yes	Pacific Willow (?)	*Salix sp.*	12	12	10	35' from Road, edge of channel?, Mostly dead	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Riparian, 1-2022
19	Yes	Blue Oak	Quercus douglasii	7	7	10	Infill at edge of the road, poor codominant connection at 10' narrow canopy structure	Proposed for Removal	2 Major Structure or Health Problems	50%	4	Riparian, 1-2022
20	Yes	Valley Oak	Quercus lobata	7	7	10	15' to edge of the road, poor taper otherwise fair	Proposed for Removal	3 Fair - Minor Problems	100%	7	Riparian, 1-2022
21	Yes	Valley Oak	Quercus lobata	20	20	30	50' off-road, slight lean towards road, at edge of channel?	Proposed for Removal	3 Fair - Minor Problems	100%	20	Riparian, 1-2022
22	Yes	Valley Oak	Quercus lobata	7	7	10	10' off road probably 3' from fill, poor taper, one-sided canopy from suppression	Proposed for Removal	2 Major Structure or Health Problems	50%	4	Riparian, 1-2022
23	Yes	Interior Live Oak	*Quercus wislizeni*	10	10	25	30' off road under gray pine, one-sided canopy from suppression	Proposed for Removal	3 Fair - Minor Problems	100%	10	Riparian, 1-2022
24	Yes	Valley Oak	Quercus lobata	10	10	12	At edge of road, decline	Proposed for Removal	3 Fair - Minor Problems	100%	10	Riparian, 1-2022

							in lower canopy likely as a result of fill or root disease					
25	Yes	Valley Oak	Quercus lobata	7	7	8	5' off road, poor tape or otherwise fair tree	Proposed for Removal	3 Fair - Minor Problems	100%	7	Riparian, 1-2022
26	Yes	Valley Oak	Quercus lobata	6	6	10	30' from Road, grapevine understory, overall fair but poor taper	Proposed for Removal	3 Fair - Minor Problems	100%	6	Riparian, 1-2022
27	Yes	Valley Oak	Quercus lobata	8	8	12	30' from road tall with poor taper otherwise good	Proposed for Removal	3 Fair - Minor Problems	100%	8	Riparian, 1-2022
28	Yes	Valley Oak	Quercus lobata	35	35	55	30' from road, significant included bark at approximately 20', lower limbs bowl over 4 to 6 nch deadwood throughout lower canopy, fair on top	Proposed for Removal	2 Major Structure or Health Problems	50%	18	Riparian, 1-2022
29	Yes	Blue Oak	Quercus douglasii	25	25	50	Bows out from under number 28 to over existing drive	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Riparian, 1-2022
30	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	50	10â€™ to rd	Proposed for Removal	3 Fair - Minor Problems	100%	7	Riparian, 1-2022
31	Yes	Interior Live Oak	*Quercus wislizeni*	10	10	15	Previously tagged but	Proposed for Removal	3 Fair - Minor Problems	100%	10	Riparian, 1-2022

							scratched off. Edge of fill for road, codon at 5' included bark jagged removal cut with decay on roadside				
32	Yes	Valley Oak	Quercus lobata	10	10	15	Behind bushes and other trees, appears to have poor structure and die back. 80' to road	Proposed for Removal	2 Major Structure or Health Problems	50%	5	Riparian, 1-2022
33	Yes	Blue Oak	Quercus douglasii	15	15	30	Behind bushes and other trees, appears to have fair structure. 80' to road	Proposed for Removal	3 Fair - Minor Problems	100%	15	Riparian, 1-2022
34	Yes	Valley Oak	Quercus lobata	25	25	40	50' to road, over story tree lower canopy dead branches	Proposed for Removal	3 Fair - Minor Problems	100%	25	Riparian, 1-2022
35	Yes	Valley Oak	Quercus lobata	25	25	40	40' to road, over story tree lower canopy dead branches	Proposed for Removal	3 Fair - Minor Problems	100%	25	Riparian, 1-2022
36	Yes	Interior Live Oak	*Quercus wislizeni*	10	10	15	hit by falling tree, 30' to road?	Proposed for Removal	2 Major Structure or Health Problems	50%	5	Riparian, 1-2022
37	Yes	Valley Oak	Quercus lobata	25	25	15	Over story, 50' to road	Proposed for Removal	3 Fair - Minor Problems	100%	25	Riparian, 1-2022
38	Yes	Interior Live Oak	*Quercus wislizeni*	5, 5	10	15	under story, 5' to road	Proposed for Removal	3 Fair - Minor Problems	100%	10	Riparian, 1-2022
39	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	15	under story, 10' to road	Proposed for Removal	3 Fair - Minor Problems	100%	6	Riparian, 1-2022

40		Yes	Valley Oak	Quercus lobata	25	25	30	Mid story, 50' to road	Proposed for Removal	3 Fair - Minor Problems	100%	25	Riparian, 1-2022
41		Yes	Valley Oak	Quercus lobata	10	10	15	under story, 50' to road	Proposed for Removal	3 Fair - Minor Problems	100%	10	Riparian, 1-2022
42		Yes	Valley Oak	Quercus lobata	30	30	15	Over story, 15' to road	Proposed for Removal	3 Fair - Minor Problems	100%	30	Riparian, 1-2022
43		Yes	Interior Live Oak	*Quercus wislizeni*	7, 7	14	15	Buried in blackberries 40' to road	Proposed for Removal	3 Fair - Minor Problems	100%	14	Riparian, 1-2022
44		Yes	White Alder	Alnus rhombifolia (?)	12	12	20	Riparian species, 60' to road	Proposed for Removal	3 Fair - Minor Problems	100%	12	Riparian, 1-2022
45		Yes	White Alder	Alnus rhombifolia (?)	12	12	20	Riparian species, 70' to road	Proposed for Removal	3 Fair - Minor Problems	100%	12	Riparian, 1-2022
46		Yes	Interior Live Oak	*Quercus wislizeni*	12	12	20	50' to road?	Proposed for Removal	3 Fair - Minor Problems	100%	12	Riparian, 1-2022
47		Yes	Interior Live Oak	*Quercus wislizeni*	25	25	35	50' to road, no visibility	Proposed for Removal	3 Fair - Minor Problems	100%	25	Riparian, 1-2022
48		Yes	Interior Live Oak	*Quercus wislizeni*	15	15	25	30', may have been included on the last between two parking lot trees	Proposed for Removal	3 Fair - Minor Problems	100%	15	Riparian, 1-2022
902		Yes	Interior Live Oak	*Quercus wislizeni*	12, 10, 8, 5	35		good flare, multi trunk @ 3', includeduded bark, medium crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	18	July 2019, Annex Data
903	4324	Yes	Interior Live Oak	*Quercus wislizeni*	12	12		leans W, at fence line, 1-sided crown, dead branches to 2", medium crown density	Proposed for Removal	3 Fair - Minor Problems	100%	12	July 2019, Annex Data
904	4323	Yes	Interior Live Oak	*Quercus wislizeni*	6	6		at base of 905, leans E, 1-sided crown, thin crown, dead	Proposed for Removal	2 Major Structure or Health Problems	50%	3	July 2019, Annex Data

							branches to 1"					
905	4322	Yes	Interior Live Oak	*Quercus wislizeni*	12	12	Normal flare, codominant junction at 3.5', included bark, medium crown density, dead branches to 1", barbed wire through trunk	Proposed for Removal	2 Major Structure or Health Problems	50%	6	July 2019, Annex Data
906		Yes	Interior Live Oak	*Quercus wislizeni*	10	10	trunk wound at base W, low branching, includeduded bark at 3', medium crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	5	July 2019, Annex Data
910		Yes	Blue Oak	*Quercus douglasii*	9	9	good flare, codominant junction at 12', medium crown density, dead branches to 2", symmetric	Proposed for Removal	3 Fair - Minor Problems	100%	9	July 2019, Annex Data
911		Yes	Interior Live Oak	*Quercus wislizeni*	9	9	outside fence to E, codominant junction at 2', included bark, against fence post, thin crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data
912		Yes	Interior Live Oak	*Quercus wislizeni*	7	7	outside prop to E, codominant junction at 3.5', buried flare, thin crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data

913	Yes	Blue Oak	*Quercus douglasii*	7	7	good flare, 1-sided crown W, medium crown density,	Proposed for Removal	3 Fair - Minor Problems	100%	7	July 2019, Annex Data
914	Yes	Interior Live Oak	*Quercus wislizeni*	12	12	codominant junction at 2', lean W, included bark, normal flare , medium crown density, dead branches to 3"	Proposed for Removal	2 Major Structure or Health Problems	50%	6	July 2019, Annex Data
915	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	flare on slope, crowded canopy, medium crown density,	Proposed for Removal	3 Fair - Minor Problems	100%	6	July 2019, Annex Data
916	Yes	Blue Oak	*Quercus douglasii*	6	6	top broken off by failed big pine	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	July 2019, Annex Data
917	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	crook at flare, codominant junction at 5', medium crown density,	Proposed for Removal	3 Fair - Minor Problems	100%	6	July 2019, Annex Data
918	Yes	Interior Live Oak	*Quercus wislizeni*	8	8	outside fence, normal flare, codominant junction at 1', 3 leaders, low branches turn up, low crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data
919	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	outside fence, 1-sided crown S, codominant leaders at 6',	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data

						included bark, medium crown density					
920	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	outside fence, codominant junction at 1', included bark, 1-sided crown SE	Proposed for Removal	2 Major Structure or Health Problems	50%	3	July 2019, Annex Data
921	Yes	Interior Live Oak	*Quercus wislizeni*	9	9	codominant junction at base & 6", on fence line, barbed wire thru trunk, leans outward, too much end weight, low crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data
922	Yes	Interior Live Oak	*Quercus wislizeni*	8	8	buried flare codominant junction at 6", included bark, 1-sided crown leans W, medium crown density,	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data
923	Yes	Interior Live Oak	*Quercus wislizeni*	14	14	codominant junction at 18", normal flare, 1-sided crown N, at fence post, medium crown density, small dense dead branches	Proposed for Removal	2 Major Structure or Health Problems	50%	7	July 2019, Annex Data
924	Yes	Blue Oak	*Quercus douglasii*	6	6	at fence line, low branches, medium crown	Proposed for Removal	3 Fair - Minor Problems	100%	6	July 2019, Annex Data

						density, dead branches to 1"					
925	Yes	Valley Oak	*Quercus lobata*	9	9	below road, good flare, codominant junction at 4', vertical growth, medium crown density, small dead branches	Proposed for Removal	3 Fair - Minor Problems	100%	9	July 2019, Annex Data
926	Yes	Valley Oak	*Quercus lobata*	7	7	at edge of road, good flare, codominant junction at 10', 1-sided crown W, medium crown density	Proposed for Removal	3 Fair - Minor Problems	100%	7	July 2019, Annex Data
927	Yes	Valley Oak	*Quercus lobata*	10	10	codominant junction at base, broken 3rd stem, swollen base, upright growth, good crown density, small dead branches	Proposed for Removal	2 Major Structure or Health Problems	50%	5	July 2019, Annex Data
928	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	good flare, codominant junction at 9', upright growth, medium crown density, poor low pruning, 1-sided crown	Proposed for Removal	3 Fair - Minor Problems	100%	6	July 2019, Annex Data

						S, small dead branches					
928	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	depressed flare, low W lateral, codominant junction at 4.5', medium crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	3	July 2019, Annex Data
930	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	low lateral at base, swollen flare, included bark, medium crown density, upright growth	Proposed for Removal	3 Fair - Minor Problems	100%	7	July 2019, Annex Data
931	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	codominant junction at base, included bark, leans S, good crown density, alongside road	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data
932	Yes	Interior Live Oak	*Quercus wislizeni*	8	8	codominant junction at 2', thin crown density, growing next to pine	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data
933	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	at N end, good flare, vertical growth, medium crown density, small dead branches	Proposed for Removal	3 Fair - Minor Problems	100%	6	July 2019, Annex Data
934	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	buried flare, bend in stem,	Proposed for Removal	2 Major Structure or	50%	4	July 2019, Annex Data

						1-sided crown N 45 deg		Health Problems			
935	Yes	Interior Live Oak	*Quercus wislizeni*	11	11	trunk leans 30 deg E, codominant junction at 3.5', growing upward, good crown density, small dead branches	Proposed for Removal	2 Major Structure or Health Problems	50%	6	July 2019, Annex Data
936	Yes	Blue Oak	*Quercus douglasii*	10	10	good flare, codominant junction at 15', good crown density, small dead branches	Proposed for Removal	4 Good - No Apparent Problems	100%	10	July 2019, Annex Data
937	Yes	Interior Live Oak	*Quercus wislizeni*	8	8	leans S 45 deg, 1-sided crown S, medium crown density, small dead branches	Proposed for Removal	2 Major Structure or Health Problems	50%	4	July 2019, Annex Data
938	Yes	Interior Live Oak	*Quercus wislizeni*	9	9	codominant junction at 1', included bark, 4 leaders from 2' & 4', crowded vertical growth, small dead branches, good crown density	Proposed for Removal	2 Major Structure or Health Problems	50%	5	July 2019, Annex Data
939	Yes	Interior Live Oak	*Quercus wislizeni*	10	10	outside fence, low laterals at 1', lean E, thin crown	Proposed for Removal	2 Major Structure or Health Problems	50%	5	July 2019, Annex Data

							density, small dead branches					
940	Yes	Interior Live Oak	*Quercus wislizeni*	6	6		outside of fence, 1 stem leans W at 45 deg onto site, codominant junction at base, medium crown density, small dead branches	Proposed for Removal	2 Major Structure or Health Problems	50%	3	July 2019, Annex Data
941	Yes	Interior Live Oak	*Quercus wislizeni*	9	9		outside fence to S, codominant junction at 4', medium crown density, small dead branches	Proposed for Removal	3 Fair - Minor Problems	100%	9	July 2019, Annex Data
2650	NO	Foothill Pine	*Pinus sabiniana*	28	28	25	Extreme decay trunk cavity south, large dead multi-stem. Remove.	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Parcel 41, 1-2022
2651	NO	Foothill Pine	*Pinus sabiniana*	20	20	20	Suppressed, canopy extreme lean south.	Proposed for Removal	2 Major Structure or Health Problems	50%	10	Parcel 41, 1-2022
2652	NO	Foothill Pine	*Pinus sabiniana*	22	22	35	Suppressed, leans south. Canopy crowded, severe previous failures, bark decay.	Proposed for Removal	2 Major Structure or Health Problems	50%	11	Parcel 41, 1-2022
2653	NO	Foothill Pine	*Pinus sabiniana*	14	14	25	Suppressed, leans east.	Proposed for Removal	2 Major Structure or	50%	7	Parcel 41, 1-2022

							Canopy crowded, severe previous failures, severe dieback. Poor crown density.		Health Problems			
2654	NO	Foothill Pine	*Pinus sabiniana*	19	19	20	Suppressed, Canopy crowded, severe dieback. Forks at 6 feet. Poor crown density.	Proposed for Removal	2 Major Structure or Health Problems	50%	10	Parcel 41, 1-2022
2655	NO	Foothill Pine	*Pinus sabiniana*	20	20	25	Suppressed, severe lean south. Canopy crowded, severe dieback. Poor crown density.	Proposed for Removal	2 Major Structure or Health Problems	50%	10	Parcel 41, 1-2022
2656	NO	Foothill Pine	*Pinus sabiniana*	24	24	35	Suppressed, one-sided canopy lean south. Canopy crowded, severe dieback. Poor crown density. Forks at 12 feet.	Proposed for Removal	2 Major Structure or Health Problems	50%	12	Parcel 41, 1-2022
2657	NO	Foothill Pine	*Pinus sabiniana*	10	10	30	Suppressed, severe lean south. Canopy crowded, severe dieback. Poor crown density.	Proposed for Removal	2 Major Structure or Health Problems	50%	5	Parcel 41, 1-2022

2658	NO	Foothill Pine	*Pinus sabiniana*	16	16	0	Standing Dead	Proposed for Removal	0 Dead	0	0	Parcel 41, 1-2022
2659	NO	Foothill Pine	*Pinus sabiniana*	30	30	0	Standing Dead	Proposed for Removal	0 Dead	0	0	Parcel 41, 1-2022
2660	Yes	Interior Live Oak	*Quercus wislizeni*	10	10	12	Measured at 6 inches. Forks at 12 inches. Growing under dead tree. Poor structure.	Proposed for Removal	2 Major Structure or Health Problems	50%	5	Parcel 41, 1-2022
2661	NO	Foothill Pine	*Pinus sabiniana*	10	10	25	Suppressed, canopy crowded. Severe lean north, dieback, poor crown density.	Proposed for Removal	2 Major Structure or Health Problems	50%	5	Parcel 41, 1-2022
2662	NO	Foothill Pine	*Pinus sabiniana*	35	35	30	Forks at 15 feet, pitching from inclusion seam. Previous failures, moderate dieback.	Proposed for Removal	2 Major Structure or Health Problems	50%	18	Parcel 41, 1-2022
2663	Yes	Blue Oak		8	8	10	Buried flare, good crown density. Upright structure.	Proposed for Removal	3 Fair - Minor Problems	100%	8	Parcel 41, 1-2022
2664	NO	Foothill Pine	*Pinus sabiniana*	36	36	45	Measured at 1â€™. Multiple limb break wounds w/decay. Trunk cavity east at 36â€�. Codominant extended heavy	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Parcel 41, 1-2022

							branches closely attached lower trunk. 20â€ limb wrapping around trunk w/ inclusion growing over recycling bins in parking lot north. Remove Tree.					
2665	NO	Foothill Pine	*Pinus sabiniana*	30	30	45	Severe lean north. 3 large codominant stems closely attached at 8 feet. Heavy extended branches.	Proposed for Removal	2 Major Structure or Health Problems	50%	15	Parcel 41, 1-2022
2666	NO	Tree of heaven	*Ailanthus altissima*	14	14	30	Severe lean north, suppressed. 1 of 2 main stems broken off at 10 feet. Poor structure.	Proposed for Removal	2 Major Structure or Health Problems	50%	7	Parcel 41, 1-2022
2667	Yes	Valley Oak		11	11	18	Growing at base of large pine. Suppressed, one sided canopy south. Height stunted.	Proposed for Removal	2 Major Structure or Health Problems	50%	6	Parcel 41, 1-2022
2668	NO	Tree of heaven	*Ailanthus altissima*	14	14	30	Severe lean south, suppressed. Extremely Poor structure.	Proposed for Removal	2 Major Structure or Health Problems	50%	7	Parcel 41, 1-2022

2669	NO	Foothill Pine	*Pinus sabiniana*	15	15	20	Significant lean south. Suppressed, canopy crowded. Poor crown ratio.	Proposed for Removal	2 Major Structure or Health Problems	50%	8	Parcel 41, 1-2022
2670	NO	Foothill Pine	*Pinus sabiniana*	18	18	25	Significant lean west. Suppressed, canopy crowded. Forks at 15 feet.	Proposed for Removal	2 Major Structure or Health Problems	50%	9	Parcel 41, 1-2022
2671	Yes	Valley Oak		14	14	25	Poor structure. Suppressed, one sided canopy south. Height stunted.	Proposed for Removal	2 Major Structure or Health Problems	50%	7	Parcel 41, 1-2022
2672	NO	Foothill Pine	*Pinus sabiniana*	28	28	30	Forks at 6 feet. Larger, 18" stem dead south. Remove Tree.	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Parcel 41, 1-2022
2673	NO	Foothill Pine	*Pinus sabiniana*	26	26	50	Severe lean east. Forks at 15 feet. Western stem at base remove, may have compromised root structure. Remove Tree or root crown excavation.	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Parcel 41, 1-2022
2674	Yes	Interior Live Oak	*Quercus wislizeni*	12,11, 11, 10, 10, 8, 5, 5, 5, 3,3	83		Multi-stem at 24"�. Severe disease and canker issues lower trunk,	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	Parcel 41, 1-2022

							fluxing. Half canopy is dead, poor twig elongation. Remove tree.					
4201	Yes	Fremont Cottonwood	*Populus fremontii*	11	11	19	Steep slope, blackberries at base, fill to NW, codominant leader @ 15', fair leaf surface	Proposed for Removal	4 Good - No Apparent Problems	100%	11	May 2017
4202	NO	Deodar Cedar	*Cedrus deodara*	6	6	9	7' from back of curb	Proposed for Removal	5 Excellent	150%	9	May 2017
4203	NO	Deodar Cedar	*Cedrus deodara*	7	7	8	Leans from base, broken stake still attached, correction @ 6', ants	Proposed for Removal	3 Fair - Minor Problems	100%	7	May 2017
4204	NO	Foothill Pine	*Pinus sabiniana*	14	14	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4204	Yes	Valley Oak	*Quercus lobata*	11 at b	11	12	Crossing limbs with 4303, bark sloughing off, mostly dead, very poor structure	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4205	Yes	Valley Oak	*Quercus lobata*	8	8	10	Codominant leader @ 7', included bark ants, fair leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	8	May 2017
4206	Yes	Valley Oak	*Quercus lobata*	12	12	0	Good flare, good leaf surface	Proposed for Removal	4 Good - No Apparent Problems	100%	12	May 2017
4207	NO	Foothill Pine	*Pinus sabiniana*	8	8	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4208	Yes	Interior Live Oak	*Quercus wislizeni*	8	8	15	Codominant leader @ 7',	Proposed for Removal	3 Fair - Minor Problems	100%	8	May 2017

							unbalanced canopy to E good leaf surface					
4209	NO	Foothill Pine	*Pinus sabiniana*	32	32	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4210	Yes	Blue Oak	*Quercus douglasii*	10	10	25	Good flare, codominant leader @7' & 8', horizontal limb @ 8' to S, epicormic growth , fair leaf surface, 1-4" dead wood	Proposed for Removal	3 Fair - Minor Problems	100%	10	May 2017
4211	NO	Foothill Pine	*Pinus sabiniana*	16	16	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4212	NO	Foothill Pine	*Pinus sabiniana*	11	11	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4214	Yes	Interior Live Oak	*Quercus wislizeni*	11 @ base	11	20	Codominant leader @ 1' multi stem tree, unbalanced canopy to S, good leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	11	May 2017
4214	NO	Foothill Pine	*Pinus sabiniana*	17	17	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4215	NO	Foothill Pine	*Pinus sabiniana*	9	9	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4216	NO	Foothill Pine	*Pinus sabiniana*	25	25	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4217	NO	Foothill Pine	*Pinus sabiniana*	12	12	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4218	NO	Foothill Pine	*Pinus sabiniana*	8	8	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4219	NO	Foothill Pine	*Pinus sabiniana*	27 @ 3'	27	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4220	NO	Foothill Pine	*Pinus sabiniana*	8	8	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017

4221	NO	Coast live oak	*Quercus agrifolia*	6	6	10	Planted as Parking lot tree, fair leaf surface, small leaves	Proposed for Removal	3 Fair - Minor Problems	100%	6	May 2017
4222	Yes	Valley Oak	*Quercus lobata*	5	5	10	Parking lot planted, stakes still attached, narrow attachment at 7' E rubbing, fair leaf surface	Proposed for Removal	4 Good - No Apparent Problems	100%	5	May 2017
4223	Yes	Valley Oak	*Quercus lobata*	6	6	12	Parking lot planting, stakes still attached, good leaf surface	Proposed for Removal	5 Excellent	150%	9	May 2017
4224	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	10	Parking lot tree, stakes still attached, codominant leader at 7', recent canopy raise, good leaf surface	Preserved	4 Good - No Apparent Problems	100%		May 2017
4225	Yes	Valley Oak	*Quercus lobata*	4	4	12	Parking lot planting, stakes still attached, codominant leader at 7' narrowly attached, unbalanced canopy SE, good leaf surface - powdery mildew	Proposed for Removal	3 Fair - Minor Problems	100%	4	May 2017
4226	NO	Foothill Pine	*Pinus sabiniana*	21	21	0	Old tag #900, Not evaluated	Preserved	Not Protected	0%		May 2017

4227	Yes	Valley Oak	*Quercus lobata*	6	6	15	Parking lot planting, stakes still attached, leans SE, good leaf surface	Proposed for Removal	4 Good - No Apparent Problems	100%	6	May 2017
4228	Yes	Interior Live Oak	*Quercus wislizeni*	10	10	15	blackberries, not evaluated, not tagged	Proposed for Removal	3 Fair - Minor Problems	100%	10	May 2017
4230	Yes	Valley Oak	*Quercus lobata*	5	5	10	Tag 4229 not used, Parking lot tree, stakes still attached, buried in blackberries, fair leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	5	May 2017
4231	NO	Coast live oak	*Quercus agrifolia*	8	8	12	girdling stakes, canker at base E - check SOD, small leaves, dense canopy	Proposed for Removal	3 Fair - Minor Problems	100%	8	May 2017
4232	Yes	Pacific Willow (?)	*Salix sp.*	1, 2, 3, 3, 3, 2, 3, 3	20	15	buried in blackberries, some dead lower limbs	Proposed for Removal	3 Fair - Minor Problems	100%	20	May 2017
4233	Yes	Valley Oak	*Quercus lobata*	6	6	12	Parking lot planting, stakes still attached, poor structure at 15', fair leaf surface, powdery mildew	Proposed for Removal	3 Fair - Minor Problems	100%	6	May 2017
4234	NO	Tree of heaven	*Ailanthus altissima*	12 @ 2'	12	25	Blackberries at base, codominant leader at 3'	Proposed for Removal	2 Major Structure or Health Problems	50%	6	May 2017

							included bark, good leaf surface, some dead twigs					
4235	Yes	Interior Live Oak	*Quercus wislizeni*	17, 17	34	35	Steep slope, buried in blackberries, main stems cross, vertical structure-interesting, failure would be into creek, broadleaf mistletoe, 1-4" dead wood	Proposed for Removal	2 Major Structure or Health Problems	50%	17	May 2017
4236	Yes	Valley Oak	*Quercus lobata*	30	30	45	Not evaluated, not tagged	Proposed for Removal	4 Good - No Apparent Problems	100%	30	May 2017
4237	Yes	Interior Live Oak	*Quercus wislizeni*	2, 4, 3, 4 all at 1'	13	15	Codominant leader at base and 1', shrub form, good leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	13	May 2017
4238	NO	Foothill Pine	*Pinus sabiniana*	15	15	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4239	Yes	Valley Oak	*Quercus lobata*	15	15	0	Limb at 2' N, grey pine at base rubbing at 15', codominant leader at 10' and 12' in S stem with included bark, epicormic growth, fair leaf surface, powdery mildew	Proposed for Removal	4 Good - No Apparent Problems	100%	15	May 2017
4240	NO	Foothill Pine	*Pinus sabiniana*	10	10	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017

4241	NO	Foothill Pine	*Pinus sabiniana*	9	9	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4242	NO	Foothill Pine	*Pinus sabiniana*	11	11	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4243	NO	Foothill Pine	*Pinus sabiniana*	11	11	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4244	Yes	Interior Live Oak	*Quercus wislizeni*	7 @ 3'	7	17	Good flare, codominant leader at 3' wide, small crossing limbs, fair leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	7	May 2017
4245	NO	Foothill Pine	*Pinus sabiniana*	8	8	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4246	NO	Foothill Pine	*Pinus sabiniana*	35	35	0	Tag low under debris and blackberry - no access at 6'	Proposed for Removal	Not Protected	0%	0	May 2017
4247	NO	Foothill Pine	*Pinus sabiniana*	22	22	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4248	Yes	Interior Live Oak	*Quercus wislizeni*	45	45	35	Too much dead wood, too many failures	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4249	Yes	Interior Live Oak	*Quercus wislizeni*	11 @ 1'	11	30	Blackberries, horizontal structure, good leaf surface (5" vo in patch)	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4250	NO	Foothill Pine	*Pinus sabiniana*	27 @ 1'	27	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4251	NO	Foothill Pine	*Pinus sabiniana*	17, 28, 18, 18	81	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4252	Yes	Valley Oak	*Quercus lobata*	9	9	20	Codominant leader at 8', epicormic growth, fair leaf surface, dead twigs low	Proposed for Removal	3 Fair - Minor Problems	100%	9	May 2017

4253	Yes	Interior Live Oak	*Quercus wislizeni*	62	62	50	Blackberries, cavity and advanced decay under base N, 4-10" dead wood and failure stubs, good leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	31	May 2017
4254	NO	Foothill Pine	*Pinus sabiniana*	20	20	0	Not tagged, 35' E of 4253	Proposed for Removal	Not Protected	0%	0	May 2017
4255	NO	Foothill Pine	*Pinus sabiniana*	17	17	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4256	Yes	Valley Oak	*Quercus lobata*	7	7	15	Codominant leader at 8' w dead wood thru center and included bark, poor leaf surface, epicormic growth	Proposed for Removal	3 Fair - Minor Problems	100%	7	May 2017
4257	NO	Foothill Pine	*Pinus sabiniana*	9	9	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4258	Yes	Interior Live Oak	*Quercus wislizeni*	6 @ 2'	6	15	Good flare, codominant leader at 3', fair leaf surface	Proposed for Removal	4 Good - No Apparent Problems	100%	6	May 2017
4259	Yes	Interior Live Oak	*Quercus wislizeni*	8 at 2'	8	15	Fill at base, structural fracture 2-3' at codominant leader removal	Proposed for Removal	2 Major Structure or Health Problems	50%	4	May 2017
4260	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	15	Good flare, lean and unbalanced canopy W, good leaf surface,	Proposed for Removal	3 Fair - Minor Problems	100%	6	May 2017

							foamy bark canker?					
4261	NO	Foothill Pine	*Pinus sabiniana*	11	11	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4262	NO	Foothill Pine	*Pinus sabiniana*	10	10	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4263	NO	Foothill Pine	*Pinus sabiniana*	10	10	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4264	NO	Foothill Pine	*Pinus sabiniana*	12	12	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4265	NO	Foothill Pine	*Pinus sabiniana*	16	16	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4266	Yes	Blue Oak	*Quercus douglasii*	13	13	20	Codominant leader at 5' and 8', included bark	Proposed for Removal	3 Fair - Minor Problems	100%	13	May 2017
4267	Yes	Valley Oak	*Quercus lobata*	12	12	23	Codominant leader at 20', good leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	12	May 2017
4268	Yes	Interior Live Oak	*Quercus wislizeni*	9	9	15	Leans to NW, suppressed, understory, poor structure, codominant leader at 5	Proposed for Removal	2 Major Structure or Health Problems	50%	5	May 2017
4269	Yes	Interior Live Oak	*Quercus wislizeni*	20	20	28	Mostly dead, codominant leader at 4',7, included bark	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4270	Yes	Valley Oak	*Quercus lobata*	6	6	8	Powdery milldew, good structure	Proposed for Removal	2 Major Structure or Health Problems	50%	3	May 2017
4271	Yes	Blue Oak	*Quercus douglasii*	23	23	32	Powdery mildew, codominant leader at 5' multi stem, included bark, past failure with decay,	Proposed for Removal	3 Fair - Minor Problems	100%	23	May 2017

							epicormic growth					
4272	Yes	Blue Oak	*Quercus douglasii*	20	20	30	Codominant leader at 8' into many, included bark, narrow attachment in canopy, epicormic growth, powdery mildew, good leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	20	May 2017
4273	Yes	Blue Oak	*Quercus douglasii*	10	10	6	3 stems-4,3,3-codominant leader at base to 1', included bark, previous cuts, next to road, compaction, poor structure	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4274	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	12	Base not visible, codominant leader at 5', included bark, sparse canopy, small old pruning cut, next to road, compaction	Proposed for Removal	2 Major Structure or Health Problems	50%	4	May 2017
4275	Yes	Blue Oak	*Quercus douglasii*	7	7	10	Codominant leader at 6, included bark, epicormic growth, powdery mildew, sparse canopy	Proposed for Removal	3 Fair - Minor Problems	100%	7	May 2017

4276	Yes	Interior Live Oak	*Quercus wislizeni*	9, 11	20	25	Codominant leader at base, 9" stem leans over road, old pruning cuts, blackberries at base, good leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	10	May 2017
4277	Yes	Valley Oak	*Quercus lobata*	12	12	22	Codominant leader at 5', mistletoe dead, good leaf surface, powdery mildew, epicormic growth	Proposed for Removal	4 Good - No Apparent Problems	100%	12	May 2017
4278	Yes	Blue Oak	*Quercus douglasii*	14	14	28	Wire imbedded in the trunk, codominant leader at 14', U-shaped crotch, small dead wood in canopy, and narrow attachments, powdery mildew, poor leaf surface-fungi	Proposed for Removal	3 Fair - Minor Problems	100%	14	May 2017
4279	Yes	Blue Oak	*Quercus douglasii*	19	19	39	Codominant leader at 6', U-shaped crotch, large branches balanced, some large crossing limbs-ok, slight lean to N, dead wood	Proposed for Removal	3 Fair - Minor Problems	100%	19	May 2017

							1- 4" with fungi, good tree					
4280	Yes	Blue Oak	*Quercus douglasii*	19	19	38	Codominant leader at 8', included bark, 1-4" dead wood with fungi, good leaf surface, powdery mildew,	Proposed for Removal	3 Fair - Minor Problems	100%	19	May 2017
4281	NO	Foothill Pine	*Pinus sabiniana*	27	27	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4282	Yes	Blue Oak	*Quercus douglasii*	14	14	0	Poor taper, codominant leader at 20', included bark, fair leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	14	May 2017
4283	Yes	Blue Oak	*Quercus douglasii*	16 at 2	16	25	4" interior live oak growing at base, codominant leader at 4', slight included bark, unbalanced canopy to N, epicormic growth, poor leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	8	May 2017
4284	Yes	Interior Live Oak	*Quercus wislizeni*	9 at b	9	10	Rock at base, codominant leader at 1', cavity at codominant leader with decay, narrow attachments in canopy	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4285	Yes	Blue Oak	*Quercus douglasii*	10	10	18	Codominant leader at 14',	Proposed for Removal	2 Major Structure or	50%	5	May 2017

							20', dead wood, poor leaf surface		Health Problems			
4286	Yes	Blue Oak	*Quercus douglasii*	14 at b	14	25	Abnormal trunk, codominant leader at 3', poor taper, epicormic growth, poor leaf surface, dead wood, 8' from road	Proposed for Removal	3 Fair - Minor Problems	100%	14	May 2017
4287	Yes	Blue Oak	*Quercus douglasii*	20	20	34	Codominant leader at 6', well balanced canopy, epicormic growth, powdery mildew, poor leaf surface, 1" dead wood	Proposed for Removal	3 Fair - Minor Problems	100%	20	May 2017
4288	Yes	Blue Oak	*Quercus douglasii*	8	8	12	Codominant leader at 6', 7', mistletoe, epicormic growth, powdery mildew, 1" dead wood, good leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	8	May 2017
4289	NO	Foothill Pine	*Pinus sabiniana*	9	9	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4290	Yes	Blue Oak	*Quercus douglasii*	11 at b	11	12	Codominant leader at 1',5', u crotch, 1" dead wood, epicormic growth, powdery mildew,	Proposed for Removal	2 Major Structure or Health Problems	50%	6	May 2017

4291	Yes	Interior Live Oak	*Quercus wislizeni*	10,9	19	17	Rock at base, codominant leader at 1', crossing limbs, mistletoe, good leaf surface,	Proposed for Removal	2 Major Structure or Health Problems	50%	10	May 2017
4292	Yes	Blue Oak	*Quercus douglasii*	6	6	8	Codominant leader at 4', included bark, fair leaf surface, 1" dead wood	Proposed for Removal	3 Fair - Minor Problems	100%	6	May 2017
4293	Yes	Blue Oak	*Quercus douglasii*	9,5	14	10	Codominant leader at base and 3', epicormic growth, 1" dead wood, fair leaf surface, powdery mildew	Proposed for Removal	2 Major Structure or Health Problems	50%	7	May 2017
4295	Yes	Blue Oak	*Quercus douglasii*	29	29	42	Good tree, codominant leader at 7', u crotch, fair leaf surface, powdery mildew, dead wood	Proposed for Removal	4 Good - No Apparent Problems	100%	29	May 2017
4295	Yes	Valley Oak	*Quercus lobata*	6	6	9	Broadleaf mistletoe, codominant leader at 12'	Proposed for Removal	4 Good - No Apparent Problems	100%	6	May 2017
4296	Yes	Valley Oak	*Quercus lobata*	6	6	10	Codominant leader at 6', broadleaf mistletoe	Proposed for Removal	4 Good - No Apparent Problems	100%	6	May 2017
4297	NO	Foothill Pine	*Pinus sabiniana*	16,16	34	0	Not evaluated	Preserved	Not Protected	0%		May 2017
4299	NO	Foothill Pine	*Pinus sabiniana*	10, 11	21	0	Not evaluated	Preserved	Not Protected	0%		May 2017

4300	Yes	Valley Oak	*Quercus lobata*	8	8	14	Broadleaf mistletoe, 1" dead wood, good leaf surface, codominant leader at 10'	Proposed for Removal	3 Fair - Minor Problems	100%	8	May 2017
4301	Yes	Interior Live Oak	*Quercus wislizeni*	17 at b	17	23	Codominant leader at 2', 4', included bark, narrow attachment in canopy, good leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	17	May 2017
4302	Yes	Valley Oak	*Quercus lobata*	13	13	17	Epicormic growth, codominant leader at 7', u crotch, narrow attachment in canopy, powdery mildew, fair leaf surface	Proposed for Removal	4 Good - No Apparent Problems	100%	13	May 2017
4303	Yes	Blue Oak	*Quercus douglasii*	7 at b	7	6	Very poor structure, suppressed, under story, crossing limbs with 4204	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4305	NO	Foothill Pine	*Pinus sabiniana*	21	21	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4306	Yes	California Black Walnut	*Juglans californica*	9,8,10,7	34	15	Codominant leader at base into many, crossing limbs, good leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	17	May 2017
4307	Yes	Blue Oak	*Quercus douglasii*	14	14	18	Rock at base, codominant leader at 6', u-crotch,	Proposed for Removal	3 Fair - Minor Problems	100%	14	May 2017

							mistletoe, powdery mildew, good leaf surface, 1" dead wood					
4308	Yes	Blue Oak	*Quercus douglasii*	12	12	15	Leans to NE, codominant leader at 12', u crotch, mistletoe, fair leaf surface, powdery mildew, <1" dead wood	Proposed for Removal	2 Major Structure or Health Problems	50%	6	May 2017
4309	Yes	Valley Oak	*Quercus lobata*	11	11	12	Codominant leader at 12', u crotch, mistletoe, powdery mildew , slight lean to NW	Proposed for Removal	3 Fair - Minor Problems	100%	11	May 2017
4310	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	10	Suppressed by grey pine, leans to NE, low canopy, codominant leader at 2', poor structure	Proposed for Removal	2 Major Structure or Health Problems	50%	3	May 2017
4311	NO	Foothill Pine	*Pinus sabiniana*	44	44	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4312	NO	Foothill Pine	*Pinus sabiniana*	16	16	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4313	Yes	Interior Live Oak	*Quercus wislizeni*	13 at 2'	13	18	Codominant leader at 3', included bark, Codominant leader at 5', included bark, low canopy, poor structure,	Proposed for Removal	2 Major Structure or Health Problems	50%	7	May 2017

							good leaf surface					
4314	Yes	Interior Live Oak	*Quercus wislizeni*	7,7	14	15	Codominant leader at 1', included bark, crossing limbs with grey pine, poor structure, leans to the NW	Proposed for Removal	2 Major Structure or Health Problems	50%	7	May 2017
4315	NO	Foothill Pine	*Pinus sabiniana*	8	8	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4316	Yes	California Black Walnut	*Juglans californica*	5,12 at 2'	17	18	On hill, leans to NW, codominant leader at 3', narrow attachment in canopy with included bark, epicormic growth, old heading cuts, crossing limbs	Proposed for Removal	2 Major Structure or Health Problems	50%	9	May 2017
4317	NO	Foothill Pine	*Pinus sabiniana*	29 at 2	29	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4318	Yes	California Black Walnut	*Juglans californica*	8,4,5,7	24	15	Codominant leader at base into many, cavity at base, poor structure, epicormic growth, dead wood, fair leaf surface, pest on leaves	Proposed for Removal	2 Major Structure or Health Problems	50%	12	May 2017
4319	Yes	Interior Live Oak	*Quercus wislizeni*	4,6,6,14	30	22	Codominant leader at base, u crotch, imbedded	Proposed for Removal	2 Major Structure or Health Problems	50%	15	May 2017

								fence and barb wire, dead wood, fair leaf surface					
4320	Yes		Blue Oak	*Quercus douglasii*	6,6	12	12	Imbedded fence and wire, codominant leader at 2', included bark, 3', 4', suppressed by interior live oak, dead wood, powdery mildew	Proposed for Removal	2 Major Structure or Health Problems	50%	6	May 2017
4321	NO		Foothill Pine	*Pinus sabiniana*	30,35	65	0	No tag, Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4325	Yes	Yes	Interior Live Oak	*Quercus wislizeni*	6,4	10	12	Suppressed, leans to S, leans on barbwire, 1" dead wood, poor structure	Preserved, Neighbors	2 Major Structure or Health Problems	50%		May 2017
4326	Yes	Yes	Interior Live Oak	*Quercus wislizeni*	12	12	20	Codominant leader at 6', included bark, abnormal trunk shape, narrow attachment in canopy with included bark, fair leaf surface, 1" dead wood	Preserved, Neighbors	2 Major Structure or Health Problems	50%		May 2017
4327	Yes	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	10	Codominant leader at 8', poor taper, fair leaf surface,	Preserved, Neighbors	3 Fair - Minor Problems	100%		May 2017

								epicormic growth					
4328	Yes	Yes	Interior Live Oak	*Quercus wislizeni*	8,3	11	20	Leans to S, codominant leader at 5', included bark, narrow attachment in canopy with included bark, good leaf surface, poor structure	Preserved, Neighbors	2 Major Structure or Health Problems	50%		May 2017
4329	Yes		California black walnut	*Juglans californica*	11,4	15	0	Dead	Proposed for Removal	0 Dead	0	0	May 2017
4330	Yes		Interior Live Oak	*Quercus wislizeni*	7,9,11,5	32	28	Past large codominant leader failure at base with decay, imbedded fence, codominant leader at 2' into many, poor structure, fair leaf surface, large dead wood	Proposed for Removal	2 Major Structure or Health Problems	50%	16	May 2017
4331	Yes		Interior Live Oak	*Quercus wislizeni*	12,13,16	41	28	Imbedded fence, codominant leader at 4', included bark, 5', included bark, poor structure, dead wood, crossing limbs	Preserved	2 Major Structure or Health Problems	50%		May 2017
4332	NO		Foothill Pine	*Pinus sabiniana*	10	10	0	Not evaluated	Preserved, Neighbors	Not Protected	0%		May 2017

4333	Yes	Interior Live Oak	*Quercus wislizeni*	11,12,6,11	40	30	Codominant leader at 2', 4', included bark, narrow attachment in canopy included bark, 1" dead wood, fair leaf surface,	Preserved	3 Fair - Minor Problems	100%		May 2017
4334	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	10	Codominant leader at 5', included bark, 7', included bark, small wound at base-ok, slight lean to N, close to dirt road, wound on codominant leader in canopy	Preserve, Meade	3 Fair - Minor Problems	100%		May 2017
4335	Yes	California Black Walnut	*Juglans californica*	5,9,4@2	18	12	Major structural problems, included bark, codominant leader at 1', 2', and 3', mostly dead	Preserve, Meade	1 Extreme Structure or Health Problems	0		May 2017
4336	NO	Black Locust	*Robinia pseudoacacia*	8	8	10	Slight lean to N, major dead wood, codominant leader at 8'	Preserve, Meade	2 Major Structure or Health Problems	50%		May 2017
4337	Yes	California Black Walnut	*Juglans californica*	10 at 3	10	12	Trunk leans on fence, codominant leader at 4', epicormic growth, unbalanced	Proposed for Removal	2 Major Structure or Health Problems	50%	5	May 2017

							canopy to W, poor leaf surface				
4338	Yes	Interior Live Oak	*Quercus wislizeni*	8,7,3	18	18	Codominant leader at 2', included bark, Codominant leader at 3', included bark, 3" stem bark sloughing off,,animal wounds in canopy, close to trailer parking and tractor road aCrown cleaness, good leaf surface	Preserve, Meade	2 Major Structure or Health Problems	50%	May 2017
4339	NO	Black Locust	*Robinia pseudoacacia*	9	9	10	Debris pile at base, mostly dead, leans to W	Preserve, Meade	1 Extreme Structure or Health Problems	0	May 2017
4340	NO	Black Locust	*Robinia pseudoacacia*	13	13	18	Debris pile at base, codominant leader cut at 5', leans over trailer, large dead wood	Preserve, Meade	2 Major Structure or Health Problems	50%	May 2017
4341	Yes	Interior Live Oak	*Quercus wislizeni*	12,17	29	28	Codominant leader at 2', included bark, imbedded nailed steps for fort, narrow attachment in canopy included bark, 12" stem leans to NE,	Preserve, Meade	2 Major Structure or Health Problems	50%	May 2017

							old pruning cut					
4342	Yes	Valley Oak	*Quercus lobata*	15	15	20	Codominant leader at 6', included bark, broadleaf mistletoe, good leaf surface, 1" dead wood	Preserve, Meade	3 Fair - Minor Problems	100%		May 2017
4343	Yes	Interior Live Oak	*Quercus wislizeni*	10 at 2	10	12	3" and 5" stems cut at 3', 5" cut at 1.5', wound at base with woundwood, root collar buried, codominant leader at 4.5', included bark, poor structure, good leaf surface	Preserve, Meade	2 Major Structure or Health Problems	50%		May 2017
4344	NO	Foothill Pine	*Pinus sabiniana*	10	10	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4345	Yes	California Black Walnut	*Juglans californica*	14 at 2	14	10	Very poor structure, codominant leader at 3' into many, crossing limbs, ooze, decay, metal hook for fence in trunk, poor leaf surface, dead wood	Proposed for Removal	2 Major Structure or Health Problems	50%	7	May 2017
4346	Yes	Interior Live Oak	*Quercus wislizeni*	13	13	15	Rocks at base, large codominant leader	Preserve, Meade	2 Major Structure or Health Problems	50%		May 2017

							remove at 2' and 5' no woundwood, codominant leader at 7', included bark, root collar buried, e.g., <1" dead wood, fence hook in trunk					
4347	Yes	Interior Live Oak	*Quercus wislizeni*	9	9	12	Root collar buried, large codominant leader removed at 1' -no wound wood forming, many wounds on trunk, bark sloughing off, epicormic growth, fair leaf surface,	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4348	Yes	Interior Live Oak	*Quercus wislizeni*	9	9	12	Leans to NE, poor structure, codominant leader at 8' included bark, many small pruning cuts, fair leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	5	May 2017
4349	Yes	Interior Live Oak	*Quercus wislizeni*	16	16	18	Root collar buried, codominant leader at 5' into many, u crotch, narrow attachment in	Proposed for Removal	3 Fair - Minor Problems	100%	16	May 2017

							canopy, good leaf surface					
4350	Yes	Interior Live Oak	*Quercus wislizeni*	7,5	12	12	Root collar buried, prostrate, very poor structure, dead wood, epicormic growth	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4351	Yes	Interior Live Oak	*Quercus wislizeni*	5,10	15	11	Root collar buried, stubs, codominant leader at 4', included bark, class in canopy, good leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	8	May 2017
4352	Yes	Interior Live Oak	*Quercus wislizeni*	45,29	74	45	Codominant leader at 2', u crotch, 13" codominant leader removed at 5' to N, old beehive/cuts on S lateral, hollow, reduction cuts, codominant leader in canopy, 4" dead wood, glad, some wounds in can	Proposed for Removal	3 Fair - Minor Problems	100%	74	May 2017
4353	NO	Black Locust	*Robinia pseudoacacia*	11	11	15	Stubs, codominant leader at 5', many old pruning cut in canopy with fungi	Preserved	2 Major Structure or Health Problems	50%		May 2017

4354	Yes	Interior Live Oak	*Quercus wislizeni*	7 at 2	7	14	Codominant leader at 3' into 3, u crotch, poor leaf surface, foliage dieback	Proposed for Removal	3 Fair - Minor Problems	100%	7	May 2017
4355	NO	Foothill Pine	*Pinus sabiniana*	13	13	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4356	NO	Foothill Pine	*Pinus sabiniana*	12	12	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4356	Yes	Interior Live Oak	*Quercus wislizeni*	11	11	15	Trunk leans to north, canopy corrected, shear plane split in canopy, <1" dead wood	Preserved	3 Fair - Minor Problems	100%		May 2017
4357	Yes	Interior Live Oak	*Quercus wislizeni*	14 at 2	14	15	Codominant leader at 2', u crotch,	Preserved	3 Fair - Minor Problems	100%		May 2017
4359	Yes	Interior Live Oak	*Quercus wislizeni*	8 at 1	8	10	Codominant leader at 1', included bark, understory, poor leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	4	May 2017
4360	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	10	Abnormal trunk, codominant leader at 5', included bark, unbalanced canopy to NW, suppressed	Preserved	2 Major Structure or Health Problems	50%		May 2017
4361	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	10	Codominant leader at 3', included bark, unbalanced canopy to NW, <1" dead	Preserved	2 Major Structure or Health Problems	50%		May 2017

							wood, poor leaf surface					
4362	Yes	Interior Live Oak	*Quercus wislizeni*	9 at 2	9	8	Understory, poor structure, suppressed by grey pine, fair leaf surface	Preserved	2 Major Structure or Health Problems	50%		May 2017
4363	NO	Foothill Pine	*Pinus sabiniana*	15	15	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4364	Yes	Interior Live Oak	*Quercus wislizeni*	8	8	12	Old pruning cut at 4' with woundwood, trunk leans to south, poor leaf surface, crossing limbs	Proposed for Removal	3 Fair - Minor Problems	100%	8	May 2017
4365	Yes	Interior Live Oak	*Quercus wislizeni*	12 at 3	12	15	Codominant leader at 3', included bark, uc to NW, <1" dead wood, wound in one stem in canopy- remove	Proposed for Removal	3 Fair - Minor Problems	100%	12	May 2017
4366	NO	Foothill Pine	*Pinus sabiniana*	19	19	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017
4367	NO	Foothill Pine	*Pinus sabiniana*	24	24	0	Not evaluated	Preserved	Not Protected	0%		May 2017
4368	Yes	Interior Live Oak	*Quercus wislizeni*	7,7	14	15	Codominant leader at 3', included bark, narrow attachments in canopy, crossing limbs, good leaf surface	Proposed for Removal	3 Fair - Minor Problems	100%	14	May 2017
4369	Yes	Interior Live Oak	*Quercus wislizeni*	6,11	17	17	Codominant leader at 3', included bark, epicormic	Proposed for Removal	3 Fair - Minor Problems	100%	17	May 2017

							growth, <1" dead wood, good leaf surface					
4370	Yes	Interior Live Oak	*Quercus wislizeni*	11	11	14	Codominant leader at 5', included bark, narrow attachments in canopy, <1" dead wood, unbalanced canopy to E	Proposed for Removal	3 Fair - Minor Problems	100%	11	May 2017
4370	Yes	Incense cedar	*Calocedrus decurrens*	7	7	6	Good	Proposed for Removal	3 Fair - Minor Problems	100%	7	May 2017
4372	Yes	Interior Live Oak	*Quercus wislizeni*	17 at 2	17	15	Codominant leader at 1', into many, codominant leader at 3', included bark, crossing limbs, narrow attachment in canopy, fair leaf surface,	Proposed for Removal	2 Major Structure or Health Problems	50%	9	May 2017
4373	Yes	Interior Live Oak	*Quercus wislizeni*	6 at2	6	8	Codominant leader at 2', included bark, suppressed, leans to N, fair leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	3	May 2017
4374	Yes	Interior Live Oak	*Quercus wislizeni*	12,6,3	21	17	Codominant leader at 2', included bark, poor structure, next to barb wire fence, narrow attachments in canopy, fair leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	11	May 2017

4375	Yes	Interior Live Oak	*Quercus wislizeni*	9,2	11	10	Poor structure, suppressed, unbalanced canopy to N, good leaf surface, <1" dead wood	Proposed for Removal	2 Major Structure or Health Problems	50%	6	May 2017
4376	Yes	Interior Live Oak	*Quercus wislizeni*	4,7 at 2	11	7	Barb wire fence between limbs, poor structure, codominant leader at base, suppressed, crossing limbs, good leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	6	May 2017
4377	Yes	Interior Live Oak	*Quercus wislizeni*	5,4,4,4,1	18	8	Stump sprout, mistletoe, fence in between limbs, poor structure, fair leaf surface,	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4378	Yes	Interior Live Oak	*Quercus wislizeni*	14 at 1	14	12	Codominant leader at 1' into many, very poor structure, crossing limbs, good leaf surface	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4379	Yes	Interior Live Oak	*Quercus wislizeni*	4,6,3,5,2,1,2	23	8	Stump sprout, poor structure, narrow attachments in canopy, fair leaf surface	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4380	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	8	Huge wound on W side of	Proposed for Removal	1 Extreme Structure or	0	0	May 2017

							trunk, very poor structure		Health Problems			
4381	Yes	Interior Live Oak	*Quercus wislizeni*	9 at base	9	10	Severe lean to West, huge wound on trunk, fair leaf surface	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4382	Yes	Interior Live Oak	*Quercus wislizeni*	7	7	10	Severe lean to N, poor structure, good leaf surface, narrow attachments in canopy	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4383	Yes	Interior Live Oak	*Quercus wislizeni*	7,	7	10	Severe lean to NW, pile of wood at base, too much dead wood, good leaf surface	Proposed for Removal	1 Extreme Structure or Health Problems	0	0	May 2017
4385	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	7	Wound at base, poor structure, <1" dead wood, good leaf surface,	Proposed for Removal	2 Major Structure or Health Problems	50%	3	May 2017
4386	Yes	Interior Live Oak	*Quercus wislizeni*	6,3	9	0	Dead	Proposed for Removal	0 Dead	0	0	May 2017
4387	Yes	Interior Live Oak	*Quercus wislizeni*	6	6	8	Hit by fail, low canopy, <1" dead wood	Proposed for Removal	2 Major Structure or Health Problems	50%	3	May 2017
4388	Yes	Interior Live Oak	*Quercus wislizeni*	8	8	10	Severe lean to NE, low canopy, debris at base, narrow attachment in canopy, good leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	4	May 2017

4389	Yes	Blue Oak	*Quercus douglasii*	22	22	29	Embedded fence wire, codominant leader at 7', u crotch, dead wood, poor leaf surface, stressed	Proposed for Removal	3 Fair - Minor Problems	100%	22	May 2017
4390	NO	Prunus spp.		11 at 1	11	8	Poor structure, codominant leader at 1', crotch, many dead wood	Proposed for Removal	2 Major Structure or Health Problems	50%	6	May 2017
4391	Yes	Interior Live Oak	*Quercus wislizeni*	9 at 1	9	8	codominant leader at 2' into many, near barbwire fence, poor structure in canopy, good leaf surface	Proposed for Removal	2 Major Structure or Health Problems	50%	5	May 2017
4798	NO	Foothill Pine	*Pinus sabiniana*	20	20	0	Not evaluated	Proposed for Removal	Not Protected	0%	0	May 2017

APPENDIX 3 – GENERAL DEVELOPMENT GUIDELINES

Definitions

Root zone: The roots of trees grow fairly close to the surface of the soil, and spread out in a radial direction from the trunk of tree. A general rule of thumb is that they spread 2 to 3 times the radius of the canopy, or 1 to 1 ½ times the height of the tree. It is generally accepted that disturbance to root zones should be kept as far as possible from the trunk of a tree.

Inner Bark: The bark on most large trees is quite thick, usually 1” to 2”. If the bark is knocked off a tree, the inner bark, or cambial region, is exposed and/or removed. The cambial zone is the area where tissues responsible for adding new layers to the tree each year are located. Removing or damaging this tissue results in a tree that can only grow new tissue from the edges of the wound. In addition, the interior wood of the tree is exposed to decay fungi and becomes susceptible to decay. Tree protection measures require that no activities occur which can knock the bark off the trees.

Methods Used in Tree Protection:

No matter how detailed Tree Protection Measures are in the initial Arborist Report, they will not accomplish their stated purpose unless they are applied correctly and a Project Arborist oversees the construction. The Project Arborist should have the ability to enforce the Protection Measures. It is advisable for the Project Arborist to be present at the Pre-Construction meeting to answer questions the contractors may have about Tree Protection Measures. This also lets the contractors know how important tree preservation is to the developer.

Root Protection Zone (RPZ): Since in most construction projects it is not possible to protect the entire root zone of a tree, a Root Protection Zone is established for each tree to be preserved. The minimum Root Protection Zone is the area calculated as 1 to 1.25’ for every inch of trunk diameter (ie. A 10” diameter tree will have an RPZ of 10’) or the dripline, whichever is greater. The Project Arborist must approve work within the RPZ.

Irrigate, Fertilize, Mulch: Prior to grading on the site near any tree, if specified by the project arborist, the area within the Tree Protection fence should be fertilized with 4 pounds of nitrogen per 1000 square feet, and the fertilizer irrigated in. The irrigation should percolate at least 24 inches into the soil. This should be done no less than 2 weeks prior to grading or other root disturbing activities. After irrigating, cover the RPZ with at least 12” of leaf and twig mulch. Such mulch can be obtained from chipping or grinding the limbs of any trees removed on the site. Acceptable mulches can be obtained from nurseries or other commercial sources. Fibrous or shredded redwood or cedar bark mulch shall not be used anywhere on site.

Fence: Fence around the Root Protection Zone and restrict activity therein to prevent soil compaction by vehicles, foot traffic or material storage. The fenced area shall be off limits to all construction equipment, unless there is express written notification provided by the Project Arborist, and impacts are discussed and mitigated prior to work commencing.

> No storage or cleaning of equipment or materials, or parking of any equipment can take place within the fenced off area, known as the RPZ.
>
> The fence should be highly visible, and stout enough to keep vehicles and other equipment out. I recommend the fence be made of orange plastic protective fencing, kept in place by t-posts set no farther apart than 6’.

In areas of intense impact, a 6' chain link fence is preferred.

In areas with many trees, the RPZ can be fenced as one unit, rather than separately for each tree.

Where tree trunks are within 3' of the construction area, place 2" by 4" boards vertically against the tree trunks, even if fenced off. Hold the boards in place with wire. Do not nail them directly to the tree. The purpose of the boards is to protect the trunk, should any equipment stray into the RPZ.

<u>Elevate Foliage</u>: Where indicated, remove lower foliage from a tree to prevent limb breakage by equipment. Low foliage can usually be removed without harming the tree, unless more than 25% of the foliage is removed. Branches need to be removed at the anatomically correct location in order to prevent decay organisms from entering the trunk. For this reason, a contractor who is an ISA Certified Arborist should perform all pruning on protected trees.[5]

<u>Expose and Cut Roots</u>: Breaking roots with a backhoe, or crushing them with a grader, causes significant injury, which may subject the roots to decay. Ripping roots may cause them to splinter toward the base of the tree, creating much more injury than a clean cut would make. At any location where the root zone of a tree will be impacted by a trench or a cut (including a cut required for a fill and compaction), the roots shall be exposed with either a backhoe digging radially to the trunk, by hand digging, or by a hydraulic air spade, and then cut cleanly with a sharp instrument, such as chainsaw with a carbide chain. Once the roots are severed, the area behind the cut should be moistened and mulched. A root protection fence should also be erected to protect the remaining roots, if it is not already in place. Further grading or backhoe work required outside the established RPZ can then continue without further protection measures.

<u>Protect Roots in Deeper Trenches:</u> The location of utilities on the site can be very detrimental to trees. Design the project to use as few trenches as possible, and to keep them away from the major trees to be protected. Wherever possible, in areas where trenches will be very deep, consider boring under the roots of the trees, rather than digging the trench through the roots. This technique can be quite useful for utility trenches and pipelines.

<u>Protect Roots in Small Trenches:</u> After all construction is complete on a site, it is not unusual for the landscape contractor to come in and sever a large number of "preserved" roots during the installation of irrigation systems. The Project Arborist must therefore approve the landscape and irrigation plans. The irrigation system needs to be designed so the main lines are located outside the root zone of major trees, and the secondary lines are either laid on the surface (drip systems), or carefully dug with a hydraulic or air spade, and the flexible pipe fed underneath the major roots.

Design the irrigation system so it can slowly apply water (no more than ¼" to ½" of water per hour) over a longer period of time. This allows deep soaking of root zones. The system also needs to accommodate infrequent irrigation settings of once or twice a month, rather than several times a week.

<u>Monitoring Tree Health During and After Construction</u>: The Project Arborist should visit the site at least twice a month during construction to be certain the tree protection measures are being followed, to monitor the health of impacted trees, and make recommendations as to irrigation or other needs. After construction is

[5] International Society of Arboriculture (ISA), maintains a program of Certifying individuals. Each Certified Arborist has a number and must maintain continuing education credits to remain Certified.

complete, the arborist should monitor the site monthly for one year and make recommendations for care where needed.

Chemical Treatments: The owner or developer shall be responsible to contact an arborist with a pesticide applicators license to arrange for an application of a root enhancing hormone, such as Paclobutrazol, to mitigate the stress produced by the development **prior to grading**. Additionally, at the discretion of the project arborist, an insect infestation preventative for both boring insects and leaf feeding insects and/or fungal preventative for leaf surfaces may be required. Roots pruned during the course of performing a cut may be required to be treated with a biofungicide such as Bio-Tam.

APPENDIX 4 - SITE PHOTOS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Appendix B

Air Quality and Greenhouse Gas Impact Analysis

Auburn Industrial Center Project

Prepared for:
King Engineering

January 2025

Prepared by

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INTRODUCTION

This Air Quality and Greenhouse Gas Impact Analysis identifies and analyzes the potential environmental impacts from the Auburn Industrial Center Project (proposed project) related to air quality and greenhouse gas (GHG) emissions. The information and analysis in this document are organized in accordance with the checklist in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. During the preliminary modeling of the Auburn Industrial Project, models were run to compare the emissions of an all-commercial land use and all-industrial land use. The all-commercial land use resulted in higher criteria pollutant and GHG emissions, which is mainly attributed to the difference in vehicle trip generation between the two land uses. Therefore, to remain conservative, the numbers presented within the analysis are pulled from the all-commercial land use modeling and provide insight into the scenario with higher emissions during operations. Additionally, the all-industrial land use emissions are presented where appropriate within the analysis. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that should be applied to the project are prescribed. All modeling results are included as Appendix A to this document.

PROJECT SUMMARY

The approximately 7.36-acre project site (a portion of APN 001-051-049) is located northeast of the terminus of Merrow Street, in the City of Auburn, California (see Figure 1). The project site is undeveloped and is generally surrounded by oak woodlands. Surrounding existing land uses include a City-owned surface parking lot and commercial uses to the north; the Union Pacific Railroad (UPRR) tracks, light industrial uses, and single-family residences to the east; and single-family residences to the south and west (Figure 2).

The proposed project would include the removal of a portion of existing onsite trees and the development of two warehouse buildings (Buildings A and B) totaling 100,663 square feet (sf). The 60,633-sf Building A would be located in the western portion of the project site and the 40,000-sf Building B would be located in the southeastern portion of the project site. The warehouse buildings would include one universal loading dock and 20 roll-up doors. Parking for warehouse employees and visitors would be provided by 165 parking stalls located adjacent to the warehouse buildings. The proposed project would also include the development of a new 89-stall parking lot located in the northern portion of the project site, which would connect to the existing City-owned parking lot. In addition, the proposed project would also include a northerly extension of Merrow Street along the western boundary of the project site. Site access would be provided by two new driveways off the Merrow Street extension, which would consist of a northern entrance for trucks and standard vehicles, and a southern entrance for standard vehicles only.

SOURCES

1. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
2. California Air Resources Board. *Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation*. August 29, 2023.
3. Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. 2006.
4. Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.
5. Placer County Air Pollution Control District. *Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA*. October 13, 2016.

6. U.S. Environmental Protection Agency. *Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards*. October 26, 2023.

Figure 1
Regional Project Location

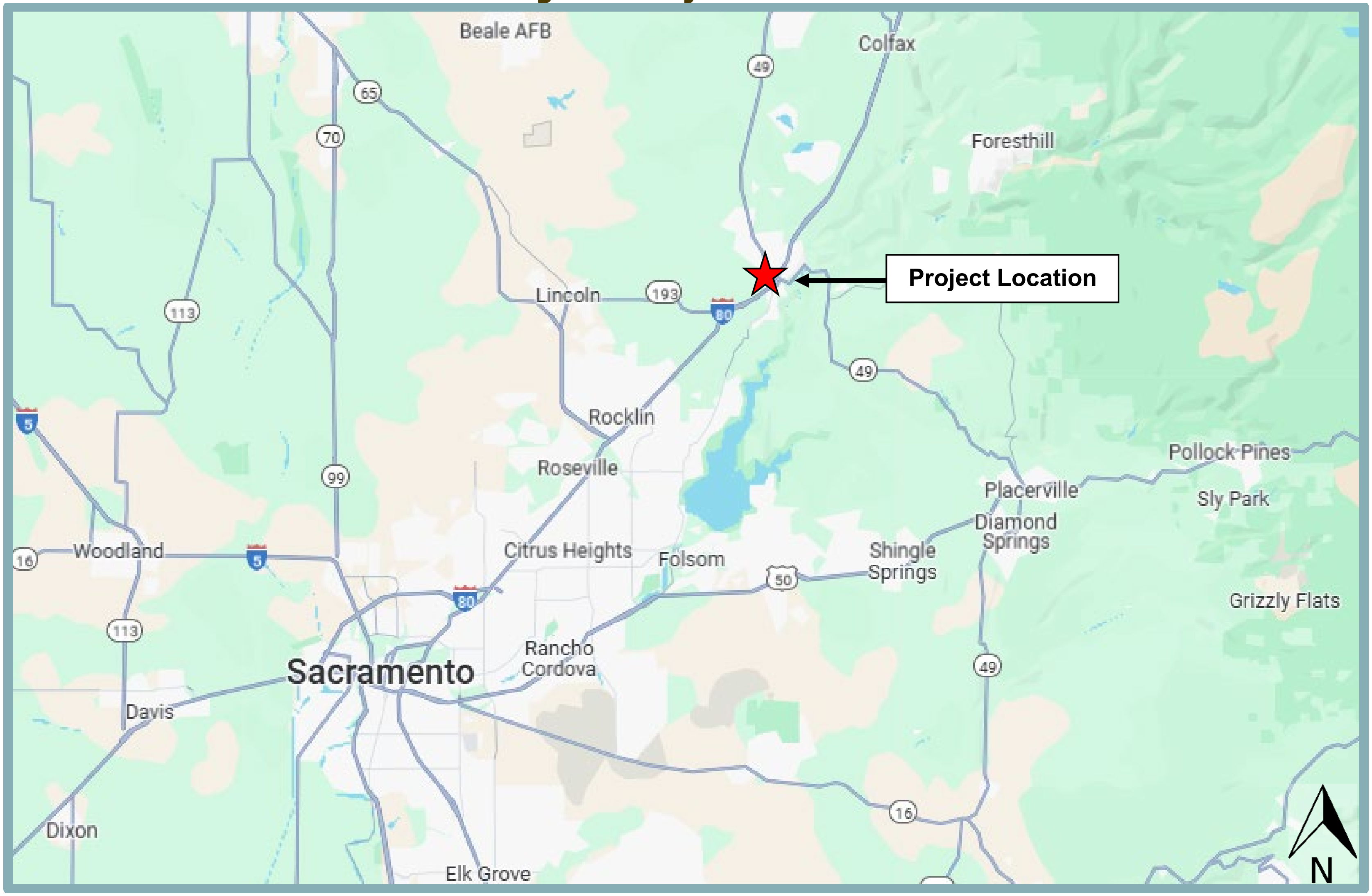
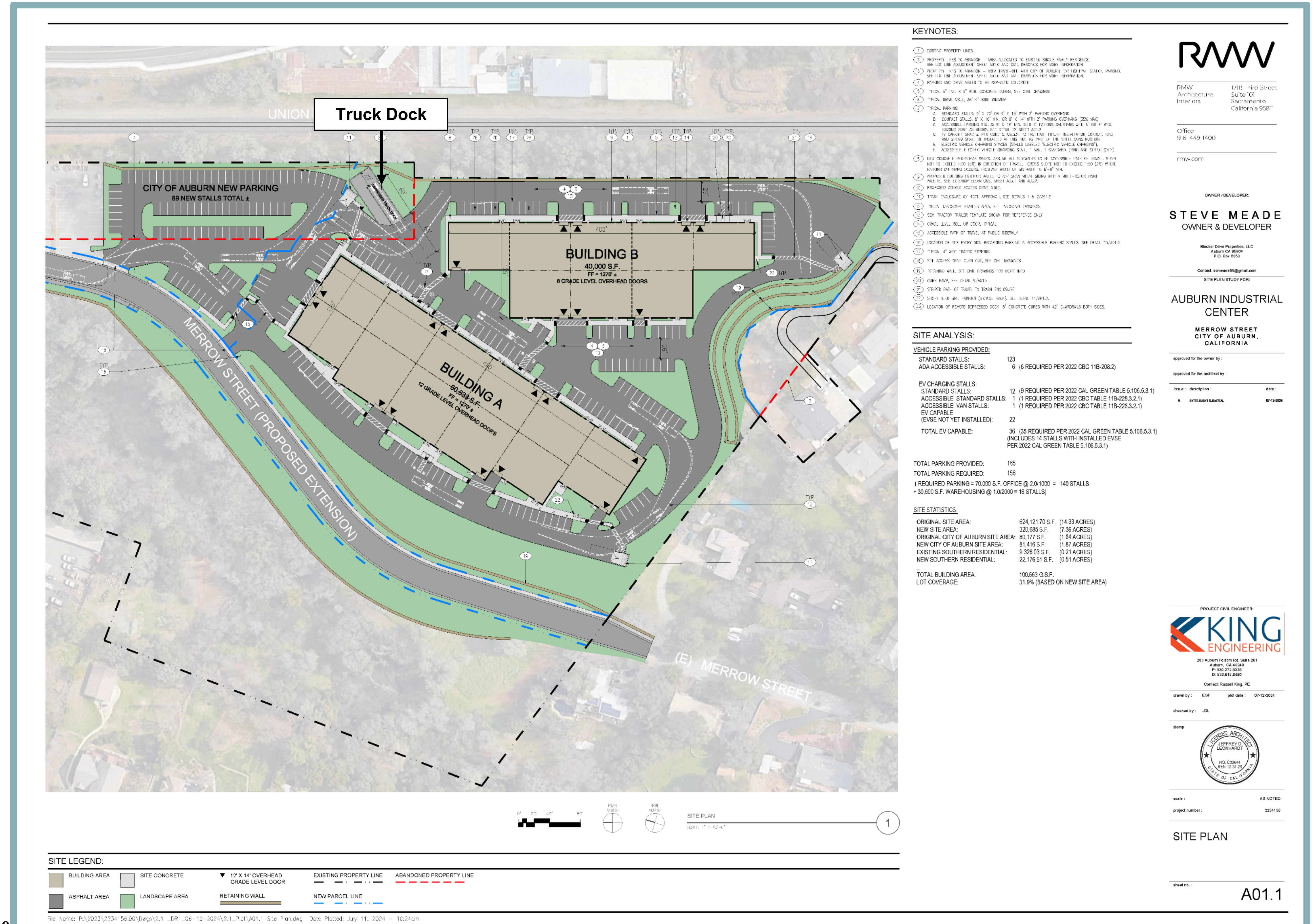


Figure 2
Project Vicinity Map

Figure 3
Site Plan



III. AIR QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	✖	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	✖	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✖	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	✖	☐

Discussion

a,b. The project site is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter ($PM_{2.5}$) and the State particulate matter 10 microns in diameter (PM_{10}) standards, as well as for both the federal and State ozone standards. The federal Clean Air Act requires areas designated as federal nonattainment to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures for states to use to attain the federal ambient air quality standards (AAQS). The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of air basins as reported by the agencies with jurisdiction over them. In compliance with regulations, the PCAPCD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal and State AAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies.

The current applicable air quality plan for the project area is the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan), updated October 17, 2023, and adopted by the California Air Resources Board (CARB) on October 26, 2023. The Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the Federal Clean Air Act requirements, including the federal AAQS.

It should be noted that in addition to strengthening the 8-hour ozone federal AAQS, the U.S. Environmental Protection Agency (USEPA) also strengthened the secondary 8-hour ozone federal AAQS, making the secondary standard identical to the primary standard. On October 26, 2015, the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). On April 30, 2018, the USEPA published designations for areas in attainment/unclassifiable for the 2015 ozone standards. The USEPA identified the portions of Placer County within the SVAB as nonattainment for the 2015 ozone standards.[1] More specifically, Placer County is part of the Ozone Sacramento Federal Nonattainment Area (SFNA) which includes the Sacramento Metropolitan Air

1 U.S. Environmental Protection Agency. *Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards*. October 26, 2023.

Quality Management District (SMAQMD), Feather River Air Quality Management District (FRAQMD), El Dorado Air Quality Management District (EDAQMD), Yolo Solano Air Quality Management District (YSAQMD) and Placer County Air Pollution Control District (PCAPCD). The attainment deadline for the SFNA is July 2025.

General conformity requirements of the regional air quality plan include whether a project would cause or contribute to new violations of any AAQS, increase the frequency or severity of an existing violation of any AAQS, or delay timely attainment of any AAQS. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the PCAPCD has adopted recommended thresholds of significance for emissions of PM_{10} and the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_X). On October 13, 2016, the PCAPCD adopted updated significance thresholds for the aforementioned pollutants.

The significance thresholds, expressed in pounds per day (lbs/day), listed in Table 1 are the PCAPCD's current thresholds of significance for use in the evaluation of air quality impacts associated with proposed development projects. Thus, if the proposed project's emissions exceed the pollutant thresholds presented in Table 1, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Table 1
PCAPCD Thresholds of Significance (lbs/day)

Pollutant	Construction Threshold	Operational Threshold
ROG	82	55
NO_X	82	55
PM_{10}	82	82

Source: Placer County Air Pollution Control District. CEQA Handbook. 2017.

Implementation of the proposed project would contribute to local emissions in the area during both the construction and operation of the proposed project. The proposed project's construction and operational emissions were estimated using the web-based California Emissions Estimator Model (CalEEMod) version 2022.1.1.29 software – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, trip generation rates, vehicle mix, trip length, average speed, compliance with the California Building Standards Code (CBSC), etc. Where project-specific data was available, such data was input into the model (e.g., construction phases and timing, inherent site or project design features, compliance with applicable regulations, etc.). The proposed project's modeling assumed the following:

- Construction would begin in July 2025 and occur over approximately one year; and
- The proposed project would be operational by 2026.

All CalEEMod results are included in Appendix A. The results of the emissions analysis for construction and operational emissions are discussed separately below.

Construction Emissions

During construction of the proposed project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NO_X, and PM_{10}, intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

Table 2 presents the estimated unmitigated construction-related emissions for the proposed project.

Table 2
Maximum Unmitigated Construction Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	6.65	62.7	26.7
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, December 2024 (see Appendix A).

As shown in Table 2, the project's total construction-related emissions would be below the applicable PCAPCD thresholds of significance for ROG, NO_X, and PM_{10}. Additionally, the proposed project would be required to comply with all PCAPCD rules and regulations for construction, which would be noted on City-approved construction plans. The applicable rules and regulations would include, but not be limited to, the following:

- Rule 202 related to visible emissions;
- Rule 217 related to cutback and emulsified asphalt paving materials;
- Rule 218 related to architectural coatings;
- Rule 228 related to fugitive dust; and
- Rule 501 related to general permit requirements.

The proposed project's compliance with the above PCAPCD rules would help to further minimize construction-related emissions. For example, Rule 228 includes implementation of dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. A Dust Control Plan must also be submitted to the PCAPCD per Rule 228 prior to the start of earth-disturbing activities.

Given the proposed project's compliance with all PCAPCD rules and regulations for construction, listed above, construction-related emissions of criteria pollutants would likely be lower than the levels presented within Table 2.

Because the proposed project's estimated unmitigated construction emissions would be below the applicable PCAPCD thresholds of significance, construction of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and a less-than-significant impact would occur associated with construction.

Operational Emissions

Operational emissions of ROG, NO_X, and PM_{10} would be generated by the proposed project from both mobile and stationary sources. Day-to-day activities, such as the future vehicle trips to and from the project site, would make up the majority of the mobile emissions. Emissions would also occur from area sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). As stated above, the proposed project would be required to comply with all applicable PCAPCD rules and regulations, including the following related to operations:

- Rule 205 related to nuisances;
- Rule 231 or Rule 247 related to water heaters and boilers; and
- Rule 502 related to review of new sources of emissions.

Table 3 presents the estimated unmitigated operational emissions for the proposed project.

Table 3
Maximum Unmitigated Operational Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	7.40	4.52	5.76
PCAPCD Significance Threshold	**55.0**	**55.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, December 2024 (see Appendix A).

As shown in the table, the proposed project's operational emissions would be below the PCAPCD's thresholds of significance for ROG, NO_X, and PM_{10}. Accordingly, operations of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and a less-than-significant impact would occur associated with operations.

Cumulative Emissions

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

To improve air quality and attain the health-based standards, reductions in emissions are necessary within nonattainment areas. The project is part of a pattern of urbanization occurring in the greater Sacramento ozone nonattainment area. The growth and combined vehicle usage, and business activity within the nonattainment area from the project, in combination with other past, present, and reasonably foreseeable projects within the City of Auburn and surrounding areas, could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project could cumulatively contribute to regional air quality health effects through emissions of criteria and mobile source air pollutants.

The PCAPCD recommends using the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS and thus result in a cumulative impact. As discussed above, the PCAPCD's recommended thresholds of significance for ozone precursors and PM_{10} are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM_{10} emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the PCACPD established operational phase cumulative-level emissions thresholds identical to the operational thresholds identified above, in Table 1.

As shown in Table 3, operational emissions would be below the PCAPCD's project-level thresholds, and, thus, would be below the PCAPCD's cumulative-level thresholds as well. Accordingly, impacts related to the cumulative emissions of criteria pollutants for which PCAPCD is in non-attainment would be considered less than significant.

Conclusion

Because the proposed project would not result in construction-related or operational emissions of criteria air pollutants in excess of PCAPCD's thresholds of significance, the proposed project would not be considered to conflict with or obstruct the implementation of any applicable air quality plans. In addition, the proposed project would not result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is non-attainment under an applicable ambient air quality standard. Therefore, a ***less-than-significant*** impact would result.

c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors are single-family residences to the west and south, located approximately 278 and 64 feet from the project site boundaries, respectively.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and toxic air contaminant (TAC) emissions, as well as regional effects of emissions of criteria pollutants, all of which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Traffic congestion near a roadway's intersection with vehicles moving slowly or idling could result in localized CO emissions at that intersection due to a vehicle engine's inefficient combustion. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Accordingly, a land use project could result in impacts associated with localized CO concentrations at roadway intersections if the project generates substantial traffic.

The PCAPCD has established screening methodology for localized CO emissions, which are intended to provide a conservative indication of whether project-generated vehicle trips would result in the generation of localized CO emissions that would contribute to an exceedance of AAQS and potentially expose sensitive receptors to substantial CO concentrations. Per the PCAPCD's screening methodology, if the project would result in vehicle operations producing more than 550 lbs/day of CO emissions and if either of the following scenarios are true, the project could result in localized CO emissions that would violate CO standards:

- Degrade the peak hour LOS on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F); or
- Substantially worsen an already existing unacceptable peak hour LOS on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes an increase in delay at an intersection by 10 seconds or more when project-generated traffic is included.[2]

However, considering that the law has changed with respect to how transportation-related impacts may be addressed under CEQA such that unacceptable LOS is not considered a significant impact on the environment under CEQA, this analysis relies on the 550 lbs/day of CO emissions screening criterion only.

According to the modeling performed for the proposed project, the proposed project would result in maximum unmitigated operational mobile source CO emissions of 31.1 lbs/day. Consequently, CO emissions related to mobile sources associated with operation of the proposed project would be well below the 550 lbs/day screening threshold used by PCAPCD, and, according to the PCAPCD's screening methodology for localized CO emissions, the proposed project would not be expected to generate localized CO emissions that would contribute to an exceedance of AAQS or expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

Another category of environmental concern is TACs. The CARB's Air Quality and Land Use Handbook: A Community Health Perspective (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, gas stations, chrome plating operations, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel

[2] Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 37]. November 21, 2017.

engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The proposed project as an all-commercial land use would not involve operations that would be considered major sources of TACs, including DPM. However, the all-industrial land use could involve components that would result in emissions of TACs and DPM. Implementation of the proposed project with all-industrial land-use would result in emissions related to the use of heavy-duty diesel trucks to transport goods to and from the site. Construction and heavy-duty truck TAC emissions are discussed below.

Construction-related activities have the potential to generate TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the proposed project is estimated to be approximately one year. Additionally, DPM is known to be highly dispersive, and only portions of the site would be disturbed at a time throughout the construction period. Operation of construction equipment would occur intermittently throughout the course of a day, rather than continuously at any one location on the project site. Operation of construction equipment within portions of the overall development area would allow for the dispersal of emissions, and would ensure that construction activity is not continuously occurring in the portions of the project site closest to existing receptors.

In addition, all construction equipment and operation thereof would be regulated per the CARB's In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the CCR. All fleets are currently prohibited from adding Tier 0, Tier 1, or Tier 2 vehicles to the fleet. In addition, starting January 1, 2024, fleets with a total horsepower over 2,501, excluding non-profit training centers, may not add any Tier 3 or Tier 4 Interim vehicles.[3] Thus, on-site emissions of PM would be reduced, which would result in a proportional reduction in DPM emissions and exposure of nearby residences to DPM. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, including Rule 501 related to General Permit Requirements.

Considering the intermittent nature of construction equipment operating within an influential distance to the nearest sensitive receptors, the limited duration of construction activities, and compliance with regulations, the likelihood that any one nearby sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. Thus, the proposed project would not expose nearby sensitive receptors to

3 California Air Resources Board. *Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation.* August 29, 2023.

substantial concentrations of TACs associated with construction emissions.

The proposed project as an all-industrial land use would consist of the development of two warehouse buildings (Buildings A and B) totaling 100,663 square feet (sf) which would involve the use of heavy-duty diesel trucks during project operations. The proposed project would have one universal loading dock and 20 roll-up doors. With only one loading dock, the proposed project could not support the number of trucks required to be to be considered a distribution center. The advisory recommendation from CARB defines distribution centers as exceeding 100 trucks per day. In addition, it should be noted that Sections 2449 and 2485 of Title 13 of the California Code of Regulations (CCR) limit idling of heavy-duty trucks to five minutes. Unless specifically exempted in Sections 2449 and 2485, all diesel-powered equipment and heavy-duty trucks associated with the proposed project would be subject to such idling limitations. Therefore, all-industrial land use for the proposed project would not result in TAC exposure to sensitive receptors during operation.

Naturally Occurring Asbestos (NOA)

Asbestos is a known carcinogen and, thus, NOA is considered a TAC. According to the Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California, prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to be in the project area.[4] Consequently, NOA is not anticipated to be present on the project site.

Criteria Pollutants

Exposure to criteria pollutants can result in adverse health effects. The applicable AAQS are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the SVAB is designated as nonattainment for State and federal eight-hour ozone and State PM_{10} standards, the PCAPCD, along with other air districts in the SVAB region, has adopted federal and State attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SVAB are not exposed to excess concentrations of criteria pollutants. The PCAPCD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS.[5] Thus, if a project's criteria pollutant emissions exceed the PCAPCD's mass emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards. However, ascertaining cancer risk, or similar measurements of health effects from air pollutants, is very difficult for regional pollutants such as the ozone precursors ROG and NO_X, as there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies. For example, ozone concentrations depend upon various complex factors, including the

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4 Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. 2006.

5 Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 20]. November 21, 2017.

presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds.

Nonetheless, as discussed above, the proposed project would not result in exceedance of the PCAPCD's thresholds of significance for criteria pollutant emissions (refer to Table 3). Consequently, implementation of the proposed project would not conflict with the PCAPCD's adopted attainment plans nor would the proposed project inhibit attainment of regional AAQS. Therefore, implementation of the proposed project would not contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

Conclusion

Based on the above analysis, the operations of the proposed project, regardless of an all-commercial or an all-industrial land use, would not be anticipated to result in the production of substantial concentrations of localized CO or criteria pollutants. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, and a ***less than significant*** impact would result.

d. Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emissions of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in questions 'a' through 'c' above. Therefore, the following discussion focuses on emissions of odors and dust during construction and operation of the project.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, determining the presence of a significant odor impact is difficult. Certain land uses such as wastewater treatment facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. The proposed project would not allow any such uses.

Diesel fumes from construction equipment and heavy-duty trucks could be found to be objectionable; however, operation of construction equipment would be regulated by PCAPCD rules and regulations, restricted to certain hours pursuant to the City of Auburn Construction Noise Guidelines, and would occur intermittently throughout the course of a day. All construction equipment and operation thereof would be regulated per the statewide In-Use Off-Road Diesel Vehicle Regulation. In addition, construction is temporary, and construction equipment would operate intermittently throughout the course of a day and would likely only occur over portions of the improvement area at a time. For the aforementioned reasons and due to the distance between the project site and the nearest sensitive receptors, the project would not result in any noticeable objectionable odors associated with construction.

PCAPCD Rule 205, Nuisance, addresses the exposure of "nuisance or annoyance" air contaminant discharges, including odors, and provides enforcement of odor control.

Rule 205 is complaint-based, where if public complaints are sufficient to cause the odor source to be considered a public nuisance, then the PCAPCD is required to investigate the identified source, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications to correct the nuisance condition. Thus, although not anticipated, if odor or air quality complaints are made upon development of the proposed project, the PCAPCD would be required (per PCAPCD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary.

Dust

As noted previously, construction of projects within the City of Auburn are required to comply with all applicable PCAPCD rules and regulations. The aforementioned rules would act to reduce construction-related dust by implementing dust control measures. PCAPCD Rule 228 requires implementation of dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors affecting a substantial number of people, and impacts would be ***less than significant***.

VIII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	✖	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	✖	☐

Discussion

a, b. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e$/yr).

In recognition of the global scale of climate change, California has enacted several pieces of legislation in an attempt to curb GHG emissions. Specifically, Assembly Bill (AB) 32, Senate Bill (SB) 32, and, more recently, Executive Order (EO) B-55-18 (Assembly Bill [AB] 1279) have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), approved in 2008 and updated in most recently in 2022, which provides the outline for actions to reduce California's GHG emissions and achieve the emissions reduction targets required by AB 32, SB 32, and EO B-55-18. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve emissions reductions in line with the Scoping Plan and aforementioned emissions reduction targets.

On October 13, 2016, the PCAPCD adopted GHG emissions thresholds for construction and operations in concert with the criteria pollutant threshold update. For project construction, the PCAPCD established a threshold of 10,000 $MTCO_2e$/yr. Should construction of a proposed project emit GHG emissions in excess of 10,000 $MTCO_2e$/yr, the project would be considered to have a cumulatively considerable contribution to global climate change.

The PCAPCD's operational thresholds begin with a screening emission level of 1,100 $MTCO_2e$/yr. Any project below the 1,100 MT CO_2e/yr threshold is judged by the PCAPCD as having a less-than-significant impact on GHG emissions within the PCAPCD and, thus, would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in emissions above the 1,100 MT CO_2e/yr threshold would not necessarily result in substantial impacts, if certain efficiency thresholds are met. The efficiency thresholds, which are based on service populations and square footage, are presented in Table 4.

Table 4
PCAPCD Operational GHG Efficiency Thresholds of Significance

Residential ($MTCO_2e$/capita)		Non-Residential ($MTCO_2e$/1,000 sf)	
Urban	**Rural**	**Urban**	**Rural**
4.5	5.5	26.5	27.3

Source: Placer County Air Pollution Control District. CEQA Handbook. 2017.

The PCAPCD further advises that regardless of emissions efficiency, should a project result in operational emissions in excess of 10,000 $MTCO_2e$/yr, the project would be considered to have a cumulatively considerable contribution to global climate change.

Construction GHG Emissions

The estimated unmitigated maximum construction-related emissions from the proposed project are presented in Table 5.

Table 5
Unmitigated Annual Construction GHG Emissions

	Maximum GHG Emissions ($MTCO_2e$/yr)
Project Emissions	587
PCAPCD Significance Threshold	10,000.00
Exceeds Threshold?	**NO**

Source: CalEEMod, December 2024 (see Appendix A).

As shown in the table above, the maximum annual emissions related to implementation would be well below the PCAPCD's construction threshold of 10,000 $MTCO_2e$/yr, and project construction would not be considered to result in a cumulatively considerable contribution to global climate change.

Operational GHG Emissions

The GHG thresholds include a bright-line threshold for the construction and operational phases of land use projects and stationary source projects, a screening level threshold for the operational phase of land use projects, and efficiency thresholds for the operational phase of land use projects that result in GHG emissions that fall between the bright-line threshold and the screening level threshold.

The threshold of 10,000 MTCO2e/yr represents the level at which a project's GHG emissions would be substantially large enough to contribute to cumulative impacts and mitigation to lessen the emissions would be mandatory. The PCAPCD further recommends use of the 10,000 MTCO2e/yr for analysis of construction-related GHG emissions for land use projects. Any project with GHG emissions below the screening level threshold of 1,100 MTCO2e/yr is considered by the PCAPCD as having a less-than-significant impact related to GHG emissions and would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in GHG emissions above the 1,100 MTCO2e/yr screening level threshold, but below the bright-line threshold of 10,000 MTCO2e/yr, must result in GHG emissions below the efficiency thresholds in order to be considered to result in a less-than-significant impact related to GHG emissions and not conflict with any State or regional GHG emission reduction goals. The GHG efficiency thresholds, which are in units of MTCO2e/yr per capita or per square foot (sf), are presented in Table 7.

The estimated operational GHG emissions at full buildout, in the year 2026, are presented Table 6. As shown in the table, the proposed project would result in operational GHG emissions above the PCAPCD's 1,100 $MTCO_2e$/yr operational threshold of significance. Therefore, the resulting GHG emissions must remain below the efficiency thresholds for Urban Non-Residential Projects as listed in Table 7. The proposed project emissions would be 12.54 MTCO2e/yr/1,000 sf which remains below the efficiency threshold of 26.50 MTCO2e/yr/1,000 sf. Thus, operations of the proposed project would not be considered to result in a cumulatively considerable contribution to global climate change.

Table 6
Unmitigated Operational GHG Emissions

Emission Source	Maximum GHG Emissions ($MTCO_2e/yr$)
Mobile	834
Area	1.48
Energy	368
Water	29.6
Waste	29.2
Refrigerants	0.04
TOTAL ANNUAL GHG EMISSIONS	**1,262.00**
PCAPCD Screening Level Threshold	**1,100.00**
Exceeds Screening Level Threshold?	**YES**

Note: Rounding may result in small differences in summation.

Source: CalEEMod, December 2024 (see Appendix A).

Table 7
Unmitigated Maximum Annual Project Operational GHG Emissions Per Capita

Project Emissions ($MTCO_2e/yr/1,000$ sf)	PCAPCD Efficiency Threshold for Urban Non-Residential Projects ($MTCO_2e/yr/1,000$ sf)	Exceeds Threshold?
12.54	26.5	**NO**

Notes: 1,262 $MTCO_2e$/yr / 100.663 = 12.54

Conclusion

Based on the information presented above, construction and operation of the proposed project would not be considered to generate GHG emissions that would have a significant impact on the environment and, thus, would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the project's impact would be ***less than significant***.

Appendix A

CalEEMod Air Quality and Greenhouse Gas Modeling Results

Auburn Industrial Project - Commercial Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Auburn Industrial Project - Commercial
Construction Start Date	7/1/2025
Operational Year	2026
Lead Agency	City of Auburn
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.30
Precipitation (days)	32.4
Location	38.89969956893763, -121.08274279298132
County	Placer-Sacramento
City	Auburn
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	450
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

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
General Office Building	101	1000sqft	3.03	100,663	34,471	—	—	—

Parking Lot	165	Space	4.33	0.00	0.00	—	—	—
Road Construction	0.02	Mile	0.07	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.93	6.65	62.7	62.7	0.14	2.62	24.0	26.7	2.42	10.8	13.2	—	15,133	15,133	0.52	1.51	20.3	15,320
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.83	4.56	29.6	20.9	0.14	0.89	9.63	10.5	0.83	4.11	4.94	—	12,506	12,506	0.25	1.51	0.53	12,964
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.28	2.17	9.17	7.66	0.04	0.31	2.77	3.08	0.28	1.20	1.48	—	3,435	3,435	0.08	0.36	2.13	3,545
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	0.40	1.67	1.40	0.01	0.06	0.51	0.56	0.05	0.22	0.27	—	569	569	0.01	0.06	0.35	587

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	7.93	6.65	62.7	62.7	0.14	2.62	24.0	26.7	2.42	10.8	13.2	—	15,133	15,133	0.52	1.51	20.3	15,320
2026	4.76	4.51	11.4	16.1	0.03	0.41	0.51	0.92	0.38	0.13	0.50	—	3,414	3,414	0.11	0.09	2.51	3,448
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.83	4.56	29.6	20.9	0.14	0.89	9.63	10.5	0.83	4.11	4.94	—	12,506	12,506	0.25	1.51	0.53	12,964
2026	4.75	4.49	11.4	15.6	0.03	0.41	0.51	0.92	0.38	0.13	0.50	—	3,365	3,365	0.11	0.11	0.07	3,400
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.11	0.95	9.17	7.66	0.04	0.31	2.77	3.08	0.28	1.20	1.48	—	3,435	3,435	0.08	0.36	2.13	3,545
2026	2.28	2.17	5.30	7.27	0.01	0.19	0.23	0.42	0.17	0.06	0.23	—	1,564	1,564	0.05	0.05	0.50	1,581
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.20	0.17	1.67	1.40	0.01	0.06	0.51	0.56	0.05	0.22	0.27	—	569	569	0.01	0.06	0.35	587
2026	0.42	0.40	0.97	1.33	< 0.005	0.03	0.04	0.08	0.03	0.01	0.04	—	259	259	0.01	0.01	0.08	262

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.78	7.40	4.02	36.1	0.07	0.13	5.64	5.76	0.12	1.43	1.55	84.7	9,274	9,359	9.13	0.41	23.5	9,733
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.47	6.13	4.52	27.6	0.07	0.12	5.64	5.76	0.11	1.43	1.55	84.7	8,658	8,743	9.17	0.44	0.85	9,103
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	5.88	5.60	3.46	22.8	0.05	0.11	4.18	4.29	0.10	1.06	1.17	84.7	7,199	7,283	9.08	0.35	7.83	7,622
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.07	1.02	0.63	4.15	0.01	0.02	0.76	0.78	0.02	0.19	0.21	14.0	1,192	1,206	1.50	0.06	1.30	1,262

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.58	4.30	3.20	31.1	0.07	0.06	5.64	5.70	0.05	1.43	1.49	—	7,019	7,019	0.27	0.30	23.2	7,138
Area	3.12	3.06	0.04	4.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.0	18.0	< 0.005	< 0.005	—	18.1
Energy	0.09	0.04	0.78	0.66	< 0.005	0.06	—	0.06	0.06	—	0.06	—	2,206	2,206	0.29	0.03	—	2,221
Water	—	—	—	—	—	—	—	—	—	—	—	34.3	31.7	66.0	3.52	0.08	—	179
Waste	—	—	—	—	—	—	—	—	—	—	—	50.5	0.00	50.5	5.04	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	7.78	7.40	4.02	36.1	0.07	0.13	5.64	5.76	0.12	1.43	1.55	84.7	9,274	9,359	9.13	0.41	23.5	9,733
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.04	3.74	3.74	26.9	0.06	0.06	5.64	5.70	0.05	1.43	1.49	—	6,420	6,420	0.32	0.33	0.60	6,526
Area	2.34	2.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.09	0.04	0.78	0.66	< 0.005	0.06	—	0.06	0.06	—	0.06	—	2,206	2,206	0.29	0.03	—	2,221
Water	—	—	—	—	—	—	—	—	—	—	—	34.3	31.7	66.0	3.52	0.08	—	179
Waste	—	—	—	—	—	—	—	—	—	—	—	50.5	0.00	50.5	5.04	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	6.47	6.13	4.52	27.6	0.07	0.12	5.64	5.76	0.11	1.43	1.55	84.7	8,658	8,743	9.17	0.44	0.85	9,103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.07	2.85	2.66	19.9	0.05	0.04	4.18	4.22	0.04	1.06	1.10	—	4,953	4,953	0.22	0.24	7.59	5,037
Area	2.73	2.70	0.02	2.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.88	8.88	< 0.005	< 0.005	—	8.91
Energy	0.09	0.04	0.78	0.66	< 0.005	0.06	—	0.06	0.06	—	0.06	—	2,205	2,205	0.29	0.03	—	2,220
Water	—	—	—	—	—	—	—	—	—	—	—	34.3	31.7	66.0	3.52	0.08	—	179
Waste	—	—	—	—	—	—	—	—	—	—	—	50.5	0.00	50.5	5.04	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	5.88	5.60	3.46	22.8	0.05	0.11	4.18	4.29	0.10	1.06	1.17	84.7	7,199	7,283	9.08	0.35	7.83	7,622
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.56	0.52	0.49	3.64	0.01	0.01	0.76	0.77	0.01	0.19	0.20	—	820	820	0.04	0.04	1.26	834
Area	0.50	0.49	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.47	1.47	< 0.005	< 0.005	—	1.48
Energy	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	365	365	0.05	< 0.005	—	368
Water	—	—	—	—	—	—	—	—	—	—	—	5.68	5.24	10.9	0.58	0.01	—	29.6
Waste	—	—	—	—	—	—	—	—	—	—	—	8.35	0.00	8.35	0.83	0.00	—	29.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.07	1.02	0.63	4.15	0.01	0.02	0.76	0.78	0.02	0.19	0.21	14.0	1,192	1,206	1.50	0.06	1.30	1,262

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.39	3.49	< 0.005	0.21	—	0.21	0.19	—	0.19	—	490	490	0.02	< 0.005	—	492
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.34	1.34	< 0.005	< 0.005	—	1.35
Dust From Material Movement	—	—	—	—	—	—	< 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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Dust From Material Movement	—	—	—	—	—	—	< 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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	55.8	55.8	< 0.005	< 0.005	0.20	56.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.71	3.11	27.3	29.4	0.06	1.21	—	1.21	1.11	—	1.11	—	6,496	6,496	0.26	0.05	—	6,518
Dust From Material Movement	—	—	—	—	—	—	3.18	3.18	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	71.2	71.2	< 0.005	< 0.005	—	71.4
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	—	11.8
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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.07	1.56	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	335	335	< 0.005	0.01	1.21	339
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.5	28.5	< 0.005	< 0.005	0.07	29.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	0.01	3.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.51	22.9	23.6	0.05	0.91	—	0.91	0.84	—	0.84	—	5,694	5,694	0.23	0.05	—	5,713

Dust From Material Movement	—	—	—	—	—	—	2.65	2.65	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.19	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	46.8	46.8	< 0.005	< 0.005	—	47.0
Dust From Material Movement	—	—	—	—	—	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.75	7.75	< 0.005	< 0.005	—	7.77
Dust From Material Movement	—	—	—	—	—	—	< 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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	1.30	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	279	279	< 0.005	0.01	1.00	283

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Linear, Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.06	0.89	7.71	10.8	0.01	0.34	—	0.34	0.31	—	0.31	—	1,620	1,620	0.07	0.01	—	1,625
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.88	8.88	< 0.005	< 0.005	—	8.91
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.47	1.47	< 0.005	< 0.005	—	1.47
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.91	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	195	195	< 0.005	0.01	0.70	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.91	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	195	195	< 0.005	0.01	0.70	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.10	0.06	3.66	0.69	0.03	0.05	0.70	0.74	0.05	0.19	0.24	—	2,784	2,784	0.04	0.44	5.84	2,922
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.85	4.85	< 0.005	< 0.005	0.01	4.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.11	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	76.3	76.3	< 0.005	0.01	0.07	80.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2

3.11. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.13	7.13	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.13	7.13	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	3.57	3.93	0.01	0.16	—	0.16	0.15	—	0.15	—	649	649	0.03	0.01	—	651
Dust From Material Movement	—	—	—	—	—	—	1.56	1.56	—	0.75	0.75	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.65	0.72	< 0.005	0.03	—	0.03	0.03	—	0.03	—	107	107	< 0.005	< 0.005	—	108
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.78	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.60	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.34	0.20	12.3	2.32	0.11	0.17	2.35	2.51	0.17	0.64	0.81	—	9,396	9,396	0.13	1.48	19.7	9,861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.57	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.32	0.19	13.3	2.37	0.11	0.17	2.35	2.51	0.17	0.64	0.81	—	9,398	9,398	0.13	1.48	0.51	9,844
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.3	33.3	< 0.005	< 0.005	0.06	33.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.04	2.86	0.51	0.03	0.04	0.51	0.54	0.04	0.14	0.18	—	2,060	2,060	0.03	0.33	1.87	2,159
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.51	5.51	< 0.005	< 0.005	0.01	5.59

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.52	0.09	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	341	341	< 0.005	0.05	0.31	357

3.13. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.90	1.12	< 0.005	0.04	—	0.04	0.03	—	0.03	—	206	206	0.01	< 0.005	—	207
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.2	34.2	< 0.005	< 0.005	—	34.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.22	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	317	317	0.01	0.01	0.03	321
Vendor	0.02	0.01	0.67	0.17	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	470	470	< 0.005	0.07	0.03	491
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.1	28.1	< 0.005	< 0.005	0.05	28.5
Vendor	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.5	40.5	< 0.005	0.01	0.05	42.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.65	4.65	< 0.005	< 0.005	0.01	4.71
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.70	6.70	< 0.005	< 0.005	0.01	7.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.55	5.99	0.01	0.17	—	0.17	0.16	—	0.16	—	1,107	1,107	0.04	0.01	—	1,111
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.83	1.09	< 0.005	0.03	—	0.03	0.03	—	0.03	—	183	183	0.01	< 0.005	—	184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.07	1.57	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	352	352	< 0.005	< 0.005	1.16	354
Vendor	0.02	0.01	0.59	0.16	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	461	461	< 0.005	0.07	1.12	483
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.09	0.09	1.15	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	311	311	0.01	0.01	0.03	315
Vendor	0.02	0.01	0.64	0.16	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	461	461	< 0.005	0.07	0.03	482
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.54	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	148	148	< 0.005	0.01	0.23	150
Vendor	0.01	0.01	0.29	0.07	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.22	223
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.4	24.4	< 0.005	< 0.005	0.04	24.8
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.3	35.3	< 0.005	0.01	0.04	36.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	1.15	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.20	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	41.4	41.4	< 0.005	< 0.005	—	41.6
Paving	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.86	6.86	< 0.005	< 0.005	—	6.88
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.57	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.16	4.16	< 0.005	< 0.005	0.01	4.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	3.18	3.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.84	7.84	< 0.005	< 0.005	—	7.87
Architectural Coatings	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.30	1.30	< 0.005	< 0.005	—	1.30
Architectural Coatings	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.5	63.5	< 0.005	< 0.005	0.01	64.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	0.01	3.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	3.18	3.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	3.18	3.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	0.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	65.3	65.3	< 0.005	< 0.005	—	65.5
Architectural Coatings	1.56	1.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.9
Architectural Coatings	0.28	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	70.4	70.4	< 0.005	< 0.005	0.23	70.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.2	62.2	< 0.005	< 0.005	0.01	63.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.3	31.3	< 0.005	< 0.005	0.05	31.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.18	5.18	< 0.005	< 0.005	0.01	5.25

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	4.58	4.30	3.20	31.1	0.07	0.06	5.64	5.70	0.05	1.43	1.49	—	7,019	7,019	0.27	0.30	23.2	7,138
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.58	4.30	3.20	31.1	0.07	0.06	5.64	5.70	0.05	1.43	1.49	—	7,019	7,019	0.27	0.30	23.2	7,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	4.04	3.74	3.74	26.9	0.06	0.06	5.64	5.70	0.05	1.43	1.49	—	6,420	6,420	0.32	0.33	0.60	6,526
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.04	3.74	3.74	26.9	0.06	0.06	5.64	5.70	0.05	1.43	1.49	—	6,420	6,420	0.32	0.33	0.60	6,526
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.56	0.52	0.49	3.64	0.01	0.01	0.76	0.77	0.01	0.19	0.20	—	820	820	0.04	0.04	1.26	834

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.56	0.52	0.49	3.64	0.01	0.01	0.76	0.77	0.01	0.19	0.20	—	820	820	0.04	0.04	1.26	834

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,177	1,177	0.19	0.02	—	1,189
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	92.3	92.3	0.01	< 0.005	—	93.3
undefined	—	—	—	—	—	—	—	—	—	—	—	—	5.11	5.11	< 0.005	< 0.005	—	5.16
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,275	1,275	0.21	0.02	—	1,287
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,177	1,177	0.19	0.02	—	1,189
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	92.3	92.3	0.01	< 0.005	—	93.3
undefined	—	—	—	—	—	—	—	—	—	—	—	—	5.11	5.11	< 0.005	< 0.005	—	5.16
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,275	1,275	0.21	0.02	—	1,287
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	195	195	0.03	< 0.005	—	197
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	15.3	15.3	< 0.005	< 0.005	—	15.4
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.60	0.60	< 0.005	< 0.005	—	0.61
Total	—	—	—	—	—	—	—	—	—	—	—	—	211	211	0.03	< 0.005	—	213

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.09	0.04	0.78	0.66	< 0.005	0.06	—	0.06	0.06	—	0.06	—	931	931	0.08	< 0.005	—	934
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.09	0.04	0.78	0.66	< 0.005	0.06	—	0.06	0.06	—	0.06	—	931	931	0.08	< 0.005	—	934
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.09	0.04	0.78	0.66	< 0.005	0.06	—	0.06	0.06	—	0.06	—	931	931	0.08	< 0.005	—	934
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.09	0.04	0.78	0.66	< 0.005	0.06	—	0.06	0.06	—	0.06	—	931	931	0.08	< 0.005	—	934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	154	154	0.01	< 0.005	—	155
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	154	154	0.01	< 0.005	—	155

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.17	2.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.78	0.72	0.04	4.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.0	18.0	< 0.005	< 0.005	—	18.1
Total	3.12	3.06	0.04	4.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.0	18.0	< 0.005	< 0.005	—	18.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.17	2.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.34	2.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.40	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.47	1.47	< 0.005	< 0.005	—	1.48
Total	0.50	0.49	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.47	1.47	< 0.005	< 0.005	—	1.48

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	34.3	31.7	66.0	3.52	0.08	—	179
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	34.3	31.7	66.0	3.52	0.08	—	179

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	34.3	31.7	66.0	3.52	0.08	—	179
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	34.3	31.7	66.0	3.52	0.08	—	179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.68	5.24	10.9	0.58	0.01	—	29.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.68	5.24	10.9	0.58	0.01	—	29.6

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	50.5	0.00	50.5	5.04	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.5	0.00	50.5	5.04	0.00	—	177

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	50.5	0.00	50.5	5.04	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.5	0.00	50.5	5.04	0.00	—	177
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	8.35	0.00	8.35	0.83	0.00	—	29.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.35	0.00	8.35	0.83	0.00	—	29.2

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	7/1/2025	7/1/2025	5.00	1.00	—
Linear, Grading & Excavation	Linear, Grading & Excavation	7/2/2025	7/7/2025	5.00	4.00	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	7/8/2025	7/10/2025	5.00	3.00	—
Linear, Paving	Linear, Paving	7/11/2025	7/14/2025	5.00	2.00	—
Site Preparation	Site Preparation	7/1/2025	7/14/2025	5.00	10.0	—
Grading	Grading	7/15/2025	11/3/2025	5.00	80.0	—
Building Construction	Building Construction	11/18/2025	8/24/2026	5.00	200	—
Paving	Paving	11/4/2025	11/17/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	12/2/2025	9/7/2026	5.00	200	—

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

Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40

Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
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	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	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	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	37.5	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	127	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	32.2	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	16.5	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.44	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	5.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	30.0	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	17.5	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	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	0.00	0.00	150,995	50,332	11,317

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 (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	—	—	0.07	0.00	—
Linear, Grading & Excavation	—	—	0.07	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.07	0.00	—
Site Preparation	—	3,000	15.0	0.00	—
Grading	—	81,000	80.0	0.00	—
Paving	0.00	0.00	0.00	0.00	4.40

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Office Building	0.00	0%
Parking Lot	4.33	100%
Road Construction	0.07	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	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005

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
General Office Building	980	222	70.5	270,893	7,929	1,799	570	2,190,642
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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)
0	0.00	150,995	50,332	11,317

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
General Office Building	2,106,810	204	0.0330	0.0040	2,906,042
Parking Lot	165,227	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	17,891,212	396,597
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	93.6	—
Parking Lot	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

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

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
Forklifts	Electric	Average	1.00	4.00	42.0	0.20

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. Biomass Cover Type

5.18.1.1. Unmitigated

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)

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days. Demolition not required for the proposed project.
Operations: Off-Road Equipment	Based on applicant provided information, off-road equipment would be utilized during operations.
Land Use	Lot acreage adjusted to represent overall acreage of the project site.

Appendix C

CULTURAL RESOURCE ASSESSMENT

FOR THE MEADE/BLOCKER PROPERTY,

CITY OF AUBURN

PLACER COUNTY, CALIFORNIA

Prepared by

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El Dorado Hills, CA 95762
(916) 939-2405

Prepared for

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ANDREGG GEOMATICS
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April 22, 2015
(Job #15-028)

INTRODUCTION

As a part of the due diligence for the property, a cultural resources study has been completed for a 12.6 acre parcel in the City of Auburn. (Figures 1 and 2). The goal of the study was to identify any prehistoric or historic period cultural resources within the project area that could be historical resources under the criteria of the California Register of Historical Resources, causing limitations for any proposed future development.

The project area is mapped on the Auburn 7.5' USGS topographic map and lies in section 10, Township 12 North Range 8 East, MDM.

Melinda Peak, M.A., served as principal investigator for the current study, supervising survey efforts and preparing the report. Neal Neuenschwander, B.A., completed the field survey.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

For the purposes of CEQA, an historical resource is a resource listed in, or determined eligible for listing in the California Register of Historical Resources. When a project will impact a site, it needs to be determined whether the site is an historical resource, which is defined as any site which:

(A.) Is historically or archeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and

(B) Meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

The studies conducted on the project area were designed to determine if any prehistoric or historic period sites were present; and if present, whether the resources are eligible for listing in the California Register of Historical Resources.

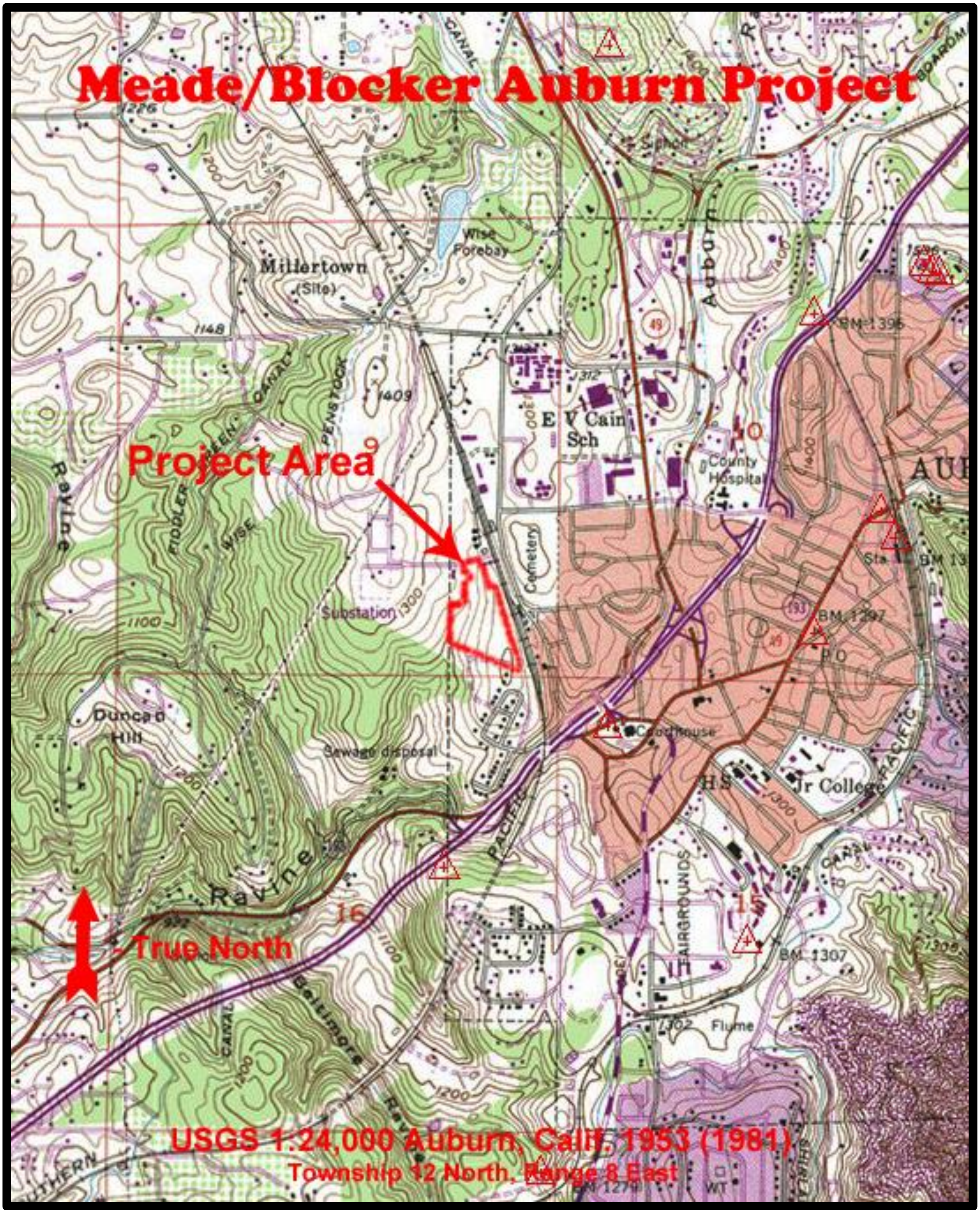
Meade/Blocker Auburn Project
Project Area
True North
USGS 1:24,000 Auburn, Calif. 1953 (1981)
Township 12 North, Range 8 East
Millertown
(Site)
Wise Forebay
E V Cain Sch
County Hospital
Cemetery
Substation
Sewage disposal
Duncan Hill
Courthouse
H.S.
Jr College
Ravine
Flume

Figure 1

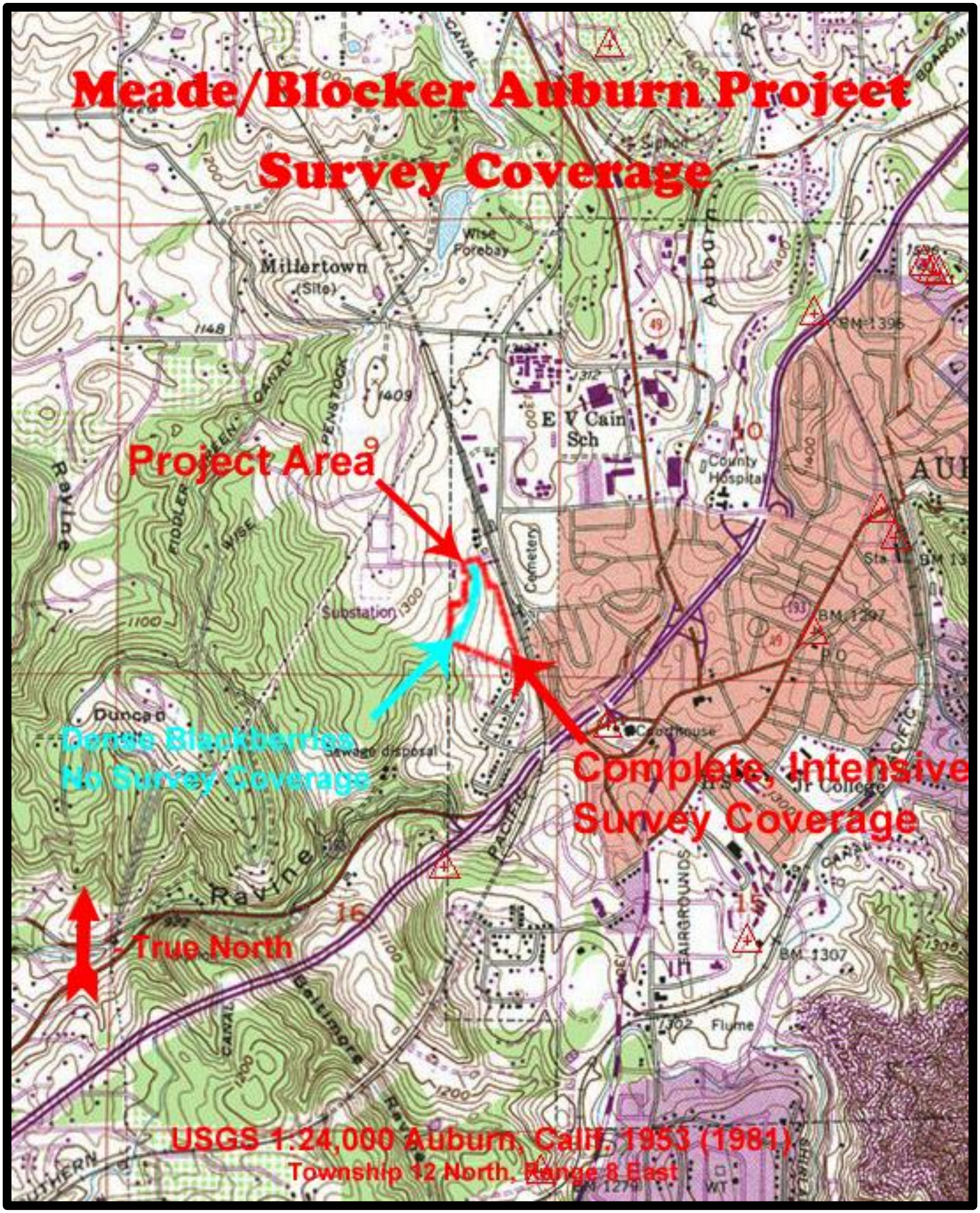
Meade/Blocker Auburn Project
Survey Coverage
Project Area
Dense Blackberries
No Survey Coverage
Complete, Intensive
Survey Coverage
- True North
USGS 1:24,000 Auburn, Calif. 1953 (1981)
Township 12 North, Range 8 East

Figure 2

CULTURAL HISTORY

Prehistory

Until recent years, few archeological studies have been conducted in this region. Early excavations had focused either on the large, rich village sites in the Delta region and along the major waterways in the Central Valley or on the higher elevation sites in proposed reservoir areas, along major Sierran waterways. As a result, chronological sequences have been established for each region, with later work emphasizing refinement of these sequences.

Increasing urbanization in the Sacramento region over the past twenty years has pushed development further from the major drainages and into the margin of the Sacramento Valley and the Sierran foothills. There is no established archeological sequence for the region, but the ties seem to be stronger to the Sierra Nevada.

The project is located in an interesting area for archeological research because it is between three areas with defined archeological sequences: the Oroville locality to the north, the Central Sierra area to the east and the Central Valley/Delta area to the west. These sequences include many similar artifact types and dates for major cultural changes, but there are also significant differences between them. It is an important goal of archeology to determine how these differences relate to different cultural traditions, cultural adaptation to differing environmental conditions or other natural or cultural influences. It is not clear at present which of these sequences best reflects the prehistory of the project vicinity or if a separate local sequence is necessary to adequately describe the area.

An excavation project by Chavez (1982) on sites on Linda Creek and Strap Ravine corroborated the findings of earlier work that indicated that the strong Central Valley association characteristic of the late prehistoric cultures in the foothill area might not extend to earlier cultures. Although there are many similarities with the material culture of the Late Horizon of the Central Valley, there are also significant points of diversion.

In the Linda Creek area, only site CA-PLA-210 produced artifacts from excavation units. There was evidence of two components at the site, although they were not distinctly separated by stratigraphy.

The more recent component, characterized by Desert Side Notched points and emphasis on the use of chert and other silicates, probably dates to Phase II of the Late Horizon -- about A.D. 1500 to the time of European contact. The older component is represented by one Gunther Barbed projectile point and an emphasis on basalt as well as silicates. This component probably dates to Phase I of the Late Horizon, about A.D. 500 to 1500. Chavez (1982:58) cautions that these conclusions are tentative due to the small number of units excavated and the low recovery rate of artifacts within these units.

The Strap Ravine sites appear to have been occupied earlier than the Linda Creek sites, and, although times of occupation overlapped, they were probably abandoned earlier as well. The excavations at CA-PLA-38 recovered enough obsidian flakes to permit sourcing by X-ray fluorescence and dating by obsidian hydration. This dating technique indicated occupation of the site from about 500 B.C. to A.D. 500. Chavez, on the basis of projectile point types recovered from the site, suggests that occupation continued later than this, through Phase I and possibly into Phase II (Chavez 1982:51). Again, the conclusions must be considered tentative due to the relatively small artifact collection contributing to the analysis.

Artifacts that suggest occupation earlier than A.D. 500--into the transitional period between the Middle and Late Horizons--include a Type C3 *Olivella* shell bead and two slate projectile points bearing distinct morphological similarities to Martis Complex styles. The slate points, both recovered from CA-PLA-87, resemble a Type 4c point as defined at CA-NEV-15 (Elsasser 1960) and a Martis Contracting Stem (Elston et al. 1977) according to Chavez (1982:47). Point types suggesting Phase I occupation were also recovered from Strap Ravine sites.

Chavez (1982), dealing with a limited artifact collection, did not go so far as to suggest occupation of the area by a population bearing the Martis Culture. He noted the position of the project vicinity between three areas of differing cultural sequences (as mentioned above) and suggested that the wide variety of artifact types indicated that the area "...could have served as a culture contact and exchange 'hub'..." (Chavez 1982: 52). A test excavation performed by Peak & Associates (1988) on a very small midden site, CA-PLA-176, on the Linda Creek watershed, also recovered a slate point similar in style to those associated with the Martis Culture.

The presence of Martis-like (Middle Archaic) artifacts was also noted at site CA-PLA-633 (Locus C) and CA-PLA-636 (Davy 1989) located in the Stanford Oaks project area. Of the 27 projectile points recovered during the excavation of the sites within the Stanford Oaks project area, six (22 percent) weighed more than two grams, and "...may or may not have been atlatl...dart points" (Davy 1989:163). The excavation of CA-PLA-663/H has also resulted in the discovery of larger projectile points that may date to this period as well (Wait, personal communication, 1994).

Peak & Associates conducted two large-scale surveys with excavation of several sites on the higher land north of Clover Valley and northwest of the project area. The extensive excavations in the Twelve Bridges Golf Club project area provide a large body of data toward defining the characteristics of the cultures in this area and a better idea of the cultural succession. The survey of Bickford Ranch (Peak & Associates 1995) included a large volcanic plateau that was almost devoid of prehistoric resources, but the margins of the plateau were the scene of considerable prehistoric occupation and use. Almost all of the sites in these project areas were associated with bedrock mortars.

It is clear that the most recent prehistoric cultures of the area reflect, in general, the late cultures of the Central Valley, though there are interesting local variations. Some of the differences clearly result from the greater wealth and population in the valley, but other differences may reflect a technological response to differing ecological settings and resource exploitation techniques.

In the preceding phase of prehistory there is a consistent expression of high Sierra Nevada and Great Basin relationships of some sort. However, the projectile points that reflect this connection are often produced on material imported from the Coast Ranges, although manufacture on locally available non-obsidian materials is much more common. The reasons for this situation are not clear. This could also be a response to differing ecological settings, but the relationship between foothill sites and the Martis Culture proper is an open question.

Ethnology

At the time of the gold rush, the project vicinity was occupied by the Nisenan Indians, identified by the language they spoke. There have been several general treatments of the Nisenan culture by Beals 1933; Kroeber 1929, 1953; Littlejohn 1928; Wilson and Towne 1978 and Wilson 1982. There are also several more specific articles on various aspects of their culture as reported in the bibliography and elsewhere.

The Nisenan peoples occupied the drainages of the Yuba, Bear, and the American Rivers from the Sacramento River on the west to the summit of the Sierra in the east. The Foothill and Hill Nisenan peoples were distinctive from the Valley Nisenan and were loosely organized into tribelets or districts with large central villages, surrounded by smaller villages. These are often referred to as winter villages by older Indians. These central villages and their leaders seemed to have had power or control over the surrounding smaller villages and camps and specific surrounding territory (Beals 1933; Littlejohn 1928; Wilson and Towne 1978). These districts were oriented to the natural resources and the landforms.

In the foothills and mountains the major drainages became formal or informal boundaries with the land in between forming the district. Thus, the Placerville District is between the Cosumnes River and the Middle Fork of the American River, the Auburn District between the Middle Fork of the American River and the Bear River and the Nevada City District between the Bear River and the Yuba River.

All the Nisenan depended on activities attuned to the seasonal ripening of plant foods and the seasonal movements and migration of the animals and the runs of fish. With the flooding of the valley in the winter and spring a great number of animals such as elk, antelope and bears moved to the natural levees along the rivers and up into the lower foothills. Along the foothill margins they joined the resident and migratory deer herds. Huge flocks of waterfowl visited the flooded areas between the rivers and the foothills, coveys of quail gathered in the fall, and pigeons were common in the fall and spring. Steelhead and salmon ran up most of the major streams including in the fall, winter and spring. The hunting of these plentiful resources was part of the foothill lifeway.

This same bounty was available to the river-oriented valley peoples out on the valley floor and along the natural levees of the rivers. Major north-south Indian trails along the margin of the foothills were usable year around as well as other trails east and west along the natural levees of the stream courses. There was probably not a great deal of competition for resources at this time except in lean years. Both the valley and foothill peoples lived at the edges of rich ecotones: the rivers and the valley floor, and the valley floor and the foothills.

While the Hill Nisenan to the east in the foothills carried on trade with the valley peoples and shared some of the cultural traits, they lacked the complexity or richness of the Valley Nisenan. The Hill Nisenan had a different resource base to work with which required greater mobility and a more intense use of the available resources (Matson 1972). They developed a local culture that was more oriented to the gathering, storage and year round use of the acorn, continual foraging of resources by everyone in the village group, specialized hunting strategies and availability of different plants to gather and process (Erskian and Ritter 1972). They depended on activities attuned to the seasonal ripening of plant foods and the seasonal migrations and increased populations of animals and insects. The foothill people relied more on foraging for food, for immediate use or short-term storage, rather than gathering for future needs. This meant they had to be much more mobile in their use of the land and its resources. Population densities and the large number of campsites reflect the more limited ability to acquire and utilize the fewer available resources: they had to work harder for less.

This continual movement meant the foothill people did not have large year-round villages. There are no known major villages in the foothills or mountains that can compare with the valley permanent village sites or population densities. However, there are hundreds of small campsites and villages scattered across the foothills and mountains with certain localities as the centers for these hill peoples.

It appears that the hill people were more socially organized around the extended family than to the village and would often camp in informal family groups around the central village. Since they did some foraging and extensive fishing and hunting in the winter they needed to have some access to a resource base at all times. However, due to the ability to store acorns and other dried foods and take advantage of the winter concentrations of game, birds and fish, they could congregate in larger villages in the wintertime. There is some evidence that these winter villages were moved at times if the local resources were too badly depleted. Over a long period of time a center village may have been abandoned and moved and then reoccupied at a later time. Many place names refer to these old or unoccupied sites.

At the central villages there was the need to build and maintain more substantial houses for winter living. Larger family houses, a dance house and acorn granaries were part of these winter quarters. The availability of firewood may also have been a factor in the preference for living up in the oak woodlands of the foothills. Winter was the time of ceremonies, social gatherings and marriages. Shamans had contests, children were trained, and trade items, tools, baskets and equipment were made and repaired.

Historic Context

After James Marshall's discovery of gold at Coloma on the South Fork of the American River in 1848, thousands came to the Sierra foothills seeking their fortunes. The creeks and drainages throughout the foothill region were worked by the early miners, with varying degrees of success. Many towns grew up to provide goods and services to the miners.

The 1833 malaria epidemic that decimated the Indians in the Central Valley played a major role in defining the post-Contact land use pattern of the Indians of the region, as well as impacting Euro-American economic development. The introduction of malaria to central California *circa* 1831 occurred as a result of expeditions of several fur brigades of the Hudson's Bay Company with infected individuals. The introduction of the disease led to the tremendous epidemic of 1833 that decimated the Indian population of the region. An estimated three quarters of the total Indian population of the region died from the disease in that year.

Malaria was epidemic in the mining camps of the Sierra foothill region, and remained endemic, with frequent sharp local outbreaks throughout the Central Valley until about 1880. The Third Biennial Report of the State Board of Health published in 1875, referenced an undated article from *The Placer Press* that reported, “Almost everybody living west of Gold Hill is either down with fever, or chills and fever, or more or less affected by the miasmatic poison generated and floating around in that locale” (Gray and Fontaine 1951:27).

Gold was discovered in Auburn on May 16, 1848, making it one of the earliest mining camps in California (Gudde 1975:23). Auburn Ravine was the focus of early mining activity and the miners quickly spread out over the length of the ravine.

When the mining industry began to wane in the region, agriculture became the main support of the region, with orchards being planted throughout the area. Newcastle and Auburn, both former mining towns on the route of the Central Pacific Railroad, became important shipping centers for fruit.

RESEARCH

A review of the files maintained at the North Central Information Center of the California Historical Resources Information System was conducted on August 5, 2013 (PLA-13-78, Appendix 2).

According to this review, a portion of the northeastern section of the project area had been surveyed in 1997 by Blossom Hamusek-McGann for the Proposed Auburn Rail/Multimodal Station Project (survey map, Appendix 2). The surveyor recorded a number of buildings within her project area (P-31-1802, -1803, -1804, -1805 and -1806), but nothing in the portion of her survey area now a part of this project area.

The Southern Pacific Railroad line to the east of the property has been recorded as P-31-001240 (CA-PLA-982H). The remainder of the project area has never been systematically surveyed and there are no recorded sites in the project area.

FIELD INSPECTION

A complete, intensive pedestrian inspection of the project area was completed on April 17, 2015. Transect spacing averaged ten to fifteen meters in width and were systematic across the entire project area. One area was excluded from systematic coverage due to the presence of a dense thicket of blackberries paralleling an unnamed drainage located in the western portion of the property. Figure 2 shows the area of intensive survey coverage and area that was excluded.

Surface visibility was mixed with tall grasses present, but a network of dirt roads crisscrossed the area and a sewer line access road was located along the western periphery of the property along the unnamed drainage. These features, and scattered rodent holes provided good opportunities to inspect the ground surface.

Scattered modern refuse, some metal poles from the adjacent Placer County yarding facility, and several homeless camps were discovered but otherwise historic and prehistoric period artifacts were absent as was evidence of prehistoric period or historic period use or habitation.

One of the buildings recorded in 1997, P-31-001804, is longer present near the project area, and a parking lot covers the former site of the building.

RECOMMENDATIONS

With any surface inspection there is always a remote possibility that previous activities (both natural and cultural) have obscured prehistoric or historic period artifacts or habitation areas, leaving no surface evidence that would permit discovery of these cultural resources. If, during construction activities, unusual amounts of non-native stone (obsidian, fine-grained silicates, basalt), bone, shell, or prehistoric or historic period artifacts (purple glass, etc.) are observed, or if areas that contain dark-colored sediment that do not appear to have been created through natural processes are discovered, then work should cease in the immediate area of discovery and a professionally qualified archeologist should be contacted immediately for an on-site inspection of the discovery.

If any bone is uncovered that appears to be human, then the Placer County Coroner must be contacted, according to state law. If the coroner determines that the bone most likely represents a Native American interment, then he must contact the Native American Heritage Commission in Sacramento so that they can identify the most likely descendants.

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APPENDIX 1

Record Search

California Historical Resources Information System

NORTH CENTRAL INFORMATION CENTER

AMADOR
EL DORADO
NEVADA
PLACER
SACRAMENTO
YUBA

California State University, Sacramento
6000 J Street, Folsom Hall, Suite 2042
Sacramento, California 95819-6100
phone: (916) 278-6217
fax: (916) 278-5162
email: ncic@csus.edu

4/8/2015

NCIC File No.: PLA-15-45

Neal Neuenschwander
Peak & Associates, Inc.
3161 Godman Avenue
Chico, CA 95973

Re: Meade Auburn Project

The North Central Information Center received your record search request for the project area referenced above, located on the Auburn USGS 7.5' quad. The following reflects the results of the records search for the project area and a 500-foot radius:

As indicated on the data request form, the locations of reports and resources are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Resources within search area:	P-31-1240 P-31-1802 P-31-1803 P-31-1805 P-31-1806
Reports within search area:	4138

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed

OHP Historic Properties Directory:	☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☒ enclosed	☐ not requested	☐ nothing listed
CA Inventory of Historic Resources (1976):	☒ enclosed	☐ not requested	☐ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☒ enclosed	☐ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☐ not requested	☒ nothing listed
GLO and/or Rancho Plat Maps:	☒ enclosed	☐ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed
Soil Survey Maps:	☐ enclosed	☒ not requested	☐ nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

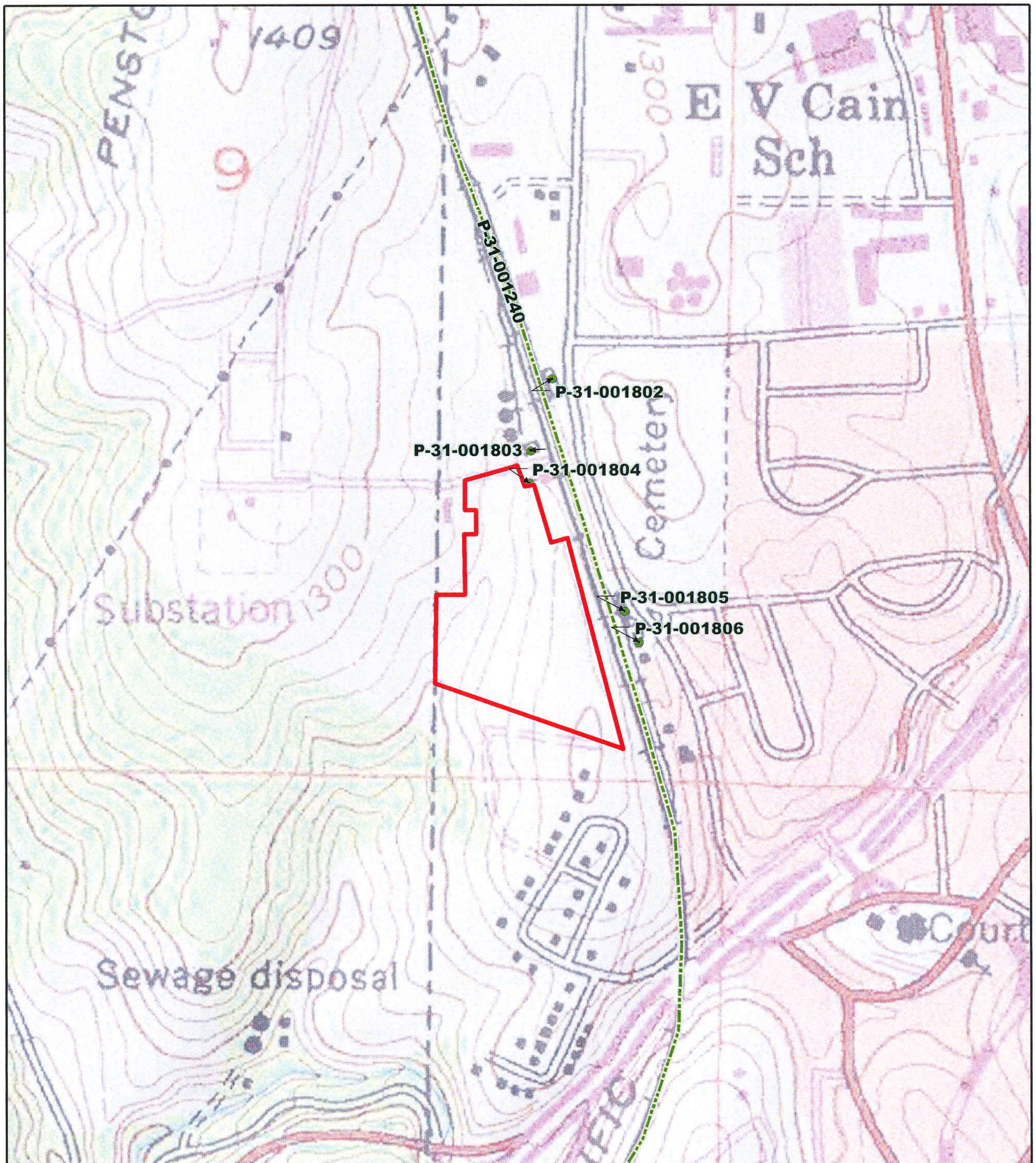
Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,

Nathan Hallam
Coordinator, North Central Information Center

Meade Auburn Project



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North Central Information Center
Records Search Results

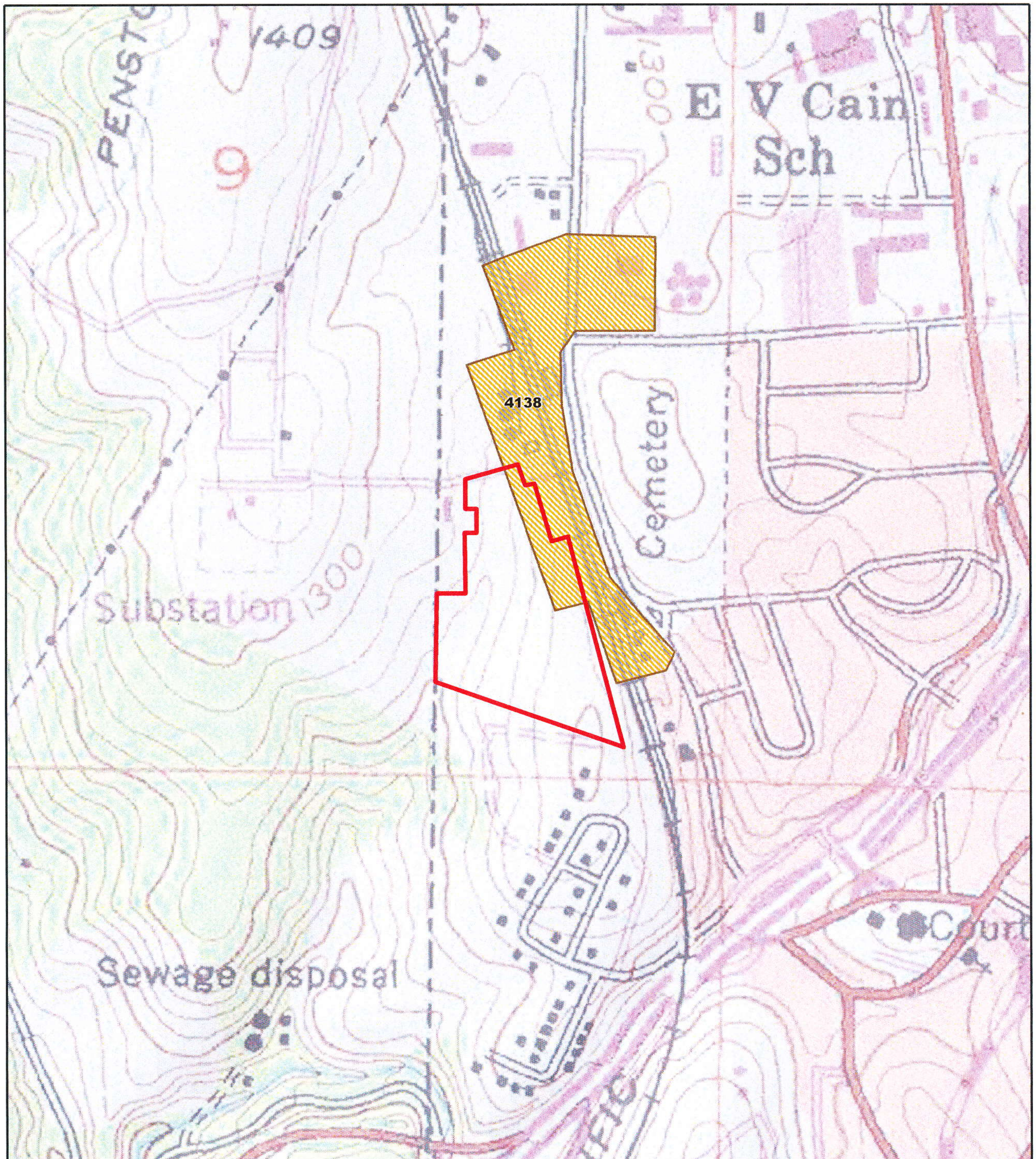
Auburn 7.5' Quadrangle

May depict confidential cultural resource locations.
Do not redistribute.

Findings:

6 resources
1 survey reports

Meade Auburn Project



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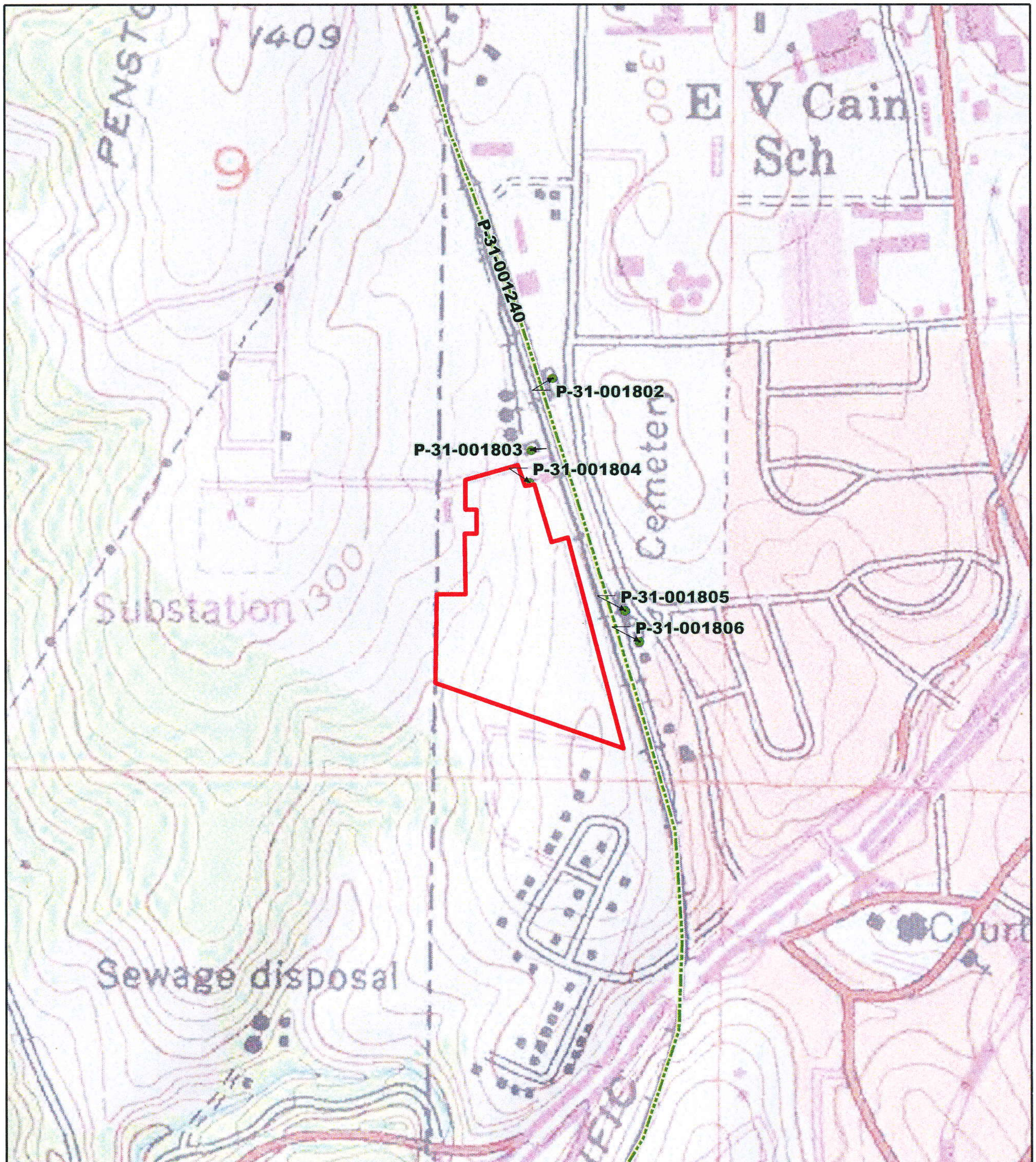

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North Central Information Center
Records Search Results

Auburn 7.5' Quadrangle

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Do not redistribute.

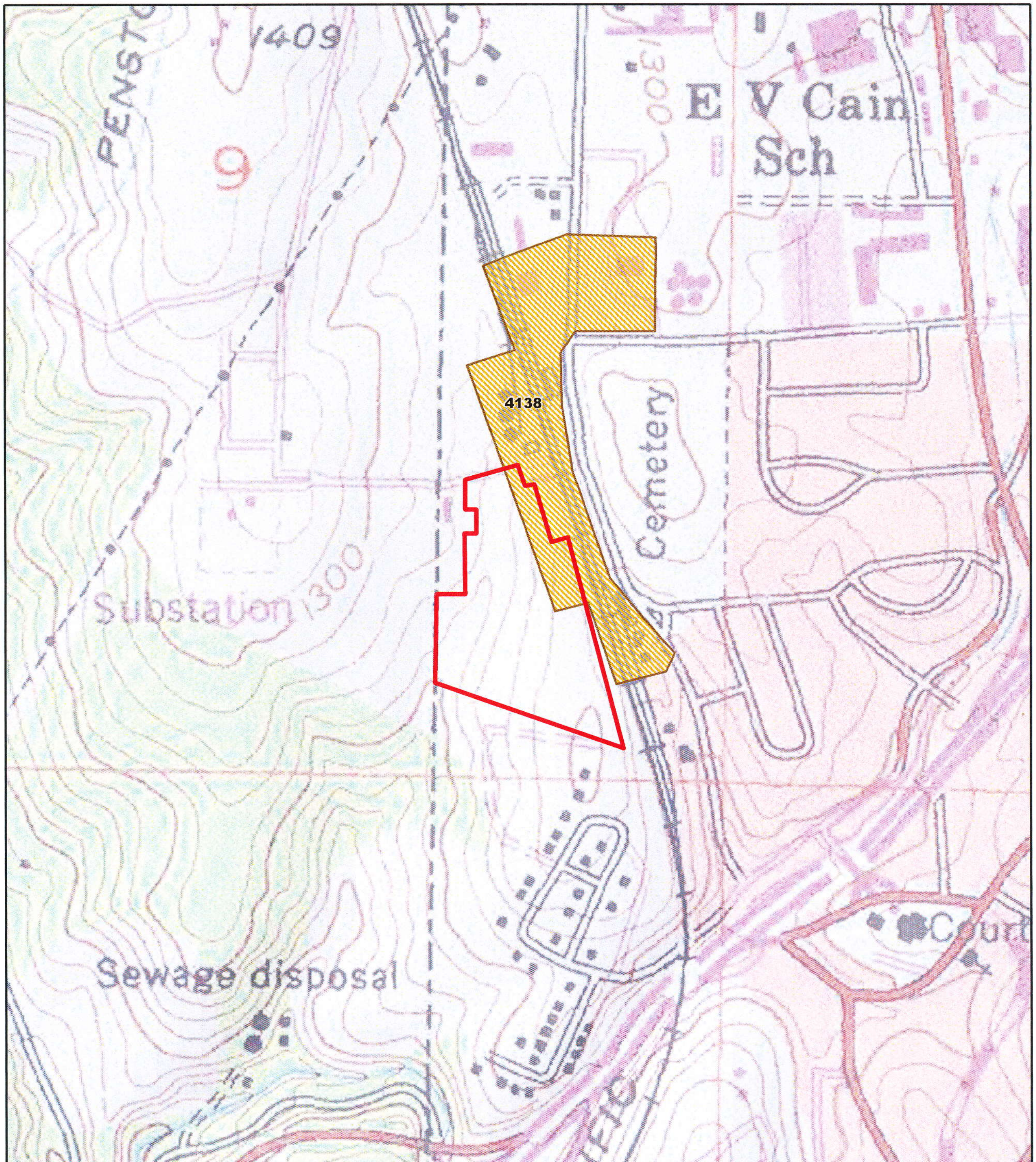
Findings:

6 resources
1 survey reports

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-31-001240	CA-PLA-000982H	Resource Name - Southern Pacific Railroad; Other - SPRR east bound; Other - PCWA-D; Other - C-Greenwood-A-1	Building, Structure	Historic	HP11 (Engineering structure)	1999 (W.L. Norton, Jones & Stokes); 1999 (W.L. Norton, S.M. Atchley, Unknown); 2005 (Cynthia Toffelmier, JRP Historical Consulting); 2007 (Denise Jurich, Jesse Martinez, PBS&J)	003943, 008967, 009362, 010366
P-31-001802		Resource Name - Nevada Station	Building	Historic	HP06 (1-3 story commercial building)	1997 (Tracy D. Bakic, PAR Environmental Services, Inc.)	004138
P-31-001803		Resource Name - Union Oil Company Bulk Facility; Other - Beacon Oil Bulk Facility; Other - Dawson Oil Co. (Cheveron)	Building	Historic	HP08 (Industrial building)	1997 (Tracy D. Bakic, Mary L. Maniery, PAR Environmental Services, Inc.)	004138
P-31-001804		Resource Name - Southern Pacific Railroad Section House; OHP PRN - 5603-0201-0000; Other - Duran Residence; Other - Grandma's Hill	Building	Historic	HP02 (Single family property)	1986 (Mary Ann Kollenberg, Historic Survey); 1997 (Tracy D. Bakic, Mary L. Maniery, PAR Environmental Services, Inc.)	004138
P-31-001805		Resource Name - Southern Pacific Fruit Packing Sheds; OHP PRN - 5603-0202-0000; Other - Southern Pacific Station Complex; Other - Echo Valley Ranch Feed Store; Other - Koch's Feed Store; Other - Southern Pacific Fruit Packing Sheds	Building	Historic	HP06 (1-3 story commercial building)	1986 (Mary Ann Kollenberg, Historic Survey); 1997 (Tracy D. Bakic, Mary L. Maniery, PAR Environmental Services, Inc.)	004138
P-31-001806		Resource Name - Southern Pacific Depot (Eastbound); OHP PRN - 5603-0200-0000; Other - Southern Pacific Station Complex - Storage / Outbuilding; Other - Belli Automotive	Building	Historic	HP06 (1-3 story commercial building); HP17 (Railroad depot)	1986 (Mary Ann Kollenberg, Historic Survey); 1997 (Tracy D. Bakic, Mary L. Maniery, PAR Environmental Serivces, Inc.)	004138

Meade Auburn Project



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North Central Information Center
Records Search Results

Auburn 7.5' Quadrangle

May depict confidential cultural resource locations.
Do not redistribute.

Findings:

6 resources
1 survey reports

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
004138		1997	Hamusek-McGann, Blossom	Positive Historic Property Survey Report and Finding of No Effect for the Proposed Auburn Rail/Multimodal Station Project Auburn, Placer County, California		31-001798, 31-001799, 31-001800, 31-001801, 31-001802, 31-001803, 31-001804, 31-001805, 31-001806

Appendix D

GEOTECHNICAL ENGINEERING REPORT
for
11500 Blocker Drive
APN 001-051-010-510
Auburn, California

Prepared for:
Blocker Drive Properties, LLC
391 Nevada Street
Auburn, CA 95603

Prepared by:
Holdrege & Kull
792 Searls Ave.
Nevada City, CA 95959

Project No. 4826-01
June 15, 2017

HOLDREGE & KULL
CONSULTING ENGINEERS • GEOLOGISTS

Project No. 4826-01
June 15, 2017

Stephen Meade
Blocker Drive Properties, LLC
391 Nevada Street
Auburn, California 95603

Reference: ***11500 Blocker Drive***
APN 001-051-015-000
Auburn, California

Subject: ***Geotechnical Engineering Report***

Dear Mr. Meade,

This report presents the results of our geotechnical engineering investigation for the approximately 13-acre property located at 11500 Blocker Drive in Auburn, California. As proposed, the project is to include development of a mini-storage facility and 50 homes, and associated roadways, sidewalks and underground utilities.

The findings presented in this report are based on our subsurface investigation, laboratory test results, and our experience with subsurface conditions in the area. Our opinion is that the project can be completed as proposed, provided the recommendations presented in this report are implemented. Our primary concerns, from a geotechnical engineering standpoint, include rippability of rock at depths greater than approximately 8 feet and retaining wall construction.

Please contact us if you have any questions regarding our observations or the recommendations presented in this report.

Sincerely,

HOLDREGE & KULL

Prepared by:

Trevor Kull
Staff Engineer

Reviewed by:

Charles R. Kull, G.E. 2359
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
CHARLES R. KULL
No. 2359
GEOTECHNICAL
STATE OF CALIFORNIA

Copies: 3 to Blocker Drive Properties, LLC/ Attn: Stephen Meade
PDF to Stephen Meade, scmeade@pacbell.net

TABLE OF CONTENTS

FIGURES

APPENDICES

1 INTRODUCTION

At the request of Blocker Drive Properties, LLC , Holdrege & Kull (H&K) performed a geotechnical investigation at the approximately 13-acre property located at 11500 Blocker Drive, Auburn, California. The geotechnical investigation was performed in general accordance with our April 13, 2017 proposal for the project, a copy of which is included as Appendix A of this report. For your review, Appendix B contains a document prepared by GBA entitled *Important Information About Your Geotechnical Engineering Report,* which summarizes the general limitations, responsibilities, and use of geotechnical reports.

1.1 SITE DESCRIPTION

The proposed self-storage and estate subdivision project site is located on 11500 Blocker Drive in the City of Auburn, California. The property is bordered by suburban residential property to the west, south, and east, and by local businesses and a railway station to the north. Figure 1 is a site vicinity map showing the property location.

At the time of our field investigation, the project site was undeveloped except for partial clearing, gravel, and dirt fire roads. Site topography varied from moderately sloping along the northern portion of the site, to steeply sloping in west and southwest portion of the site. The site is located on the western edge of Auburn, southwest of the Old Auburn Cemetery.

1.2 PROPOSED IMPROVEMENTS

Based on our review of a site plan dated March 3, 2017 for the project provided by Blocker Drive Properties, LLC, we understand that the proposed improvements will likely include a mini-storage facility, 50 residences, and associated roadways, sidewalks and underground utilities. We anticipate that grading for the project will include cut and fill for roadways, retaining structures, and excavation for underground utilities.

1.3 PURPOSE

We performed a surface reconnaissance and subsurface geotechnical investigation at the site, collected soil samples for laboratory testing, and performed engineering calculations to provide grading and drainage recommendations, foundation and retaining wall design criteria, slab-on-grade recommendations, and pavement design recommendations for the proposed improvements.

1.4 SCOPE OF SERVICES

To prepare this report, we performed the following scope of services:

- We performed a site investigation, including a literature review and a limited subsurface investigation.
- We collected relatively undisturbed soil samples and bulk soil samples from selected exploratory trenches.
- We performed laboratory tests on select soil samples obtained during our subsurface investigation to determine their engineering material properties.
- Based on observations made during our subsurface investigation and the results of laboratory testing, we performed engineering calculations to provide geotechnical engineering recommendations for earthwork and structural improvements.

Our scope of services did not include a groundwater flow analysis nor an evaluation of the site for the presence of hazardous materials, historic mining features, asbestiform minerals, mold, or corrosive subsurface conditions.

2 SITE INVESTIGATION

Holdrege and Kull performed a site investigation on May 22, 2017 to characterize the existing surface conditions and shallow subsurface soil/rock conditions. Our site investigation included a literature review and field investigation as described below.

2.1 LITERATURE REVIEW

We performed a limited review of geologic literature pertaining to the project site. The following sections summarize our findings.

2.1.1 Soil Survey

As part of our investigation, we reviewed the online soil survey presented by the U.C. Davis Soil Resource Laboratory and the *Soil Survey of Placer County, California, Western Part* by the United States Department of Agriculture Soil Conservation Service (1980). The soil surveys indicated that the site is located in an area containing two distinct soil types. The property contains soils of the Auburn-Sobrante Silt Loams Complex, which is approximately 50% Auburn soil and 40% Sobrante soil.

The Auburn-Sobrante Silt Loams (15 to 30 percent slopes) is described as having moderate permeability and a moderate to high erosion hazard. Auburn-Sobrante Silt Loams typically has a pH of 6.1, slightly acidic, and is well drained.

Sobrante soil typically has a yellowish red silt loam surface layer approximately 7 inches thick. The subsoil is typically a yellowish red silt loam and heavy loam. At a depth of 33 inches is weathered basic schist, which is underlain by hard basic schist. Auburn soil has a strong brown silt loam surface layer about 4 inches thick. The subsoil is yellowish red silt loam at a depth from 4 to 20 inches. At 20 inches it transitions to weathered basic schist.

2.1.2 Regional Geology

The project site is located in the Sierra Nevada Foothills, on the western side of the Sierra Nevada geomorphic province. The Sierra Nevada province is an elongate, north-west/south-east trending structural block that is tilted upward to form a steep scarp above the adjacent Basin and Range province to the east. The western slope of the Sierra Nevada dips gently westward, and extends beneath sediment of the Great Valley province. Sediment within the Great Valley is derived from continual uplift and erosion of the Sierra Nevada.

2.1.3 Site Geology

We also reviewed the Geologic Map of California (California Division of Mines and Geology, 1977) to extract information on lithology and age of the geologic units of the property. According to the geologic map, the area containing the project site is generally underlain by Jurassic age Mesozoic volcanic rocks. The Jurassic period spans the period of time between 201 and 145 million years before present.

We reviewed California Geological Survey Open File Report 96-08, Probabilistic Seismic Hazard Assessment for the State of California, and the 2002 update entitled California Fault Parameters. The documents indicate the property is located within the Foothills Fault System. The Foothills Fault System is designated as a Type C fault zone, with low seismicity and a low rate of recurrence. According to the Caltrans ARS online tool on the California Department of Transportation website, the site is located approximately 1/2 mile east of the Deadman Fault, and approximately one mile south of the DeWitt Fault.

2.2 FIELD INVESTIGATION

Holdrege and Kull performed our field investigation on May 22, 2017. During our field investigation, we observed the local topography and surface conditions and performed a limited subsurface investigation. The following sections summarize surface and subsurface conditions observed during our field investigation.

Our subsurface investigation included the excavation of 6 exploratory trenches across the project site. We excavated to depths ranging between 2 and 6 feet below the ground surface (bgs) using a Kubota KX121-3 excavator equipped with an 18-inch bucket. We obtained samples using a hand-actuated slide sampler and shovel. A staff and senior engineer from our firm logged the soil conditions revealed in the exploratory trenches and collected relatively undisturbed and bulk soil samples for laboratory testing. Figure 2 shows the approximate exploratory trench locations.

2.2.1 Surface Conditions

At the time of our investigation, the site appeared to be unimproved, except for a few dirt roads. Site topography was generally hilly, with estimated slopes ranging from 15 to 30 percent; the slope runs from the uphill, northeast section of the property to the downhill, southwest section of the property. According to the base topographic map provided by Blocker Drive Properties, LLC, site elevations ranged from 1270 feet above mean sea level (MSL) at the northeast section of the site to 1155 feet MSL at the southwest edge of the property.

Vegetation on the site was typical of the Sierra Nevada Foothills, with areas of dense oak and pine trees and open fields of grasses and forbs. Seasonal drainage courses traversed the site. The seasonal stream courses were lined with blackberry thickets and riparian grasses.

2.2.2 Subsurface Soil Conditions

The soil conditions described in the following paragraphs are generalized, based on our observations of soil revealed in our 6 exploratory trenches. More detailed information can be found in the trench logs in Appendix C.

Trench T-1 was excavated through reddish brown, sandy silt to an approximate depth of 2 feet below ground surface (bgs). A 6-inch layer of gray, sandy clay was encountered between 2 and 2.5 feet bgs. The thin layer of sandy clay was underlain by dark reddish brown, silty gravel with sand. Trench T-1 was terminated at refusal at a depth of 3.5 feet bgs.

Trench T-2 was excavated through dark reddish brown, silty gravel from the surface to an approximate depth of 2 feet bgs. The subsurface soil was yellowish red, sandy silt to 4 feet bgs. Reddish brown, silty gravel with sand was encountered from 4 to 6 feet bgs. This soil layer contained weathered gravel and cobbles varying in size from 1 to 6 inches in diameter. Trench T-2 was terminated at refusal at a depth of 6 feet bgs.

Trenches T-3, T-4, and T-5 contained strong brown and dark red, moist, sandy silt. Typically, the amount of weathered gravel and cobbles increased as depth increased. Trenches T-3, T-4, and T-5 were terminated without refusal at depths of 4.5, 4.5, and 4 feet bgs, respectively.

Trench T-6 contained fractured, weathered gravel with silt. The angular gravel and cobbles varied in size from 0 to 8 inches in diameter. Trench T-6 was terminated at refusal at a depth of 2 feet bgs.

Please see the trench logs for more detailed descriptions of the underlying soil conditions.

2.2.3 Groundwater Conditions

During our site investigation, we did not encounter groundwater seepage in our exploratory trenches, nor did we observe onsite springs or seeps emanating from the ground surface. We did observe drainage channels and swales on the property that indicate seasonal flow of surface water.

Our observations of groundwater conditions were made in May 2017. Although we did not observe groundwater in our exploratory trenches, our experience has shown that seepage may be encountered in excavations which reveal the soil/weathered rock transition, particularly during or after the rainy season.

3 LABORATORY TESTING

We performed laboratory tests on selected soil samples collected from our subsurface exploratory trenches to determine their engineering material properties. These engineering material properties were used to develop geotechnical engineering design recommendations for earthwork and structural improvements. We performed the following laboratory tests:

D2166, Unconfined Compression Strength
D2216, Moisture Content
D2487, Unified Soil Classification System
D2488, Soil Description Visual Manual Method
D2844, Resistance Value (R-Value)

D2937, Density
D4318, Atterberg Limits
D4829, Expansion Index

In general, relatively undisturbed soil samples were collected for laboratory testing within the upper 3 feet of the trenches. Significant rock content prevented the collection of undisturbed soil samples below 3 feet.

Table 3.1 summarizes moisture/density and direct shear test results. Appendix D presents graphical direct shear, expansion index, and R-value test results.

Table 3.1 – Summary of Moisture/Density and Unconfined Compression Strength Testing

Trench No.	Sample No.	Depth (feet)	Dry Density (pcf)	Moisture Content (%)	Shear Friction Angle (degrees)	Shear Cohesion (psf)
T-2	052217D	2.5 - 3	106.1	18.5	-	1046
T-3	052217G	1.5 - 2	100.5	19	-	-

We performed a particle size determination on sample 052217B collected from 2.5 to 3.5 feet bgs in trench T-1. The test revealed the sample consisted of approximately 43 percent gravel, 22 percent sand, and 35 percent silt and clay. Based on the particle size determination, we classified the soil as silty gravel (GM).

We performed an Atterberg limits determination on sample 052217E obtained from a depth of 4 to 4.5 feet bgs in Trench T-2. The Atterberg limits determination revealed that the portion of the sample passing the No. 40 sieve had a liquid limit of 36 and a plastic limit of 26, resulting in a plasticity index of 10. Based on the Atterberg limits determination and the particle size determination, we classified the soil as silty gravel (GM).

We performed expansion index testing on sample 052217M, obtained at a depth of 3.5 to 4.5 feet bgs in trench T-5. The sample was described as yellowish red, sandy silt. A portion of sample 052217M was remolded in a 1.0-inch-high ring and submerged in water under an applied loading of 144 pounds per square foot (psf). We observed the loaded sample for a minimum of 24 hours. During that time we measured the swell (or settlement) with a dial micrometer. Expansion index test results of 12 indicate the sample exhibited very low expansion potential, as classified by UBC guidelines.

R-value testing is currently being performed and pavement design will be presented in an addendum.

4 CONCLUSIONS

The following conclusions are based on our field observations, laboratory test results, and our experience in the area.

1. Our opinion is that the site is suitable for the proposed improvements, provided that the geotechnical engineering recommendations and design criteria presented in this report are incorporated into the project plans.
2. Our primary concerns are the steep topography of the site, and the presence of resistant rock at shallow depths, which may affect excavatability. Recommendations for excavating through resistant rock are discussed in the section 5.1.3 of this report.
3. Based on our site observations, the geology of the region, and our experience in the area, our opinion is that the risk of seismically induced hazards such as slope instability, liquefaction, and surface rupture are remote at the project site.
4. Based on the site geology and our observation of the surface conditions, we anticipate that grading and excavation onsite will reveal variably weathered, fractured, metamorphic rock. Areas of resistant rock may be encountered which may require splitting, hammering, or blasting to increase the rate of excavation. In addition, spoil resulting from excavation onsite will likely consist of predominantly angular, gravel to cobble-sized rock fragments. This material may be suitable for use as fill, depending on the nominal size of the rock fragments, but will likely require specific recommendations for fill placement and observation to confirm compaction. Preliminary recommendations addressing rock fill placement are included in this report.
5. We did not encounter existing fill in our exploratory trenches. If existing fill is encountered during construction, we should be retained to evaluate the condition of the fill, and to make recommendations to mitigate the presence of fill, if necessary. Existing fill, if encountered, should not be relied upon to support proposed improvements without testing and evaluation.
6. During our site investigation, we did not observe groundwater or seepage within our exploratory trenches. However, we did observe evidence that surface water is seasonally transported through the drainage channels and swales on the property. We anticipate that moist to saturated soil conditions and groundwater may be encountered during grading, particularly in

excavations that reveal the soil/rock transition. Recommendations addressing moisture conditioning, drainage, and fill placement are presented in the following sections of this report.

7. Prior to grading and construction, we should be retained to review the proposed grading plan and structural improvements to confirm our recommendations.

5 RECOMMENDATIONS

The following geotechnical engineering recommendations are based on our understanding of the project as currently proposed, our field observations, the results of our laboratory testing program, engineering analysis, and our experience in the area.

5.1 GRADING

The following sections present our grading recommendations. The grading recommendations address clearing and grubbing, soil preparation, cut slope grading, fill placement, fill slope grading, surface water drainage, construction dewatering, underground utility trenches, plan review, and construction monitoring.

5.1.1 Clearing and Grubbing

The areas to be graded should be cleared and grubbed to remove vegetation and other deleterious materials as described below.

1. Strip and remove debris from clearing operations and the top 1-4 inches of soil containing shallow vegetation, roots and other deleterious materials. The organic topsoil can be stockpiled onsite and used in landscape areas but is not suitable for use as fill. The project geotechnical engineer should approve any proposed use of the spoil generated from stripping prior to placement.
2. Overexcavate any relatively loose debris and soil that is encountered in our exploratory trenches or any other onsite excavations to underlying, competent material. Possible excavations include exploratory trenches excavated by others, mantles or soil test pits, holes resulting from tree stump or boulder removal, and mining relics.
3. Although not observed during our investigation, if loose, untested fill is encountered during site development, overexcavate to competent native soil or weathered rock a minimum of 5 feet beyond the areas of proposed improvements.

4. Remove rocks greater than 8 inches in greatest dimension (oversized rock) from native soil by scarifying to a depth of 12 inches below finish grade in areas to support pavement, slabs-on-grade or other flatwork. Oversized rock may be used in landscape areas, rock landscape walls, or removed from the site. Oversized rock can be stockpiled onsite and used to construct fills, but must be placed at or near the bottom of deep fills and must be placed in windrows to avoid nesting. No oversized rock should be placed in the upper 3 feet of any structural fill. Unless used as rip-rap, oversized rock placed in fill should not be located within 5 feet horizontally of the finished fill slope face. The project geotechnical engineer should approve the use of oversized rock prior to constructing fill.
5. Fine grained, potentially expansive soil, as determined by H&K, that is encountered during grading should be mixed with granular soil, or overexcavated and stockpiled for removal from the project site or for later use in landscape areas. A typical mixing ratio for granular to expansive soil is 4 to 1. The actual mixing ratio should be determined by H&K.
6. Vegetation, deleterious materials, structural debris, and oversized rocks not used in landscape areas, drainage channels, or other non-structural uses should be removed from the site.

5.1.2 Cut Slope Grading

Based on our understanding of the project at this time, we anticipate that permanent cut slopes up to 15 feet in height will be created during grading of the proposed improvements. In general, permanent cut slopes should not be steeper than ½:1, horizontal to vertical (H:V). Steeper cut slopes may be feasible, depending on the soil/rock conditions encountered and should be reviewed on a case-by-case basis. The upper two feet of all cut slopes should be graded to an approximate ½:1, H:V, slope to reduce sloughing and erosion of looser surface soil.

Temporary cut slopes may be constructed to facilitate retaining wall construction. We anticipate that subsurface conditions will be favorable for construction of temporary cut slopes no steeper than ½:1, H:V, for a maximum height of approximately 6 feet. To reduce the likelihood of sloughing or failure, temporary cut slopes should not remain over the winter.

A representative of H&K must observe temporary cut slopes steeper than ½:1, H:V, during grading to confirm the soil and rock conditions encountered. We recommend that personnel not be allowed between the cut slope and the proposed retaining structure, form work, grading equipment, or parked vehicles during construction, unless the stability of the slope has been reviewed by H&K or the slope has been confirmed to meet OSHA excavation standards.

We anticipate that excavations deeper than 8 feet may be difficult with conventional excavation equipment and may require a bulldozer with a single tooth ripper. Areas of more resistant rock may require blasting.

5.1.3 Soil Preparation for Fill Placement

Where fill placement is proposed, the surface soil exposed by site clearing and grubbing should be prepared as described below.

1. The surface soil should be scarified to a minimum depth of 12 inches below the existing ground surface, or to resistant rock, whichever is shallower. Following scarification, the soil should be uniformly moisture conditioned to within approximately 3 percentage points of the ASTM D1557 optimum moisture content.
2. The scarified and moisture conditioned soil should then be compacted to achieve a minimum relative compaction of 90 percent based on ASTM D1557 maximum dry density. The moisture content, density, and relative percent compaction should be verified by a representative of H&K. The earthwork contractor should assist our representative by excavating test pads with onsite earth moving equipment.
3. Where fill placement is proposed on native slopes steeper than approximately 5:1, H:V, a base key and routine benches must be provided. Unless otherwise recommended by the project geotechnical engineer, the base key should be excavated at the toe of the fill a minimum of 2 feet into competent stratum, as determined by a representative of H&K during construction observation. The bottom of the base key should be sloped slightly into the hillside at an approximate gradient of 5 percent or greater.
4. The fill must be benched into existing side slopes as fill placement progresses. Benching must extend through loose surface soil into firm material, and at intervals such that no loose surface soil is beneath the fill. As a minimum, a horizontal bench should be excavated every 5 vertical feet or as determined by a representative of H&K.

5.1.4 Fill Placement

Soil fill placement proposed for the project should incorporate the following recommendations:

1. Soil used for fill should consist of uncontaminated, predominantly granular, non-expansive native soil or approved import soil. If encountered, rock used in fill should be broken into pieces no larger than 8 inches in diameter. Rocks larger than 8 inches are considered oversized material and should be stockpiled for offhaul or later use in landscape areas and drainage channels. If approved by the project geotechnical engineer, oversized rock may be placed at or near the bottom of deep fills. Oversized rock must be placed in windrows to avoid nesting and to facilitate the placement of compacted fill. No oversized rock should be placed in the upper 3 feet of any structural fill. The project geotechnical engineer should approve the use of oversized rock prior to constructing fill.

2. Import soil should be predominantly granular, non-expansive and free of deleterious material. Import material that is proposed for use onsite should be submitted to H&K for approval and possible laboratory testing at least 72 hours prior to transport to the site.

3. Cohesive, predominantly fine grained, or potentially expansive soil encountered during grading should be stockpiled for removal, mixed as directed by H&K, or used in landscape areas.

   As an option, cohesive fine grained, or potentially expansive soil can often be placed in the deeper portions of proposed fill (e.g., depths greater than 3 feet below subgrade in building footprints). However, this option would have to be evaluated on a case-by-case basis with consideration of the fill depth and proposed loading.

4. Soil used to construct fill should be uniformly moisture conditioned to within approximately 3 percentage points of the ASTM D1557 optimum moisture content. Wet soil may need to be air dried or mixed with drier material to facilitate placement and compaction, particularly during or following the wet season.

5. Fill should be constructed by placing uniformly moisture conditioned soil in maximum 8-inch-thick loose, horizontal lifts (layers) prior to compacting.

6. All fill should be compacted to a minimum relative compaction of 90 percent of the ASTM D1557 maximum dry density. The upper 12 inches of fill in paved areas, beneath proposed slabs-on-grade, and within the proposed building footprint should be compacted to a minimum of 95 percent relative compaction.

1. The moisture content, density and relative percent compaction of fill should be confirmed by a representative of H&K during construction.

5.1.5 Rock Fill Placement

Based on our observation of the rocky nature of the subsurface conditions revealed in our exploratory trenches, we anticipate that fill material generated from the project site may contain significant rock fragments, and that compaction testing with conventional methods may be difficult or inappropriate. Typically, fill that consists primarily of soil can be tested for relative compaction by using a nuclear density gauge. Our opinion is that rock fill cannot be reliably tested using this method.

We recommend that quality assurance during rock fill placement be based on a procedural approach, or method specification, rather than a specified relative compaction. The procedural requirements will depend on the equipment used, as well as the nature of the fill material, and will need to be determined by the geotechnical engineering firm onsite. Typically, procedural recommendations are based on the measured relative compaction of a test fill constructed onsite.

Based on our experience in the area, we anticipate that the procedural specification will require a minimum of six passes (back and forth equaling one pass) with a Cat 563 or similar, self-propelled, vibratory compactor to compact a maximum 8-inch thick, loose lift. Processing or screening of the fill material will be needed to remove rocks larger than approximately 8 inches in maximum dimension. Continuous or nearly continuous observation by a representative of H&K would be required during fill placement to confirm that procedural specifications have been met.

5.1.6 Differential Fill Depth

The recommendations presented in this section are intended to reduce the magnitude of differential settlement-induced structural distress associated with variable fill depth beneath structures.

2. Site grading should be performed so that cut-fill transition lines do not occur directly beneath any structures. The cut portion of the cut-fill building pads, if proposed, should be scarified to a minimum depth of 8 inches, and recompacted to 95 percent relative compaction.
3. Differential fill depths beneath structures should not exceed 5 feet. For example, if the maximum fill depth is 8 feet across a building pad, the minimum fill depth beneath that pad should not be less than 3 feet. If a cut-fill building pad is used in this example, the cut portion would need to be overexcavated 3 feet and rebuilt with compacted fill.

5.1.7 Fill Slope Grading

Based on our understanding of the project, we anticipate that fill slopes up to 14 feet in height will be created as part of the proposed improvements. In general, permanent fill slopes created onsite should be no steeper than 2:1, H:V. H&K should review fill slope configurations greater than approximately 15 feet in height, if proposed, prior to fill placement. Compaction and fill slope grading must be confirmed by H&K in the field.

Steeper fill slopes may be feasible with the use of geotextile reinforcement and/or rock facing. We can provide reinforced or buttressed fill slope design for the project, if requested.

Fill should be placed in horizontal lifts to the lines and grades shown on the project plans. Slopes should be constructed by overbuilding the slope face and then cutting it back to the design slope gradient. Fill slopes should not be constructed or extended horizontally by placing soil on an existing slope face and/or compacted by track walking.

Where placement of oversized rock in deep fill is proposed, the oversized rock should be placed a minimum of 5 feet horizontally from the finished fill slope face.

5.1.8 Underground Utility Trenches

Underground utility trenches should be excavated and backfilled as described below.

1. Based on subsurface conditions observed in our exploratory trenches, we anticipate that resistant rock at shallow depths will limit utility trench excavations. Pre-ripping of the trench alignment, blasting, or splitting may be required, particularly if utility trench excavations are deeper than five feet.
2. The California Occupational Safety and Health Administration (OSHA) requires all utility trenches deeper than 4 feet bgs be shored with bracing equipment prior to being entered by any individuals, whether or not they are associated with the project.
3. Shallow subsurface seepage may be encountered, particularly if utility trenches are excavated during the winter, spring, or early summer. The earthwork contractor may need to employ dewatering methods as discussed in the Construction Dewatering section of this report to excavate, place and compact the trench backfill materials.

4. Trench backfill used within the bedding and shading zones should consist of ¾-inch minus crushed rock, granular material with a sand equivalent greater than 30, or similar material approved by the project engineer.
5. Soil used as trench backfill should consist of non-expansive soil with a plasticity index (PI) less than or equal to 15 and should not contain rocks greater than 3 inches in greatest dimension unless otherwise approved by the geotechnical engineer.
6. Where utility trenches will intersect perimeter footings or pass within the proposed building footprint, we recommend that a low permeability backfill plug be placed to reduce water migration and infiltration. In general, a low permeability, predominantly fine-grained soil backfill, sand-cement slurry, or other approved material should be placed within five feet of the building exterior.
7. Trench backfill should be constructed by placing uniformly moisture conditioned soil in maximum 12-inch-thick loose lifts prior to compacting.
8. Trench backfill should be compacted to a minimum relative compaction of 90 percent of the ASTM D1557 maximum dry density. In areas of proposed pavement or concrete flatwork, the upper 12 inches of backfill should be compacted to a minimum relative compaction of 95 percent of the ASTM D1557 maximum dry density. Jetting is not an acceptable method of compacting trench backfill or bedding sand.
9. The loose lift thickness, moisture, density and relative compaction of the trench backfill soil should be observed by a representative of H&K during placement.
10. Construction quality assurance tests should be performed at a frequency determined by the project geotechnical engineer. Where trench backfill is placed at depths greater than approximately 4 feet, or where potentially unstable sidewall conditions exist, shoring may need to be provided by the contractor to facilitate compaction testing. If shoring is not provided or unsafe conditions are encountered, full time observation will likely be required to confirm compactive effort.
11. We anticipate that trenches deeper than 5 feet may be difficult with conventional excavation equipment and may require a bulldozer with a single tooth ripper. Areas of more resistant rock may require blasting.

5.1.9 Construction Dewatering

Seepage may be encountered during grading, particularly in deeper excavations made during site preparation. The earthwork contractor should be prepared to dewater excavations if seepage is encountered during grading. Seepage may be encountered if grading is performed during or immediately after the rainy season. In addition, perched groundwater may be encountered on low permeability soil or weathered rock layers even during the summer months.

If subsurface seepage or groundwater conditions are encountered which prevent or restrict fill placement or construction of the proposed improvements, subdrains may be necessary. If groundwater or saturated soil conditions are encountered during grading, we should be retained to observe the conditions and provide site specific subsurface drainage recommendations. The following typical measures can be employed to mitigate the presence of seepage in excavations.

1. We anticipate that dewatering of utility trenches can be performed by constructing sumps to depths below the trench bottom and removing the water with sump pumps.
2. Additional sump excavations and pumps should be added as necessary to keep the excavation bottom free of standing water and relatively dry when placing and compacting the trench backfill material.
3. If groundwater enters the trench faster than it can be removed by the dewatering system, the underlying compacted soil may become unstable while compacting successive soil lifts. If this occurs, the unstable soil may need to be removed and replaced with free draining open graded drain rock. If drain rock is used, it should meet or exceed the following gradation specifications: 100 percent passing the ¾-inch sieve, 95 to 100 percent passing the ½-inch sieve, 70 to 100 percent passing the ⅜-inch sieve, 0 to 55 percent passing the No. 4 sieve, 0 to 10 percent passing the No. 8 sieve, and 0 to 3 percent passing the No. 200 sieve. Other approved backfill materials can again be used after placing the drain rock to an elevation that is higher than the groundwater.
4. We recommend that the utility trench excavations be performed as late in the summer months as possible to allow the groundwater table to reach its lowest seasonal elevation.

5.1.10 Surface Water Drainage

Proper surface water drainage is important to the successful development of the project. We recommend the following measures to help mitigate surface water drainage problems:

1. Slope final grades in structural areas so that surface water drains away from building pad finish subgrade at a minimum 2 percent slope for a minimum distance of 10 feet. For structures utilizing slab-on-grade interior floor systems we recommend increasing the slope to 4 percent.
2. To reduce surface water infiltration, compact and slope all soil placed adjacent to building foundations such that water is not allowed to pond. Backfill should be free of deleterious materials.
3. Direct downspouts to positive drainage or a closed collector pipe that discharges flow to positive drainage.
4. Construct V-ditches at the top of cut and fill slopes where necessary to reduce concentrated surface water flow over slope faces. Typically, V-ditches should be 3 feet wide and at least 6 inches deep. Surface water collected in V-ditches should be directed away and downslope from proposed building pads and driveways into a drainage channel.

5.1.11 Grading Plan Review and Construction Monitoring

Construction quality assurance includes review of plans and specifications and performing construction monitoring as described below.

1. H&K should be retained to review the final grading plans prior to construction to confirm our understanding of the project at the time of our investigation, to determine whether our recommendations have been implemented, and to provide additional and/or modified recommendations, if necessary.
2. H&K should be retained to perform construction quality assurance (CQA) monitoring of all earthwork grading performed by the contractor to determine whether our recommendations have been implemented, and if necessary, provide additional and/or modified recommendations.

5.2 STRUCTURAL IMPROVEMENT DESIGN CRITERIA

The following sections present our structural improvement design criteria and recommendations. The recommendations address foundations, seismic parameters, concrete slabs-on-grade, and retaining walls.

5.2.1 Seismic Design Criteria

Our classification of on-site soil conditions is based on field observations and laboratory tests. The on-site soil primarily consists of granular soil composed of reddish brown, sandy silt with gravel and cobbles. Based on the presence of predominantly granular soil and resistant, ultramafic rock at relatively shallow depths, we classified the on-site soil as sandy silt (ML) for design purposes.

Table 5.2.1.1 below summarizes seismic design criteria based on ASCE 7-10, the 2013 California Building Code, and the United States Geological Survey (USGS), *U.S. Seismic Design Maps Tool.*

Table 5.2.1.1 - Seismic Design Parameters

Description	Value	Reference	Description	Value	Reference
Latitude Longitude	38.902 -121.084	1	Site Class	B	2
Site Coefficient, F_A	1.000	5	Site Coefficient, F_V	1	6
Mapped Acceleration Parameter, Ss	0.474g	3	Mapped Acceleration Parameter, S_1	*0.235g*	4
Maximum Considered Short (0.2 sec) Spectral Response, S_{ms}	0.474*g*	5	Maximum Considered Long (1.0 sec) Spectral Response, S_{m1}	0.454*g*	6
Design Spectral Response Acceleration, S_{DS}	0.361g	7	Design Spectral Response Acceleration, S_{D1}	0.157g	8

References:

1. *USGS 7.5 min*
2. *ASCE 7-10 Table 20.3-1*
3. *ASCE 7-10 Figure 22-1*
4. *ASCE 7-10 Figure 22-2*
5. *ASCE 7-10 Equation 11.4-1*
6. *ASCE 7-10 Equation 11.4-2*
7. *ASCE 7-10 Equation 11.4-3*
8. *ASCE 7-10 Equation 11.4-4*

5.2.2 Foundations

Provided that the grading for the project is performed in accordance with the recommendations presented in this report, our opinion is that the site will be suitable for the use of conventional perimeter foundations, isolated interior footings, and interior slabs-on-grade. Following are our recommendations for foundations constructed on compacted and tested fill or competent native soil:

1. Footings for single story structures should be a minimum of 12 inches wide and trenched through any loose surface material, potentially expansive soil, or untested fill, and a minimum of 12 inches into competent native soil, weathered rock or compacted fill. Footings for two-story structures, if proposed, should be a minimum of 15 inches wide and trenched a minimum of 18 inches into competent native soil, weathered rock or compacted fill. If clay is encountered at the base of footing excavations, the footing should be deepened through the clay lens into underlying granular material or weathered rock, as determined in the field by H&K.

2. The base of the footing excavation should be approximately level. On sloping sites, it will be necessary to step the base of the footing excavation as necessary to maintain a slope of less than 10 percent at the base of the footing.

3. Footing trenches should be cleaned of all loose soil and construction debris prior to placing concrete. A representative from H&K should observe the footing excavations prior to concrete placement.

4. As a minimum, the footings should be designed with two No. 4 rebar reinforcement, one near the top of the footing and one near the bottom. A minimum of 3 inches of concrete coverage should surround the bars.

5. In general, structures constructed adjacent to descending slopes should employ a minimum setback of either 1/3 the height of the slope, or 40 feet, whichever is less. The setback for ascending slopes is either 1/2 the slope height or 15 feet, whichever is less. Where footings are proposed within these code-based setbacks, the project geotechnical engineer should review the proposed slope configuration and provide revised setback recommendations, if appropriate.

6. Footing excavations should be saturated prior to placing concrete to reduce the risk of problems caused by wicking of moisture from curing concrete. However, concrete should not be placed through standing water in the footing excavations.

7. In an effort to reduce the likelihood of settlement-induced distress to the proposed structures, we recommend that strip and isolated footings with a minimum embedment depth of 12 inches in competent soil be sized for an allowable bearing capacity of 3,000 psf for dead plus live loads. This value can be increased by 300 psf for each additional foot of embedment up to a limiting value of 3,600 psf. Allowable bearing may be increased by 33 percent for additional transient loading, such as wind or seismic loads.

8. A triangularly-distributed lateral resistance (passive soil resistance) of 300d psf, where d is footing depth, may be used for footings. This value may be increased by 33 percent for wind and seismic. As an alternate to the passive soil resistance described above, a coefficient of friction for resistance to sliding of 0.35 may be used.

1. Total settlement of individual foundations will vary depending on the plan dimensions of the foundation and actual structural loading. Based on anticipated foundation dimensions and loads, we estimate that total post-construction settlement of footings designed and constructed in accordance with our recommendations will be on the order of one-half inch. Differential settlement between similarly loaded, adjacent footings is expected to be less than one-quarter inch, provided footings are founded on similar materials (e.g., all on structural fill, native soil or rock). Differential settlement between adjacent footings founded on dissimilar materials (e.g., one footing on soil and an adjacent footing on rock) may approach the maximum anticipated total settlement. Settlement of foundations is expected to occur rapidly and should be essentially complete shortly after initial application of loads.

5.2.3 Rock Anchors

Rock anchors or doweling may be used to provide lateral and uplift resistance where shallow, competent rock limits footing excavation. Rock anchors should only be installed in competent rock, to be determined in the field by a representative of H&K. The design of rock anchors should include the following criteria.

1. Pull-out resistance for rock anchors will generally be limited by the shear resistance between the grout and the native rock. For design purposes, a pull-out resistance of 50 pounds per square inch of grout/competent rock contact may be used. Because of the strain in the anchor steel during pull-out, we recommend that the upper 6 inches of grout/competent rock contact be neglected when sizing for uplift.
2. We recommend that the drilled hole have a minimum ½-inch annular clearance between the steel and surrounding rock. Thus, grouting a No. 4 rebar would require a 1½-inch diameter hole.
3. Lateral shear resistance for rock anchors should be designed using V_s=0.45 F_y, where F_y equals the tensile strength of the steel. To develop this shear resistance, a minimum steel embedment of 24 inches into undisturbed, competent rock should be used.

4. Prior to anchor placement, loose debris, dust, and standing water in the hole must be removed by blowing with oil-free compressed air, cleaning the hole with a nylon brush, and then blowing out the remaining dust. Dust and debris left in the hole will significantly reduce anchor capacity.
5. We recommend using a cement grout that has a water/cement ratio of less than 0.6 to construct rock anchors. If high strength epoxy or other adhesives are proposed, H&K should review the proposed rock anchor detail prior to construction.
6. If rock anchors are used on more than 10 percent of the foundation system of any given structure, a representative of H&K should perform pull tests on select anchors.

5.2.4 Slab-on-Grade Floor Systems

Our opinion is that interior concrete slab-on-grade floors may be used in conjunction with perimeter concrete foundations for the proposed improvements. The project structural engineer should design slabs-on-grade with regard to the anticipated loading. This section presents typical slab sections and reinforcement schedules used for residential construction in the region and presents construction recommendations. We can provide project specific slab-on-grade design for the proposed improvements once anticipated loading and serviceability criteria have been established.

2. The slab-on-grade should be a minimum of 4 inches thick. If floor loads higher than 250 psf or intermittent live loads are anticipated, a structural engineer should determine the slab thickness and steel reinforcing schedule.
3. The subgrade soil around the slabs-on-grade should be sloped away from the proposed slab subgrade a minimum of 4 percent for a distance of 10 feet as discussed in the Surface Water Drainage section of this report. A representative from H&K should observe pad and subgrade elevations prior to forming the slab footings.
4. As a minimum, No. 3 rebar on 24-inch centers or flat sheets of 6x6, W4.0xW4.0 welded wire mesh (WWM) should be used as slab reinforcement. We do not recommend using rolls of WWM because vertically centered placement of rolled mesh within the slab is difficult to achieve. All rebar and sheets of WWM should be placed in the center of the slab and supported on concrete "dobies". We do not recommend "hooking and pulling" of steel during concrete placement.

5. Prior to placing the vapor retarder and concrete, slab subgrade soil must be moisture conditioned to between 75 and 90 percent saturation to a depth of 24 inches. Moisture conditioning should be performed for a minimum of 24 hours prior to concrete placement. Clayey soil may take up to 72 hours to reach this required degree of saturation. If the soil is not moisture conditioned prior to placing concrete, moisture will be wicked out of the concrete, possibly contributing to shrinkage cracks. Additionally, our opinion is that moisture conditioning the soil prior to placing concrete will reduce the likelihood of soil swell or heave following construction at locations where fine grained, potentially expansive soil is encountered. To facilitate slab-on-grade construction, we recommend that the slab subgrade soil be moisture conditioned following rock placement. Following moisture conditioning, the vapor retarder should be placed.

6. Slabs should be underlain by 4 inches of washed rock. The rock should be uniformly graded so that 100% passes the 1-inch sieve, with 0% to 5% passing the No. 4 sieve. Following rock placement, the subgrade soil should be moisture conditioned for 24 hours. The rock should then be overlain by a vapor retarder at least 15 mils thick. All penetrations through the vapor retarder should be taped or sealed to reduce vapor. Laps in the vapor retarder should be taped. If requested, H&K can provide observation of the vapor retarder prior to placing concrete. The vapor retarder may be omitted in areas that do not have moisture sensitive floor coverings (i.e., exterior parking areas).

7. Regardless of the type of vapor retarder used, moisture can wick up through a concrete slab. Excessive moisture transmission through a slab can cause adhesion loss, warping and peeling of resilient floor coverings, deterioration of adhesive, seam separation, formation of air pockets, mineral deposition beneath flooring, odor and fungi growth. Slabs can be tested for water vapor transmissivity prior to the installation of moisture sensitive flooring. Commercial sealants, entrained air, fly ash and a reduced water to cement ratio can be incorporated into the concrete to reduce slab permeability. A waterproofing consultant should be contacted if moisture sensitive flooring is proposed.

8. Expansion joints should be provided between the slab and perimeter footings. Control joints should bisect the length and width of the slab at intervals specified by the American Concrete Institute (ACI) or Portland Concrete Association (PCA).

9. Exterior slabs-on-grade, such as sidewalks, may be placed directly on compacted fill without the use of a baserock section. For exterior slabs, the native soil should be ripped, moisture conditioned and recompacted to an 8-inch depth per the grading recommendations presented in this report.
10. All deleterious material must be removed prior to placing concrete.
11. We recommend that concrete have a water/cement ratio no greater than 0.45. Pozzolans or other additives may be added to increase workability.
12. Concrete slabs should be moisture cured for at least seven days after placement. Excessive curling of the slab may occur if moisture conditioning is not performed. This is especially critical for slabs that are cast during the warm summer months.
13. Concrete slabs impart a relatively small load on the subgrade (approximately 50 psf). Therefore, some vertical movement should be anticipated from possible expansion or differential loading. For expansive soil sites, or multi-lot residential development, this should be considered. A floor level survey should be considered to establish a baseline for the initial slab condition, particularly where potentially expansive soil conditions are encountered. This survey should be performed following framing and roof construction, and prior to the installation of floor coverings.

5.2.5 Retaining Wall Design Criteria

The following active and passive pressures are for retaining walls in cut native soil or backfilled with granular onsite soil. If import soil is used, a representative from our firm should be retained to observe and test the soil to determine its strength properties. The pressures exerted against retaining walls may be assumed to be equal to a fluid of equivalent unit weight.

Table 5.2.5.1 presents equivalent fluid unit weights for cut native soil and onsite fill compacted per the grading recommendations presented in this report. For approximately horizontal backfill we assume that the retained fill surface will be no steeper than 10% for a minimum distance of the wall height from the back of the retaining wall. If surcharge loads (such as adjacent building foundations) or live loads will be applied within a distance of the wall height from the back of the wall, we should be retained to review the loading conditions and revise our recommendations, if necessary.

Table 5.2.5.1 - Equivalent Fluid Unit Weights [1]

Loading Condition	Retained Cut or Compacted Fill (approximately horizontal backfill)	Retained Cut or Compacted Fill (retained slope up to 1:1, H:V)
Active Pressure (pcf)	35	50
Passive Pressure (pcf)	300	300
At-Rest Pressure (pcf)	55	65
Coefficient of Friction	0.35	0.35

Note: (1) The equivalent fluid unit weights presented are ultimate values and do not include a factor of safety. The passive pressures provided assume footings are founded in competent native soil or engineered fill.

Please note that the use of the tabulated active pressure unit weight requires that the wall design accommodate sufficient deflection for mobilization of the retained soil to occur. Typically, a wall yield of less than 1 percent of the wall height is sufficient to mobilize active conditions in granular soil. However, if the walls are rigid or restrained to prevent rotation, at-rest conditions should be used for design.

Recommendations for design and construction of retaining walls are listed below:

1. Compaction equipment should not be used directly adjacent to retaining walls unless the wall is designed or braced to resist the additional lateral pressures.
2. If any surface loads are closer to the top of the retaining wall than its height, H&K should review the loads and loading configuration. We should be retained to review wall details and plans for any wall over 15 feet in height.
3. All retaining walls must be well drained to reduce hydrostatic pressures. Walls should be provided with a drainage blanket to reduce additional lateral forces and minimize saturation of the backfill soil. Drainage blankets may consist of graded rock drains or geosynthetic blankets.
4. Rock drains should consist of a minimum 12-inch wide, Caltrans Class II, permeable drainage blanket, placed directly behind the wall; or crushed washed rock enveloped in a non-woven geotextile filter fabric such as Amoco 4546™ or equivalent. Drains should have a minimum 4-inch diameter, perforated, schedule 40, PVC pipe placed at the base of the wall, inside the drainrock, with the perforations placed down. The PVC pipe should be sloped so that water is directed away from the wall by gravity. A geosynthetic drainage blanket such as Enkadrain™ or equivalent may be substituted for the rock drain, provided the collected water is channeled away from the wall. If a

geosynthetic blanket is used, backfill must be compacted carefully so that equipment or soil does not tear or crush the drainage blanket.

5. Adequate drainage and waterproofing for retaining walls associated with finished interior spaces are essential to reduce the likelihood of seepage and vapor transmission into the living space. We recommend that an appropriate waterproofing sealant be applied to the exterior surface of such retaining walls. A waterproofing consultant may be contacted to further review seepage and vapor transmission.

6. Additional lateral loading on retaining structures due to seismic accelerations may be considered at the designer's option. For an earthquake producing a design horizontal acceleration of 0.2g, we recommend that the resulting additional lateral force applied to unrestrained (cantilevered) retaining structures with drained level backfill onsite be estimated as $P_{ae}=9H^2$ pounds, where H is the height of the wall in feet. The additional seismic force may be assumed to be applied at a height of 0.6H above the base of the wall. This seismic loading is for a drained, level backfill condition only; H&K should be consulted for values of seismic loading due to non-level or non-drained backfill conditions. The use of reduced factors of safety is often appropriate when reviewing overturning and sliding resistance during seismic events.

7. Alternate retaining wall designs such as stacked rockery walls and mechanically stabilized earth walls can be used at the site. We can provide recommendations for these types of walls, if requested.

5.2.6 Pavement Design

R-value testing is currently being performed and pavement design will be presented in an addendum.

6 LIMITATIONS

The following limitations apply to the findings, conclusions and recommendations presented in this report:

1. Our professional services were performed consistent with the generally accepted geotechnical engineering principles and practices employed in northern California. No warranty is expressed or implied.

2. These services were performed consistent with our agreement with our client. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of our services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report. This report is solely for the use of our client unless noted otherwise. Any reliance on this report by a third party is at the party's sole risk.

3. If changes are made to the nature or design of the project as described in this report, then the conclusions and recommendations presented in this report should be considered invalid. Only our firm can determine the validity of the conclusions and recommendations presented in this report. Therefore, we should be retained to review all project changes and prepare written responses with regards to their impacts on our conclusions and recommendations. However, we may require additional fieldwork and laboratory testing to develop any modifications to our recommendations. Costs to review project changes and perform additional fieldwork and laboratory testing necessary to modify our recommendations are beyond the scope of services presented in this report. Any additional work will be performed only after receipt of an approved scope of services, budget, and written authorization to proceed.

4. The analyses, conclusions and recommendations presented in this report are based on site conditions as they existed at the time we performed our surface and subsurface field investigations. We have assumed that the subsurface soil and groundwater conditions encountered at the location of our exploratory trenches are generally representative of the subsurface conditions throughout the entire project site. However, the actual subsurface conditions at locations between and beyond our exploratory trenches may differ. Therefore, if the subsurface conditions encountered during construction are different than those described in this report, then we should be notified immediately so that we can review these differences and, if necessary, modify our recommendations.

5. The elevation or depth to groundwater underlying the project site may differ with time and location.

6. The project site map shows approximate exploratory trench locations as determined by pacing distances from identifiable site features. Therefore, the trench locations should not be relied upon as being exact nor located with surveying methods.

7. Our geotechnical investigation scope of services did not include evaluating the project site for the presence of historic mining operations or hazardous materials. Although we did not observe evidence of historic mining activity or hazardous materials within the proposed building area at the time of our field investigation, all project personnel should be careful and take the necessary precautions should hazardous materials be encountered during construction. Possible historic mining excavation not detected during our investigation may impact the proposed improvements.

8. The findings of this report are valid as of the present date. However, changes in the conditions of the property can occur with the passage of time. The changes may be due to natural processes or to the works of man, on the project site or adjacent properties. In addition, changes in applicable or appropriate standards can occur, whether they result from legislation or the broadening of knowledge. Therefore, the recommendations presented in this report should not be relied upon after a period of two years from the issue date without our review.

FIGURES

MAP SOURCE: GOOGLE MAPS (2017)

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SITE VICINITY

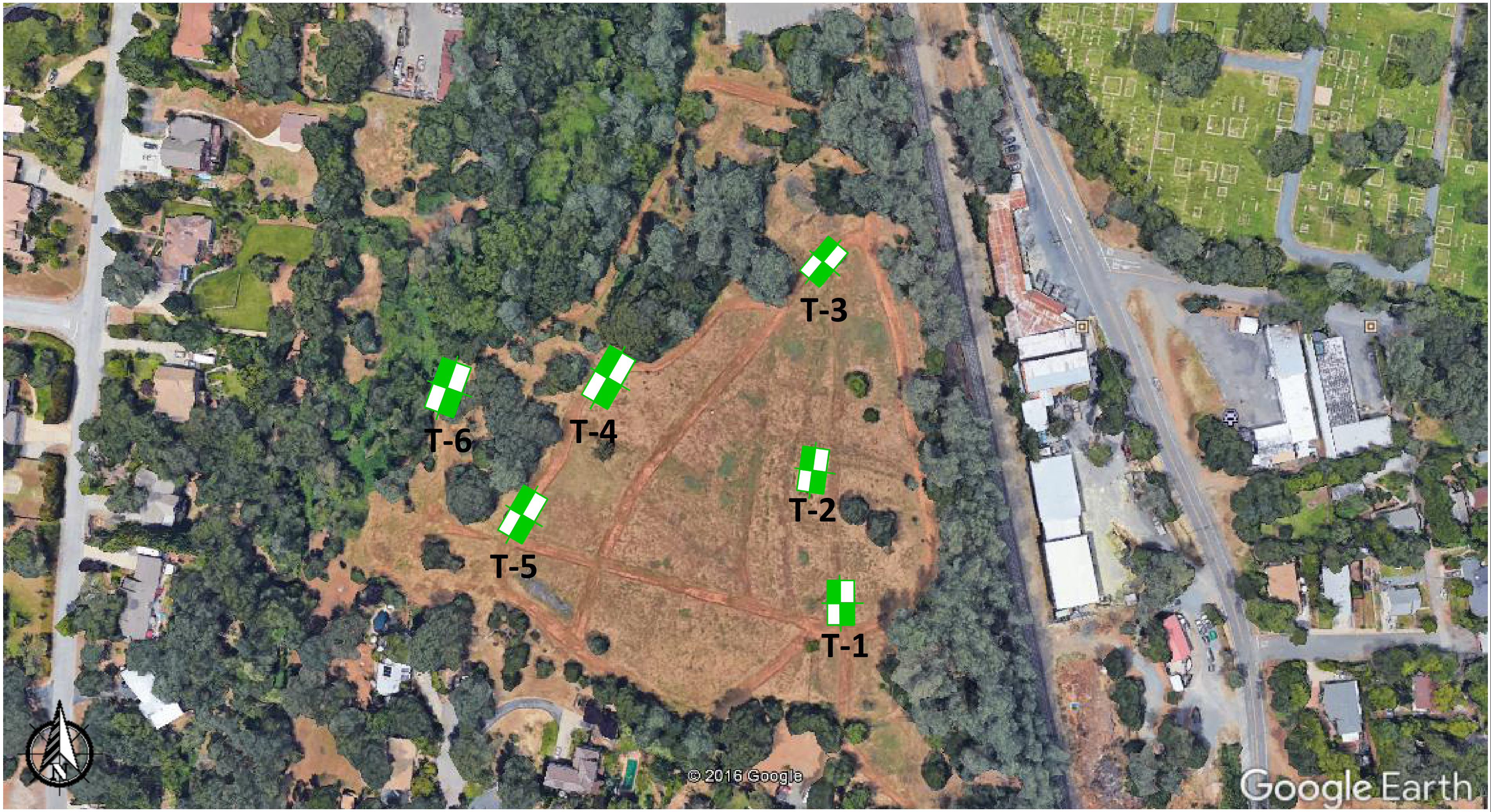
11500 BLOCKER DRIVE

AUBURN, CALIFORNIA

PROJECT NO. 4826-01

MAY 2017

FIGURE 1



MAP SOURCE: GOOGLE EARTH (2017)

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EXPLORATORY TRENCH LOCATIONS

11500 BLOCKER DRIVE

AUBURN, CALIFORNIA

PROJECT NO. 4826-01

MAY 2017

FIGURE 2

APPENDIX A PROPOSAL

Proposal No. PN17083
April 13, 2017

Stephen Meade
Blocker Drive Properties, LLC
391 Nevada Street
Auburn, California 95603

Reference: ***11500 Blocker Drive***
APN 001-051-010-510
Auburn, California

Subject: ***Proposal to Provide Geotechnical Engineering Services***

Dear Mr. Meade,

At your request, Holdrege & Kull (H&K) is proposing to provide geotechnical engineering services to support future design and construction of the proposed self-storage and residence to be located on the 13-acre property at 11500 Blocker Drive in Auburn, California. The scope of services presented in this proposal is based on our conversations with you and our review of the preliminary site plan for the project prepared by J. Lee Buckingham dated March 13, 2017.

At this time, the project is envisioned to include the construction of 6 self-storage buildings and a residence. The project would include the construction of paved driveways and parking areas, underground utility services, storm water drainage facilities, deep excavations, and retaining walls up to approximately 13 feet in height.

Based on our experience in the area, we anticipate that our geotechnical investigation would focus on establishing the subsurface soil and rock conditions within areas of proposed deep excavation and retaining wall construction. In addition, the scope of our laboratory testing is intended to facilitate our determination of retaining wall and foundation design criteria for the project, and support the design of alternate retaining wall systems, if appropriate.

SCOPE OF SERVICES

We propose to perform a design-level geotechnical investigation in general accordance with the 2016 California Building Code (CBC). Based on our understanding of the project, we propose the following scope of services.

Geotechnical Investigation

H&K will perform a map and literature review of published documents pertinent to the project site, including geologic maps and soil survey maps. We will perform investigation to characterize the soil, rock and shallow groundwater conditions, if encountered, at the site. As currently proposed, we anticipate that the subsurface investigation will be centered on the observation of subsurface conditions revealed in 6 to 8 exploratory trenches excavated using a large backhoe or track-mounted mini excavator. The depth of the exploratory trenches will vary in an effort to correspond to the anticipated excavation depth for the project. However, the trenches may be shallower than the proposed excavation depths if refusal is encountered on resistant weathered rock.

An engineer or geologist from our firm will log soil conditions observed and collect relatively undisturbed and bulk soil samples from the exploratory trenches. Collection of soil samples and the sample intervals will depend upon the soil conditions encountered. The soil samples will be labeled, sealed, and transported to our laboratory where selected samples will be tested to determine their engineering material properties. If groundwater is encountered, the depth to groundwater below the existing ground surface will be measured. Following sample collection, the trenches will be backfilled with soil.

Prior to our field investigation, a representative of H&K will visit the project site to locate the proposed exploratory trench locations for Underground Service Alert (USA). Although we will use reasonable caution in excavating the exploratory trenches, we will not be responsible for damage caused to underground utilities that were not marked or that were improperly marked prior to our investigation. In order to reduce the chance of damage to underground utilities, we can revise our proposal and fee to include private utility location service, if requested.

Laboratory Testing

H&K will perform laboratory tests on selected soil samples to determine their engineering material properties. Laboratory tests will be performed using American Society for Testing and Materials (ASTM) and Caltrans methods as guidelines. The testing may include:

D422, Particle Size Determination (if appropriate)
D2216, Moisture Content
D2487, Unified Soil Classification System

D2937, Density
D3080, Direct Shear Strength
D4829, Expansion Index (if appropriate)
D4318, Atterberg Limits (if appropriate)
D7521, Asbestos Testing in Soil/Rock (if warranted)

The actual tests performed may vary, depending on the subsurface conditions encountered. Direct shear testing will be performed to develop site-specific foundation and retaining wall design criteria. If fine-grained soil is encountered during our field investigation, we will perform Atterberg limits and/or expansion index testing in an effort to evaluate expansion potential. If naturally occurring asbestos (NOA) is encountered, we will perform NOA testing in accordance with ASTM D7521.

Data Analysis and Engineering

Following the completion of laboratory testing, H&K will develop geotechnical engineering design recommendations for earthwork and structural improvements. The geotechnical engineering design recommendations will address the following:

Earthwork Improvements

1. Site clearing and soil subgrade preparation.
2. Fill moisture conditioning and compaction.
3. Cut and fill slope grading.
4. Utility trench excavation and backfill.
5. Erosion control.
6. Surface water drainage.
7. Expansive soil mitigation, if encountered.

Structural Improvements

1. Shallow foundation design criteria, including allowable bearing pressure.
2. Retaining wall design criteria.
3. Concrete slabs-on-grade.
4. Conclusions regarding geologic hazards at the site.
5. Estimated total and differential settlement.
6. Seismic (earthquake shaking) design parameters.
7. Asphalt pavement sections.

Report Preparation

We will prepare a geotechnical engineering report for the site that will present our findings, conclusions, and recommendations. The report will include descriptions of site conditions, a summary of the field investigation, laboratory test results, and geotechnical engineering design recommendations for the proposed earthwork and structural improvements, including retaining wall and foundation design criteria. The report will present conclusions regarding the feasibility of using alternate retaining wall systems for the project. The report will also include a site plan showing the approximate locations of the exploratory trenches. The report appendices will present the exploratory trench logs and laboratory test data.

If rock encountered at the project site contains NOA, we will prepare an Asbestos Dust Mitigation Plan (ADMP) using Placer County Air Pollution Control District's Guidance Document revised on May 21, 2014, at your request.

ASSUMPTIONS AND CLIENT RESPONSIBILITIES

The proposed scope of services is based on the following assumptions:

- The client will provide H&K with the authorization to access the site. Although reasonable care will be used during our investigation, the client understands that unmarked underground utilities may be damaged. H&K will not be responsible for repair of utilities that were not marked or were improperly marked prior to the investigation.

- One copy of the report will be sent to the client and/or the client's engineers and architects. In addition, we will prepare a pdf format version of the report to facilitate distribution to the project team.

FEES

Our fee to perform the geotechnical investigation described above will be $. This fee includes the costs associated with excavation services. If NOA is encountered, we would provide an ADMP for a fee of $, if requested. Billing would be monthly on a percent complete basis. If this proposal is acceptable, please sign and return the attached agreement to our office as our authorization to proceed.

SCHEDULE

We will schedule our field investigation within two weeks of receiving authorization to proceed, weather permitting. We can provide verbal preliminary recommend-dations within one week following the site investigation based on the field investigation data. However, final recommendations will be developed from the field and laboratory data. We anticipate the final report will be submitted within four weeks following completion of our field investigation.

We appreciate the opportunity to provide you with this proposal. If you have any questions, please feel free to contact our office.

Sincerely,

HOLDREGE & KULL

Chuck Kull, GE, PE
Principal

Attached: Agreement for Geotechnical Engineering Services

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APPENDIX B IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT (Included with permission of GBA, Copyright 2016)

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled.* No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be*, and, in general, *if you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.*

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.*** Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

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APPENDIX C EXPLORATORY TRENCH LOGS

HOLDREGE & KULL
CONSULTING ENGINEERS • GEOLOGISTS
792 Searls Avenue, Nevada City, California, 95959
PHONE: 530-478-1305, FAX: 530-478-1019

EXPLORATORY TRENCH LOG

Trench No. T-1

Project Name: 11500 BLOCKER DRIVE | **Project No.:** 4826-01 | **Task:** 01 | **Date:** 5/22/17

Location: APN 001-051-015-000, AUBURN CA | **Ground Elev. (Ft. MSL):** --- | **Logged By:** TMK | **Sheet:** 1 of 6

Excavator: KX121-3 KUBOTA EXCAVATOR | **Operator:** DERECK WHER | **Excavation Method:** 18" BUCKET

Groundwater Encountered: NO | **Caved:** NO | **Sampling Method:** BULK

Ground Water Information

Date	-	-	-	
Time	-	-	-	
Depth (ft)	-	-	-	

Time (H:M)	Pocket Penetrometer (TSF)	Dry Density (pcf)	Percentage Moisture	Sample Recovery (Ft./Ft.)	Sample No.	Depth BGS (Ft.)	Sample Interval And Symbol	Graphic Log	Groundwater	Soil and/or Rock Descriptions (USCS Symbol; USCS Name; Field Estimated Particle Size Gradation (%); Munsel Color; Density/Consistency; Moisture; Fill Material; Dilatancy; Plasticity Toughness; Dry Strength; Structure; Cementation; Organics; Odor; Other)
						1				(ML) SANDY SILT; FLD. EST.: 75% SILT, 20% SAND, 5% ORGANICS; DARK REDDISH BROWN; DRY.
					052217A	2				
						3				(CL) SANDY CLAY; FLD. EST.: 60% CLAY, 20% SAND, 20% GRAVEL; GRAY; MOIST.
					052217B	4				(GM) SILTY GRAVEL WITH SAND; FLD. EST.: 40% SILT, 20% SAND, 40% WEATHERED ROCK GRAVEL AND COBBLES 2-6" IN DIAMETER; DARK REDDISH BROWN; DRY.
						5				
						6				REFUSAL MET AT 3.5 FEET BGS.
						7				
						8				
						9				
						10				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

NOTES:

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EXPLORATORY TRENCH LOG

792 Searls Avenue, Nevada City, California, 95959
PHONE: 530-478-1305, FAX: 530-478-1019

Trench No. T-2

Project Name: 11500 BLOCKER DRIVE	**Project No.:** 4826-01	**Task:** 01	**Date:** 5/22/17
Location: APN 001-051-015-000, AUBURN CA	**Ground Elev. (Ft. MSL):** ---	**Logged By:** TMK	**Sheet:** 2 of 6
Excavator: KX121-3 KUBOTA EXCAVATOR	**Operator:** DERECK WHER	**Excavation Method:** 18" BUCKET	
Groundwater Encountered: NO	**Caved:** NO	**Sampling Method:** BULK	

Ground Water Information

Date	-	-	-	
Time	-	-	-	
Depth (ft)	-	-	-	

Time (H:M)	Pocket Penetrometer (TSF)	Dry Density (pcf)	Percentage Moisture	Sample Recovery (Ft./Ft.)	Sample No.	Depth BGS (Ft.)	Sample Interval And Symbol	Graphic Log	Groundwater	Soil and/or Rock Descriptions (USCS Symbol; USCS Name; Field Estimated Particle Size Gradation (%); Munsel Color; Density/Consistency; Moisture; Fill Material; Dilatancy; Plasticity Toughness; Dry Strength; Structure; Cementation; Organics; Odor; Other)
						1				(GM) SILTY GRAVEL; DARK REDDISH BROWN; DRY.
						2				
					052217C					
					052217D	3				(ML) SANDY SILT; FLD. EST.: 40% SILT, 40% SAND, 20% WEATHERED GRAVEL AND COBBLES 1-6" IN DIAMETER; YELLOWISH RED; DRY.
						4				
					052217E	5				(GM) SILTY GRAVEL WITH SAND; FLD. EST.: 40% SILT, 20% SAND, 40% WEATHERED GRAVEL AND COBBLES 1-6" IN DIAMETER; REDDISH BROWN; DRY.
					052217F	6				
						7				REFUSAL MET AT 6 FEET BGS.
						8				
						9				
						10				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

NOTES:

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EXPLORATORY TRENCH LOG

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PHONE: 530-478-1305, FAX: 530-478-1019

Trench No. T-3

Project Name: 11500 BLOCKER DRIVE	**Project No.:** 4826-01	**Task:** 01	**Date:** 5/22/17
Location: APN 001-051-015-000, AUBURN CA	**Ground Elev. (Ft. MSL):** ---		**Logged By:** TMK

Sheet: 3 of 6

Excavator: KX121-3 KUBOTA EXCAVATOR	**Operator:** DERECK WHER	**Excavation Method:** 18" BUCKET
Groundwater Encountered: NO	**Caved:** NO	**Sampling Method:** BULK

Ground Water Information

Date	-	-	-	
Time	-	-	-	
Depth (ft)	-	-	-	

Time (H:M)	Pocket Penetrometer (TSF)	Dry Density (pcf)	Percentage Moisture	Sample Recovery (Ft./Ft.)	Sample No.	Depth BGS (Ft.)	Sample Interval And Symbol	Graphic Log	Groundwater	Soil and/or Rock Descriptions (USCS Symbol; USCS Name; Field Estimated Particle Size Gradation (%); Munsel Color; Density/Consistency; Moisture; Fill Material; Dilatancy; Plasticity Toughness; Dry Strength; Structure; Cementation; Organics; Odor; Other)
						1				(ML) SANDY SILT; FLD. EST.: 75% SILT, 25% SAND; STRONG BROWN; MOIST.
					052217G	2				
					052217H	3				(ML) SANDY SILT; FLD. EST.: 60% SILT, 20% SAND, 20% WEATHERED GRAVEL AND COBBLES; DARK RED; MOIST.
					052217I	4				(ML) SANDY SILT; FLD. EST.: 50% SILT, 10% SAND, 40% WEATHERED GRAVEL AND COBBLES; DARK RED; MOIST.
						5				
						6				TRENCHING TERMINATED AT 4.5 FEET BGS.
						7				
						8				
						9				
						10				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

NOTES:

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EXPLORATORY TRENCH LOG

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Trench No. T-4

Project Name: 11500 BLOCKER DRIVE	**Project No.:** 4826-01	**Task:** 01	**Date:** 5/22/17	
Location: APN 001-051-015-000, AUBURN CA	**Ground Elev. (Ft. MSL):** ---		**Logged By:** TMK	**Sheet:** 4 of 6
Excavator: KX121-3 KUBOTA EXCAVATOR	**Operator:** DERECK WHER		**Excavation Method:** 18" BUCKET	
Groundwater Encountered: NO	**Caved:** NO		**Sampling Method:** BULK	

Ground Water Information

Date	-	-	-	
Time	-	-	-	
Depth (ft)	-	-	-	

Time (H:M)	Pocket Penetrometer (TSF)	Dry Density (pcf)	Percentage Moisture	Sample Recovery (Ft./Ft.)	Sample No.	Depth BGS (Ft.)	Sample Interval And Symbol	Graphic Log	Groundwater	Soil and/or Rock Descriptions (USCS Symbol; USCS Name; Field Estimated Particle Size Gradation (%); Munsel Color; Density/Consistency; Moisture; Fill Material; Dilatancy; Plasticity Toughness; Dry Strength; Structure; Cementation; Organics; Odor; Other)
						1				(ML) SANDY SILT; FLD. EST.: 65% SILT, 25% SAND; DARK RED; MOIST.
						2				
						3				(ML) SANDY SILT; FLD. EST.: 60% SILT, 20% SAND, 30% WEATHERED ROCK; DARK RED; MOIST.
					052217J 052217K	4				
						5				TRENCHING TERMINATED AT 4.5 FEET BGS.
						6				
						7				
						8				
						9				
						10				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

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EXPLORATORY TRENCH LOG

792 Searls Avenue, Nevada City, California, 95959
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Trench No. T-5

Project Name: 11500 BLOCKER DRIVE	**Project No.:** 4826-01	**Task:** 01	**Date:** 5/22/17
Location: APN 001-051-015-000, AUBURN CA	**Ground Elev. (Ft. MSL):** ---	**Logged By:** TMK	**Sheet:** 5 of 6
Excavator: KX121-3 KUBOTA EXCAVATOR	**Operator:** DERECK WHER	**Excavation Method:** 18" BUCKET	
Groundwater Encountered: NO	**Caved:** NO	**Sampling Method:** BULK	

Ground Water Information

Date	-	-	-	
Time	-	-	-	
Depth (ft)	-	-	-	

Time (H:M)	Pocket Penetrometer (TSF)	Dry Density (pcf)	Percentage Moisture	Sample Recovery (Ft./Ft.)	Sample No.	Depth BGS (Ft.)	Sample Interval And Symbol	Graphic Log	Groundwater	Soil and/or Rock Descriptions (USCS Symbol; USCS Name; Field Estimated Particle Size Gradation (%); Munsel Color; Density/Consistency; Moisture; Fill Material; Dilatancy; Plasticity Toughness; Dry Strength; Structure; Cementation; Organics; Odor; Other)
						1				(ML) SANDY SILT; FLD. EST.: 50% SILT, 10% SAND, 40% WEATHERED ROCK 0-2 FEET IN DIAMETER; DARK RED; DRY.
						2				
						3				(ML) SANDY SILT; FLD. EST.: 50% SILT, 20% SAND, 30% WEATHERED ROCK AND QUARTZ 0-3 FEET IN DIAMETER; YELLOWISH RED; DRY.
					052217L 052217M	4				
						5				TRENCHING TERMINATED AT 4 FEET BGS.
						6				
						7				
						8				
						9				
						10				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

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EXPLORATORY TRENCH LOG

792 Searls Avenue, Nevada City, California, 95959
PHONE: 530-478-1305, FAX: 530-478-1019

Trench No. T-6

Project Name: 11500 BLOCKER DRIVE	**Project No.:** 4826-01	**Task:** 01	**Date:** 5/22/17
Location: APN 001-051-015-000, AUBURN CA	**Ground Elev. (Ft. MSL):** ---	**Logged By:** TMK	**Sheet:** 6 of 6
Excavator: KX121-3 KUBOTA EXCAVATOR	**Operator:** DERECK WHER	**Excavation Method:** 18" BUCKET	
Groundwater Encountered: NO	**Caved:** NO	**Sampling Method:** BULK	

Ground Water Information

Date	-	-	-	
Time	-	-	-	
Depth (ft)	-	-	-	

Time (H:M)	Pocket Penetrometer (TSF)	Dry Density (pcf)	Percentage Moisture	Sample Recovery (Ft./Ft.)	Sample No.	Depth BGS (Ft.)	Sample Interval And Symbol	Graphic Log	Groundwater	Soil and/or Rock Descriptions (USCS Symbol; USCS Name; Field Estimated Particle Size Gradation (%); Munsel Color; Density/Consistency; Moisture; Fill Material; Dilatancy; Plasticity Toughness; Dry Strength; Structure; Cementation; Organics; Odor; Other)
						1				(GM) FRACTURED WEATHERED ROCK WITH SILT; 75% COBBLES AND GRAVEL 0-8" IN DIAMETER, 25% SILT; DARK REDDISH BROWN; DRY.
						2				
						3				REFUSAL MET AT 2 FEET BGS.
						4				
						5				
						6				
						7				
						8				
						9				
						10				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

NOTES:

APPENDIX D LABORATORY TEST DATA

HOLDREGE & KULL

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UNCONFINED COMPRESSION

ASTM D2166

DSA File #:

DSA Appl #:

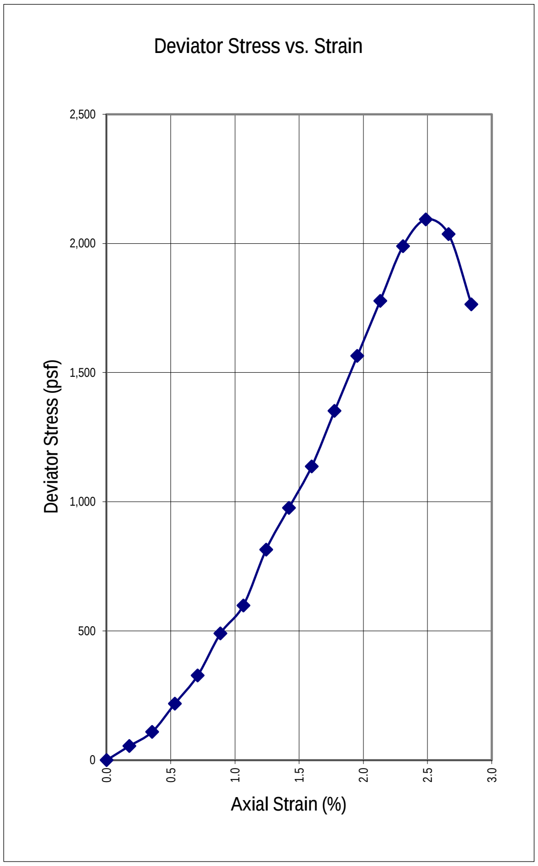
Project No.:	4826-01	Project Name:	11500 Blocker Dr.			Date:	5/24/2017
Sample No.:	052217D	Boring/Trench No.:	T-2	Depth (ft.)	2.5-3	Tested By:	CAMM/NGH
Soil Description:	Yellowish Red (5YR 4/6) Sandy Silt					Check By:	MLH
Sample Location:						Lab No.:	15-17-161

Sample Data		
Tare Tube Number	I.D.	KLM
Tare Weight	(gm)	253.19
Wet Soil + Tare	(gm)	789.26
Dry Soil + Tare	(gm)	705.74
Weight of Water	(gm)	83.52
Dry Soil Weight	(gm)	452.55
Moisture Content	(%)	18.46
Soil Height	(cm)	14.30
Sample Diameter	(cm)	4.88
Wet Unit Weight	(pcf)	125.13
Dry Unit Weight	(pcf)	105.64
Specific Gravity	(dim)	2.70
Saturation	(%)	83.76
Strain Rate	(%)	0.53
Proving Ring Constant	(lbs/unit)	1.108

Sample Sketch At Failure

Unconfined Shear Strength = 1,046.5 psf

Elapsed Time (Minutes)	Strain Units (0.001in/unit)	Strain Percent (%)	Area (cm^2)	Load Dial (units)	Load Force (lbs)	Deviator Stress (psf)
12:00:00	0	0.00	0.00	0	0.00	
12:00:20	10	0.18	18.74	1	1.11	54.94
12:00:40	20	0.36	18.77	2	2.22	109.68
12:01:00	30	0.53	18.80	4	4.43	218.97
12:01:20	40	0.71	18.84	6	6.65	327.86
12:01:40	50	0.89	18.87	9	9.97	490.92
12:02:00	60	1.07	18.91	11	12.19	598.93
12:02:20	70	1.24	18.94	15	16.62	815.26
12:02:40	80	1.42	18.97	18	19.94	976.56
12:03:00	90	1.60	19.01	21	23.27	1137.26
12:03:20	100	1.78	19.04	25	27.70	1351.44
12:03:40	110	1.95	19.08	29	32.13	1564.84
12:04:00	120	2.13	19.11	33	36.56	1777.45
12:04:20	130	2.31	19.15	37	41.00	1989.28
12:04:40	140	2.4867133	19.180756	39	43.21	2092.99679
12:05:00	150	2.6643357	19.215758	38	42.10	2035.61552
12:05:20	160	2.841958	19.250888	33	36.56	1764.54547



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Moisture & Density

ASTM D2216 & D2937

DSA File #:
DSA Appl #:

Project No.:	4826-01	Project Name:	11500 Blocker Dr.	Date:	5/24/2017
Lab No.:	15-17-161	Performed By:	MLH	Checked By:	MLH

SAMPLE LOCATION DATA											
Boring/Trench No.	Units	T-3	T-2								
Sample No.		052217G	052217D								
Depth Interval	(ft.)	1.5-2	2.5-3								
Sample Description		Strong brown(7.5 YR 4/6) Sandy Silt	Yellowish Red (5 YR 5/6) Sandy Silt								
USCS Symbol											
SAMPLE DIMENSION AND WEIGHT DATA											
Sample Length	(in)	5.980	5.630								
Sample Diameter	(in)	1.920	1.920								
Sample Volume	(cf)	0.0100	0.0094								
Wet Soil + Tube Wt.	(gr)	718.72	713.40								
Tube Wt.	(gr)	175.21	175.77								
Wet Soil Wt.	(gr)	543.51	537.63								
MOISTURE CONTENT DATA											
Tare No.		MH	KIM								
Tare Wt.	(gr)	140.57	253.19								
Wet Soil + Tare Wt.	(gr)	682.95	789.26								
Dry Soil + Tare Wt.	(gr)	596.23	705.74								
Water Wt.	(gr)	86.72	83.52								
Dry Soil Wt.	(gr)	455.66	452.55								
Moisture Content	(%)	19.0	18.5								
TEST RESULTS											
Wet Unit Wt.	(pcf)	119.6	125.7								
Moisture Content	(%)	19.0	18.5								
Dry Unit Wt.	(pcf)	100.5	106.1								
MOISTURE CORRECTION DATA											
Gauge Moisture	(%)										
K Value Correction Factor											
COMPACTION CURVE DATA (ASTM D698, ASTM D1557, or CAL216)											
Test Method											
Curve No.											
Max Wet Unit Wt.	(pcf)										
Max Dry Unit Wt.	(pcf)										
Optimum Moisture	(%)										
Wet Relative Comp.	(%)										
Dry Relative Comp.	(%)										

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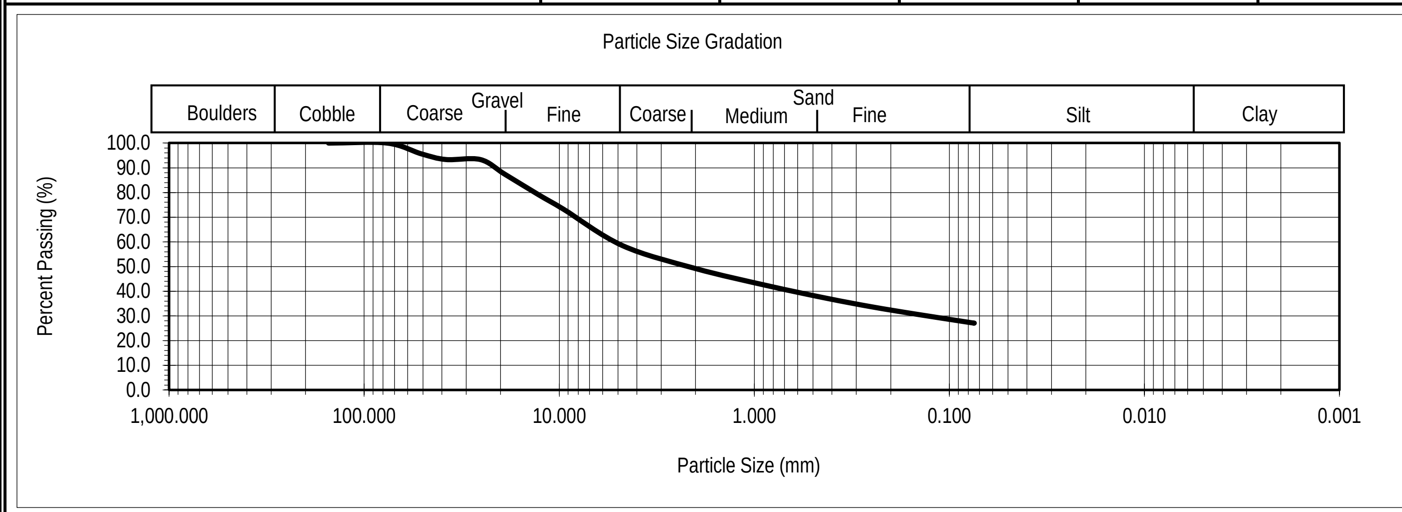
Particle Size Distribution

ASTM D422

Project No.:	**4826-01**	Project Name:	**11500 Blocker Dr.**	Date:	**5/24/2017**
Sample No.:	**052217B**	Boring/Trench:	**T-1** Depth, (ft.): **2.5-3.5**	Tested By:	**NGH**
Description:	**Reddish Brown (5YR 4/3) Silty Gravel with Sand**			Checked By:	**MLH**
Sample Location:	**0**			Lab. No.:	**15-17-161**

Sieve Size (U.S. Standard)	Particle Diameter Inches (in.)	Particle Diameter Millimeter (mm)	Dry Weight on Sieve Retained On Sieve (gm)	Dry Weight on Sieve Accumulated On Sieve (gm)	Dry Weight on Sieve Passing Sieve (gm)	Percent Passing (%)
6 Inch	6.0000	152.4	0.00	0.0	5,688.1	100.0
3 Inch	3.0000	76.2	0.00	0.0	5,688.1	100.0
2 Inch	2.0000	50.8	249.60	249.6	5,438.5	95.6
1.5 Inch	1.5000	38.1	129.30	378.9	5,309.2	93.3
1.0 Inch	1.0000	25.4	0.00	378.9	5,309.2	93.3
3/4 Inch	0.7500	19.1	336.60	715.5	4,972.6	87.4
1/2 Inch	0.5000	12.7	481.00	1,196.5	4,491.6	79.0
3/8 Inch	0.3750	9.5	325.30	1,521.8	4,166.3	73.2
#4	0.1870	4.7500	838.80	2,360.6	3,327.5	58.5
#10	0.0787	2.0000	530.27	2,890.9	2,797.2	49.2
#20	0.0335	0.8500	398.30	3,289.2	2,399.0	42.2
#40	0.0167	0.4250	287.66	3,576.8	2,111.3	37.1
#60	0.0098	0.2500	195.99	3,772.8	1,915.3	33.7
#100	0.0059	0.1500	165.17	3,938.0	1,750.1	30.8
#200	0.0030	0.0750	209.42	4,147.4	1,540.7	27.1

Hydrometer



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Atterberg Indices

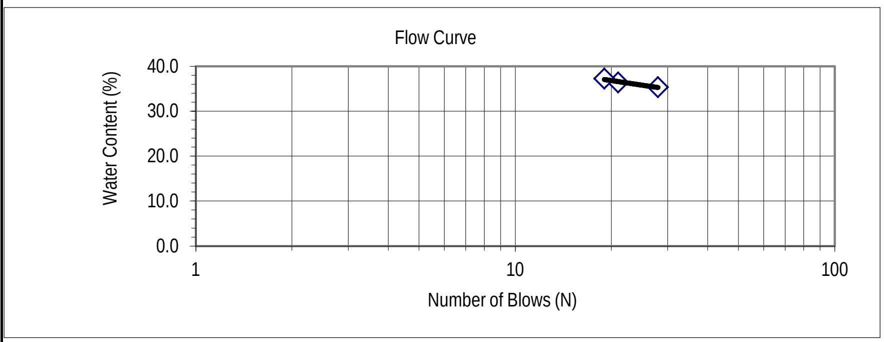
ASTM D4318

DSA File #:
DSA Appl #:

Project No.:	**4826-01**	Project Name:	**11500 Blocker Dr.**	Date:	**5/24/2017**
Sample No.:	**052217E**	Boring/Trench: **T-2**	Depth, (ft.): **4-4.5**	Tested By:	**SJS/HLR**
Description:	**Reddish Brown (5YR 4/3) Silty Gravel with Sand**			Checked By:	**MLH**
Sample Location:				Lab. No.:	**15-17-161**

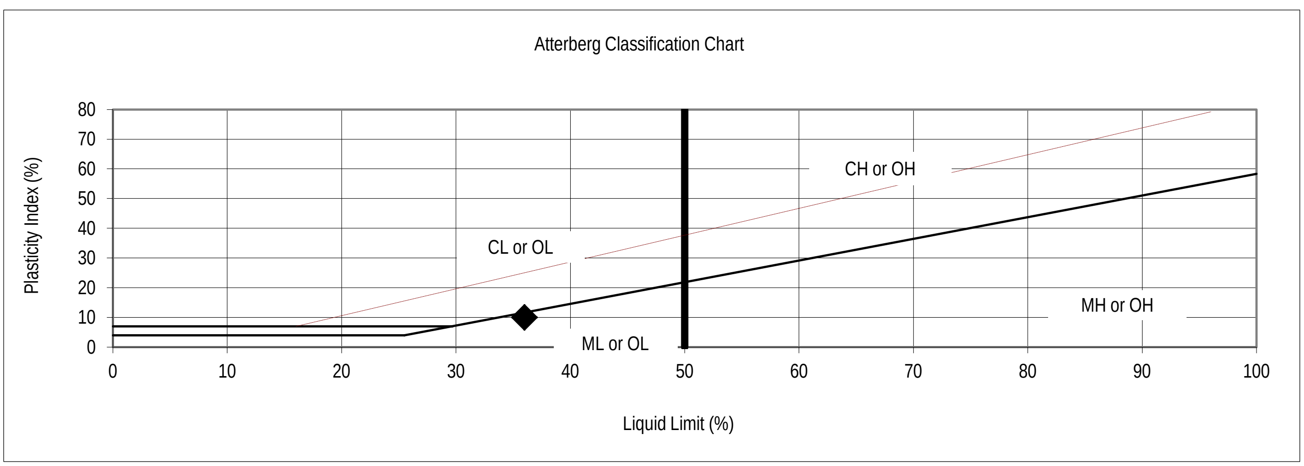
Estimated % of Sample Retained on No. 40 Sieve: 50 Sample Air Dried: yes
Test Method A or B: A

	LIQUID LIMIT:					PLASTIC LIMIT:		
Sample No.:	1	2	3	4	5	1	2	3
Pan ID:	20	32	38			LC	LD	
Wt. Pan (gr)	22.28	21.82	21.33			15.07	15.23	
Wt. Wet Soil + Pan (gr)	33.81	32.44	30.14			21.91	21.35	
Wt. Dry Soil + Pan (gr)	30.80	29.61	27.75			20.48	20.09	
Wt. Water (gr)	3.01	2.83	2.39			1.43	1.26	
Wt. Dry Soil (gr)	8.52	7.79	6.42			5.41	4.86	
Water Content (%)	35.3	36.3	37.2			26.4	25.9	
Number of Blows, N	28	21	19					
				LIQUID LIMIT =	36	PLASTIC LIMIT =		26



Plasticity Index = 10

Group Symbol = CL



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Expansion Index/Swell

ASTM D4829

DSA File #:
DSA Appl #:

Project No.:	4826-01	Project Name:	11500 Blocker Dr.	Date:	5/24/2017
Sample No.:	052217M	Boring/Trench No.:	T-5 Depth (ft.) 3.5-4.5	Tested By:	MLH
Soil Description:	Yellowish Red (5 YR 5/6) Sandy Silt			Checked By:	MLH
Estimated % of sample retained on #4:	15%	Notes:		Lab. No.:	15-17-161
Specimen Type:	Undisturbed:	Disturbed:	Remolded to:	ASTM Guidelines	
Tube Dia. (Inch) =		Ring Dia. (Inch) = 4	Ring Height (Inch) = 1.00		

FIELD DATA Tube Sample Moisture & Density			LAB DATA	Test wt. 144 Initial	Final	Test wt. Initial	Final	Test wt. Initial	Final
Tare Tube Number			Tare Number	CJ					
Tare Weight	(gr)		Tare Ring Weight (gr)	200.74	200.74				
Wet Soil + Tare	(gr)		Tare Pan Weight (gr)	0.00	190.05				
Dry Soil + Tare	(gr)		Wet Soil + Tare (gr)	598.23	822.26				
Weight of Water	(gr)	0.00	Dry Soil + Tare (gr)	559.37	749.42	0.00		0.00	
Dry Soil Weight	(gr)	0.00	Weight of Water (gr)	38.86	72.84	0.00	0.00	0.00	0.00
Moisture Content	(%)	0.00	Dry Soil Weight (gr)	358.63	358.63	0.00	0.00	0.00	0.00
Soil Height	(In.)		Moisture Content (%)	10.84	20.31	0.00	0.00	0.00	0.00
Wet Unit Weight	(pcf)		Wet Unit Weight (pcf)	120.52	129.33				
Dry Unit Weight	(pcf)		Dry Unit Weight (pcf)	108.73	107.50				
			Sample Height (Inches)	1.00	1.012				
Specific Gravity		2.7	Percent Saturation	53.24	96.67				

Expansion Index Number

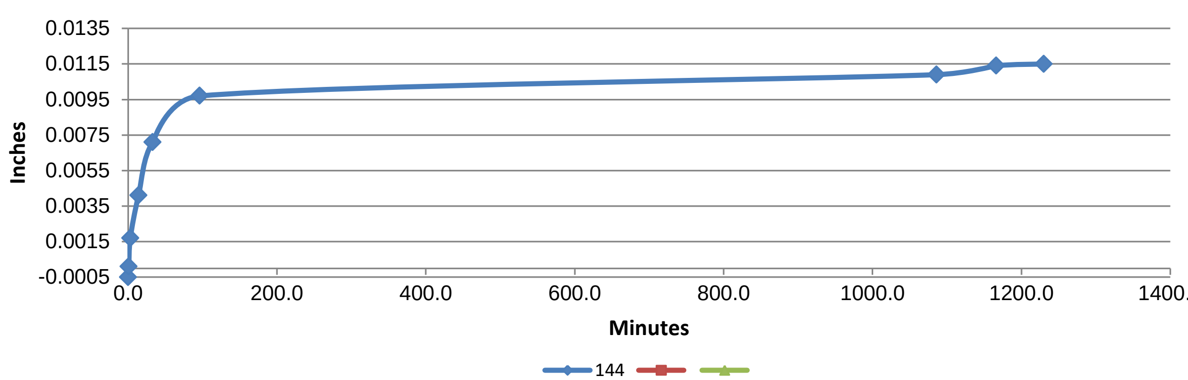
Surcharge (psf)		Uncorrected	Corrected to 50% Saturation
Test wt.	144	12	13
Test wt.			
Test wt.			

Elapsed Time (m:s)	Change in Height (Inches)	Elapsed Time (m:s)	Change in Height (Inches)	Elapsed Time (m:s)	Change in Height (Inches)
0.0	-0.0005				
1.0	0.0001				
3.0	0.0017				
14.0	0.0041				
33.0	0.0071				
96.0	0.0097				
1086.0	0.0109				
1166.0	0.0114				
1230.0	0.0115				

Expansion Index Values and Descriptions

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very High

Expansion Versus Time



HOLDREGE & KULL
(530) 478-1305 - Fax (530) 478-1019 - 792 Searls Ave.- Nevada City, CA 95959 - A California Corporation

Project No. 4826.01
March 5, 2024

Blocker Drive Properties, LLC
Atten: Stephen Meade
391 Nevada Street
Auburn, CA 95603

Reference: **11500 Blocker Drive**
Auburn Industrial Center
APN 001-051-015
Auburn, Placer County, California

Subject: **Geotechnical Engineering Report Update and Applicability**

Dear Mr. Meade,

NV5 (previously Holdrege & Kull (H&K)) prepared this letter to update the findings of our previous geotechnical engineering report for property located at 11500 Blocker Drive in Auburn, California. The subject property encompasses Placer County Assessor's Parcel Number (APN) 001-051-015. The purpose of this letter is to confirm that the findings of our geotechnical engineering report are still valid for the subject property, and to verify that the recommendations of our geotechnical engineering report are applicable to the new proposed improvements for the property. This letter should be used in conjunction with our previously prepared *Geotechnical Engineering Report for 11500 Blocker Drive* dated June 15, 2017 and *Addendum to Geotechnical Report – Pavement Design Recommendations* dated June 22, 2017.

REPORT UPDATE

It is our opinion that our geotechnical engineering report and related addendum is still valid for the subject property, with the exception of seismic design criteria. The following section contains updated design criteria. This update was performed so that the report complies with current code requirements.

SEISMIC DESIGN CRITERIA

The paragraphs and table below supersede Section 5.2.1 of the geotechnical engineering report (H&K (NV5), 2017).

Our classification of on-site soil and rock conditions is based on field observations and laboratory tests. The on-site soil primarily consists of granular soil composed of sandy silt with gravel and cobbles. Based on the presence of predominantly granular soil and resistant, ultramafic rock at relatively shallow depths, we classified the site as "rock" or Site Class "B" for design purposes.

The code-based seismic design parameters were developed in accordance with Section 1613 of the 2022 California Building Code (CBC), and the Structural Engineers Association of California (SEAOC) and California Office of Statewide Health Planning and Development (OSHPD) Seismic Design Maps web application. The internet-based application (https://seismicmaps.org/) is used for determining seismic design values from the 2016 ASCE-7 Standard in accordance with the 2022 CBC. Table 5.2.1 below summarizes seismic design criteria.

Table 5.2.1-1, Seismic Design Parameters

Description	Value	Reference
Latitude North (degree)	38.9017399	Google Earth
Longitude West (degree)	-121.083647	Google Earth
Site Coefficient, F_A	0.9	*2022 CBC, Table 1613A.2.3(1), ASCE 7-16, OSHPD*
Site Coefficient, F_V	0.8	*2022 CBC, Table 1613A.2.3(2), ASCE 7-16, OSHPD*
Site Class	B - Rock	*ASCE 7-16, Section 11.4.3, Table 20.3-1*
Short (0.2 sec) Spectral Response, S_S (g)	0.483	*ASCE 7-16, Section 11.4.3, OSHPD*
Long (1.0 sec) Spectral Response, S_1 *(g)*	0.228	*ASCE 7-16, Section 11.4.3, OSHPD*
Short (0.2 sec) MCE Spectral Response, S_{MS} *(g)*	0.435	*ASCE 7-16, Section 11.4.3, OSHPD*
Long (1.0 sec) MCE Spectral Response, S_{M1} *(g)*	0.183	*ASCE 7-16, Section 11.4.3, OSHPD*
Short (0.2 sec) Design Spectral Response, S_{DS} *(g)*	0.290	*ASCE 7-16, Section 11.4.3, OSHPD*
Long (1.0 sec) Design Spectral Response, S_{D1} *(g)*	0.122	*ASCE 7-16, Section 11.4.3, OSHPD*
Risk Category	II	*2022 CBC, Table 1604.5*
Seismic Design Category	B	*ASCE 7-16, Section 11.4.3, OSHPD*
Geometric Mean Peak Ground Acceleration (PGA_M) (g)	0.182	*ASCE 7-16, Section 11.8.3, OSHPD*

Notes:
CBC = California Building Code
MCE = Maximum Considered Earthquake
g = gravitational acceleration (9.81 meters per second^2 = 32.2 feet per second^2)
sec = second

NEW PROPOSED IMPROVEMENTS AND REPORT APPLICABILITY

The geotechnical engineering report (H&K (NV5), 2017) focused on the development of a mini-storage facility, 50 single-family residences, and associated roadways, sidewalks, and underground utilities. Based on our review of the Preliminary Site Plan Option B (Sheet A01.1) for the Auburn Industrial Center prepared by King Engineering (plot date October 10, 2023), we understand that new proposed improvements will likely include construction of two large industrial buildings of approximately 40,000 and 60,600 square-feet and associated roadways, sidewalks, underground utilities, parking areas, and landscaping. Each industrial building will have multiple tenants with vehicular access to each space.

Our field investigation performed in May of 2017 included 6 trenches excavated to depths of 2 to 6 feet below the ground surface across the property. These exploratory trench locations are within the areas proposed for the new improvements and are still representative of the soil conditions that may be encountered during development.

In our opinion, the geotechnical engineering report (H&K (NV5), 2017), used in conjunction with this letter, is applicable to the new proposed improvements.

NV5 should be retained to review the final project plans prior to construction to confirm our understanding of the project to determine whether our recommendations have been implemented, and to provide additional and/or modified recommendations, if necessary.

LIMITATIONS

The limitations outlined in the *Geotechnical Engineering Report for 11500 Blocker Drive* dated June 15, 2017, are applicable to this letter. Accordingly, the recommendations presented in this letter should not be relied upon after a period of two years from the issue date without our review. We have prepared this letter for your exclusive use in accordance with the generally accepted geotechnical engineering practice as it exists in the site area at the time of our services. No warranty, express or implied, is intended.

We appreciate the opportunity to provide geotechnical engineering services for your project. If you have any questions regarding this letter or the geotechnical engineering report, please contact the undersigned.

Sincerely,

NV5

Prepared by:

Janina S. Smith
Staff Engineer

Reviewed by:

Chuck R. Kull, G.E. 2359
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
CHARLES R. KULL
No. 2359
GEOTECHNICAL
STATE OF CALIFORNIA

Sent via Email (PDF): Stephen Mead, scmeade59@gmail.com

X:\1 Projects\4826 11500 Blocker Drive\4826.01 Geotech Report Update\4826.01_11500 Blocker Drive_Gtk Rpt Update & Applicability.Docx

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in *timeout* error.
USGS web services are now operational so this tool should work as expected.

OSHPD

11500 Blocker Dr, Auburn, CA 95603, USA

Latitude, Longitude: 38.9017399, -121.083647

Date	2/15/2024, 2:27:01 PM
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	B - Rock

Type	Value	Description
S_S	0.483	MCE_R ground motion. (for 0.2 second period)
S_1	0.228	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.435	Site-modified spectral acceleration value
S_{M1}	0.183	Site-modified spectral acceleration value
S_{DS}	0.29	Numeric seismic design value at 0.2 second SA
S_{D1}	0.122	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	B	Seismic design category
F_a	0.9	Site amplification factor at 0.2 second
F_v	0.8	Site amplification factor at 1.0 second
PGA	0.202	MCE_G peak ground acceleration
F_{PGA}	0.9	Site amplification factor at PGA
PGA_M	0.182	Site modified peak ground acceleration
T_L	12	Long-period transition period in seconds
SsRT	0.483	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	0.502	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.228	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.242	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.202	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.961	Mapped value of the risk coefficient at short periods
C_{R1}	0.943	Mapped value of the risk coefficient at a period of 1 s
C_V	0.861	Vertical coefficient

July 25, 2024

Stephen Meade
PO Box 5053
Auburn, CA 95604

Subject: Addendum Update of the 2017 Biological Resources Assessment and Aquatic Resources Delineation reports for the 13.2-acre Blocker Drive Project Site City of Auburn, Placer County, CA

Dear Mr. Meade:

At your request, Salix Consulting has conducted a review of our previously published Biological Resources Assessment and Aquatic Resources Delineation Reports prepared in 2017. This letter addresses any necessary updates that would be included in a new document. Changes to the landscape, special status species database queries, and any other fundamental adjustments are addressed.

LOCATION AND SETTING

The study area has not changed since the original analysis. It is located on Blocker Drive just west of Nevada Street in the City of Auburn in Section 09, Township 12 North and Range 8 East on the Auburn, California 7.5-minute USGS topographic quadrangle (Figure 1 and 2). The approximate coordinates for the center of study area are 38°54'01.01"N and 121°05'01.00"W.

Objectives of Update Review

- Identify if any changes have occurred to the landscape since the 2017 analysis;
- Reevaluate if any sensitive habitats or special-status plant and animal species exist or could exist on the site;
- Assess if the aquatic resources mapped in 2017 are the same or if there are any changes;
- Provide conclusions and recommendations.

METHODS

New queries were conducted of the California Department of Fish and Wildlife's *Natural Diversity Data Base* (2024) and occurrence data are plotted on a five-mile radius map presented in Figures 4a and 4b which show the special status species locations in proximity to the study area.

A field assessment was conducted on July 9, 2024 to determine if the property has been altered or is different in any way that would adjust the determinations made in the previous analysis. Vegetation units and aquatic resources were observed for any changes that may have occurred. Surveys to determine the actual presence or absence of potentially occurring special-status species were not conducted during this evaluation.

FINDINGS

Habitat and Vegetation

The site has remained unaltered since we reviewed it in 2017. The upper area near the railroad has roadcuts throughout the area and they are regraded each year. A review of historic photos shows these roadcuts dating back to at least 2009. The habitat configuration remains unchanged. The lower western area of the property is a broad drainage swale that supports expansive Himalayan blackberry cover under a canopy of primarily valley oak. Site photos are presented in Figures 5a-5c.

Wildlife Occurrence and Usage

The project site remains an important refugia for local wildlife species and some migratory birds due to the dense vegetative cover and availability of water in the lower western area. No notable changes have occurred to alter this setting or species composition.

Aquatic Resources

A perennial or near perennial urban creek flows through the swale bottom. The stream is not visible from the surrounding area because most of it flows under the blackberry. During the 2017 Aquatic Resources Delineation, we cut swaths through the blackberry to reach the stream in several transects up and down the stream. The flowline was surveyed and the aquatic resources mapping was generated from this survey. From our current visual observations, there appears to be no changes to any of these habitats since the 2017 analysis. This is the only aquatic resource in the study area.

Special-Status Species

Salix re-queried the California Natural Diversity Database (CNDDB 2024) for location records for special-status species known to occur within five miles of the study area (Figures 4a and 4b).

Plants

Six plants are recorded in CNDDB as occurring within five miles of the study area. These are:

Big-scale balsam-root (*Balsamorhiza macrolepis*)

Brandegee's clarkia *(Clarkia biloba ssp. brandegeeae)*

Butte County fritillary (*Fritillaria eastwoodiae)*

Dubious Pea *(Lathyrus sulphureus var. argillaceus)*

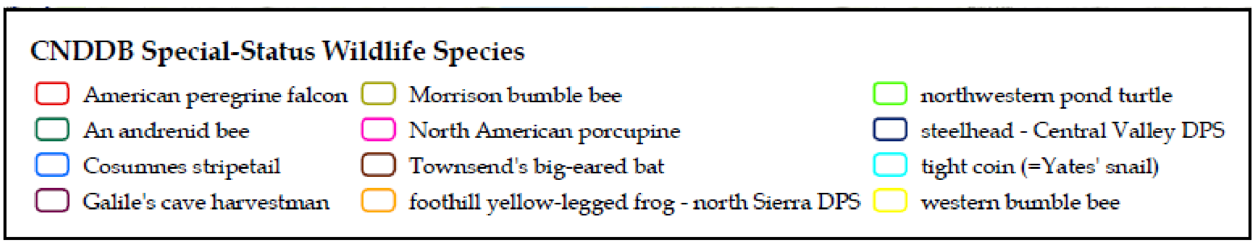
Jepson's Onion *(Allium jepsonii)*

Western viburnum (*Viburnum ellipticum*)

The property was previously evaluated for four of the above species. The two additional species are Jepson's onion and Brandegee's clarkia. Jepson's onion occurs north of the property near Highway 49 and Dry Creek Road on barren serpentine soils. This condition does not exist in the study area and therefore, there is no potential for this species to occur. Brandegee's clarkia occurs in road cuts in the Auburn region but is locally common and has been downgraded to a CNPS Rank 4.2 which means it is on a watch list and falls below the level of significance in a CEQA analysis. The four species that were reviewed in 2017 and generally determine not to be present remain the same. Habitat quality for big scale balsam-root, Butte County fritillary, dubious pea and western viburnum is minimal due to marginal habitat and a more thorough assessment for presence/absence in the 2017 analysis.

Animals

The five-mile radius map showing special status animal species has occurrences of 12 different species. Five of these species are bees, snails and an aquatic insect. There is one bird, two are mammals, two are fish, one is an amphibian, and one is a reptile (see legend of Figure 4b below).



In the 2017 analysis, all but two of these species were ruled out as potentially occurring and the same is true for this review. The two species that may occupy the site are western pond turtle and foothill yellow-legged frog. The western pond turtle occupies ponds but uses connecting waterways as movement corridors. This particular waterway is mostly under Himalayan blackberry so travel would be limited, but still possible. The foothill yellow-legged frog may occupy the stream. Foothill yellow-legged frog, north Sierra DPS, has no federal status but is listed at Threatened under the California Endangered Species Act and efforts to avoid any impacts to the stream should be exercised to prevent any negative effects on this species.

Recommendations

Aquatic Resources

The property has one aquatic resource, a perennial (or near perennial) stream that flows through the large swale/ravine in the western area of the property. This stream carries local runoff for all or most of the year and is "buried" under an expansive area of Himalayan blackberry. Avoidance of this stream is recommended to eliminate the need for wetland permits and potential impacts to aquatic species, including the foothill yellow-legged frog.

Oak Resources Conservation Ordinance

Impacts to oak trees should be coordinated with the Auburn Planning Department.

Special-Status Plants

The study area has very low potential to support rare plant species. Previous studies and analysis of the property did not detect any special status plant species and due to the extremely low probability of occurrence, no further surveys are recommended.

Special-Status Animals

Potentially occurring special status animals are limited to the stream, and larger trees. The stream may support western pond turtle and foothill yellow-legged frog. These species are limited to aquatic areas and would not venture too far from water. Best management practices should be installed before any ground disturbance due to the steep adjacent landscape and potential for soil to move down in the stream zone. Every effort should be made to prevent soil from moving into the stream zone. Trees may support nesting raptors or other protected birds as outlined below.

Nesting Raptors and Migratory birds

The property likely supports nesting birds and potentially nesting raptors. If site disturbance occurs during the nesting season (Feb. 15-Aug. 31), a pre-construction survey should be conducted by a qualified biologist no more than 15 days prior to initiation of development activities. If active nests are found on or immediately adjacent to the site, a no-work-zone buffer should be established by the biologist and confirmed by the City of Auburn and if necessary, CDFW. If no nesting is found to occur, necessary tree removal could then proceed. It is recommended that any tree and shrub removal be conducted in the non-nesting season.

Summary

We reviewed the 2017 Biological Resources Assessment and Aquatic Resources Delineation reports for currency. A field evaluation was conducted in July 2024. The CNDDB was requeried to determine if new information would warrant any further analysis or study of this site. We identified species that were not noted in the previous analyses, most of which have no suitable habitat in the study area. Other than maturing woody vegetation, the study area is essentially unchanged from the 2017 evaluation. The aquatic resources remain unchanged. The new information discovered during this analysis does not affect our previous findings.

Please contact me at (530) 888-0130 if you have any questions about this report.

Sincerely,

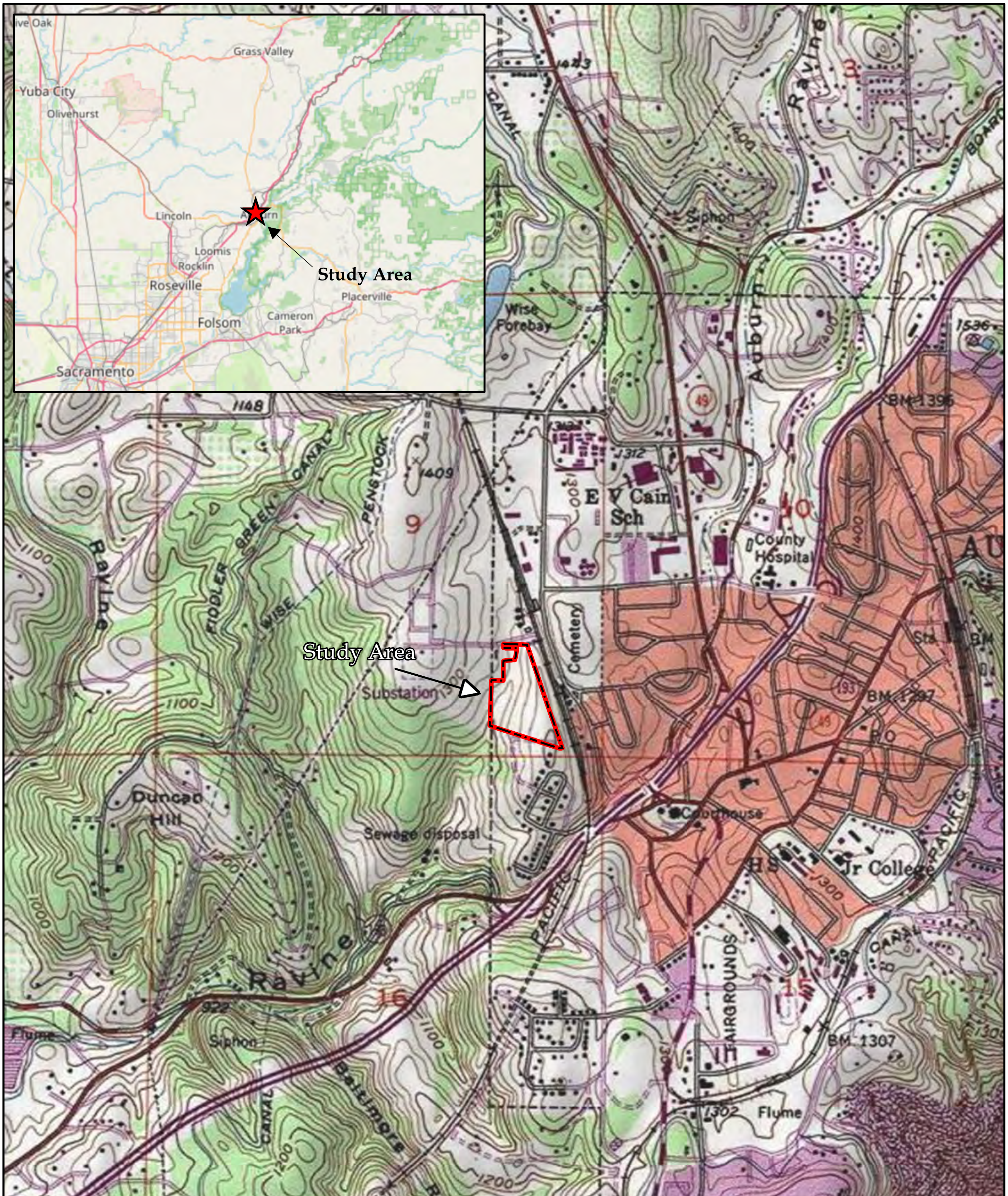
Jeff Glazner

Jeff Glazner
Principal Biologist

cc: Russell King, King Engineering

Attachments:

- Figure 1. USGS Site and Vicinity
- Figure 2. Recent Aerial Photo
- Figure 3. Updated Habitat Map
- Figure 4a. July 2024 CNDDB Query and Special-status Plant Occurrence Map
- Figure 4b. July 2024 CNDDB Query Special-status Animal Occurrence Map
- Figure 5a-c. July 2024 Site Photos



Salix consulting, inc.

N

0 1,000 2,000

Feet

Source Maps: USGS Topographic Map
Auburn (1981) Quad 1:24,000
Section 09 Township 2N Range 12E

Figure 1

SITE AND VICINITY MAP

Meade-Blocker

City of Auburn, Placer County, CA

Salix consulting, inc.

N

0 100 200

Feet

Study Area (±13.2 acres)

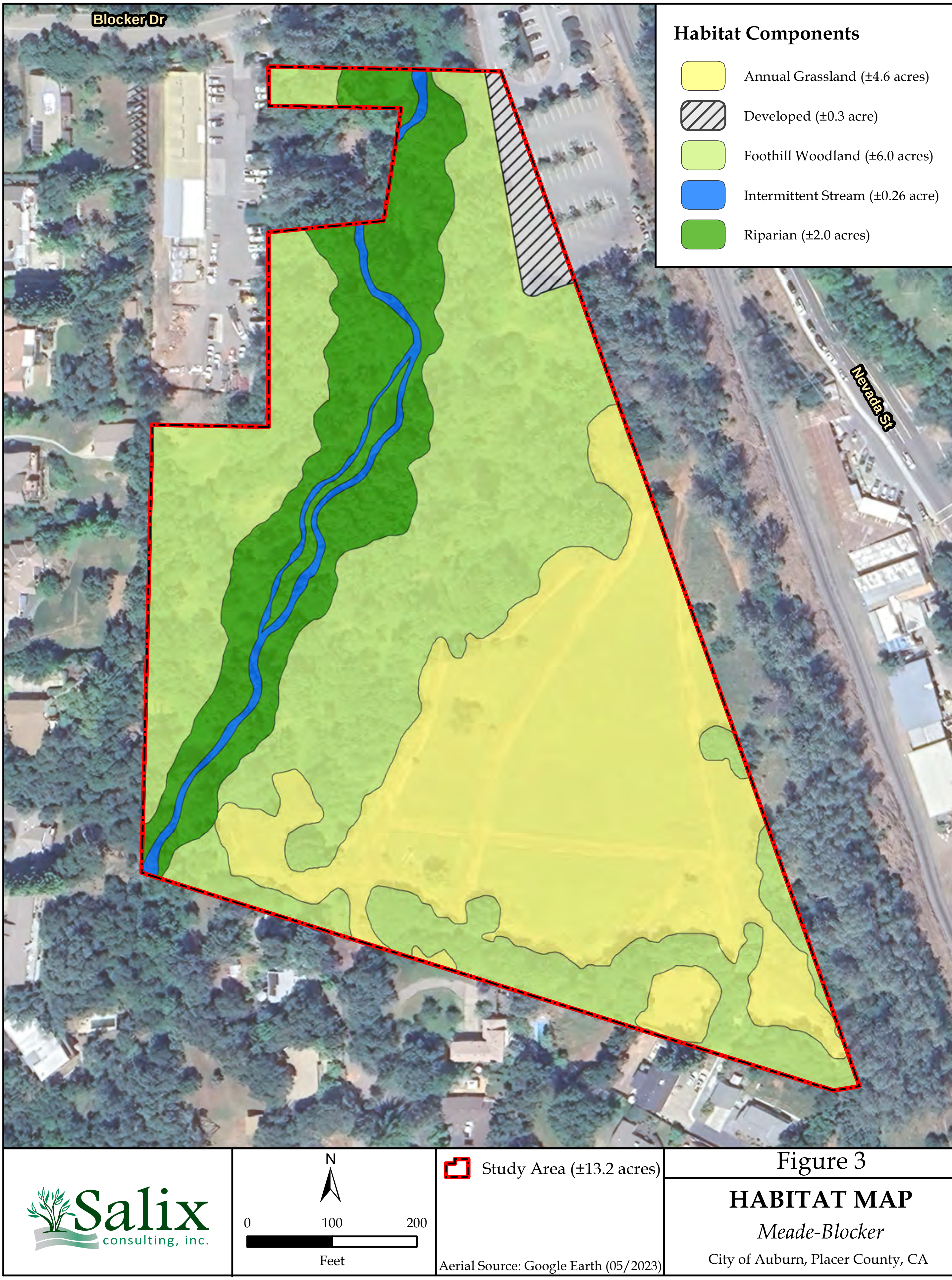
Aerial Source: Google Earth (05/2023)

Figure 2

AERIAL PHOTO

Meade-Blocker

City of Auburn, Placer County, CA



Aerial Source: Google Earth (05/2023)

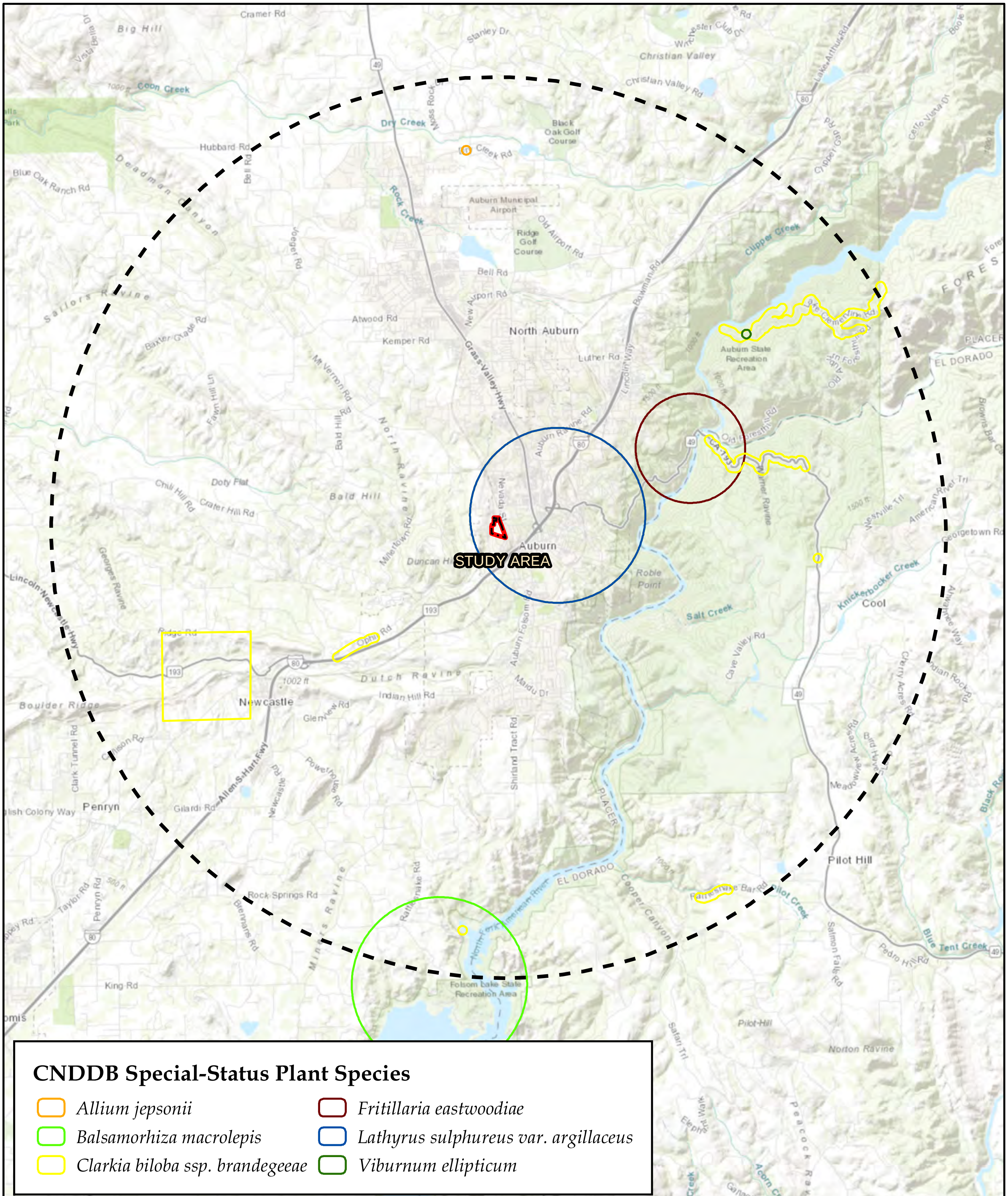
Salix consulting, inc.

Figure 3

HABITAT MAP

Meade-Blocker

City of Auburn, Placer County, CA



CNDDB Special-Status Plant Species

- *Allium jepsonii*
- *Balsamorhiza macrolepis*
- *Clarkia biloba ssp. brandegeeae*
- *Fritillaria eastwoodiae*
- *Lathyrus sulphureus var. argillaceus*
- *Viburnum ellipticum*

Salix consulting, inc.

N

0 5,000 10,000

Feet

Study Area (±13.2 ac)

5-Mile Radius

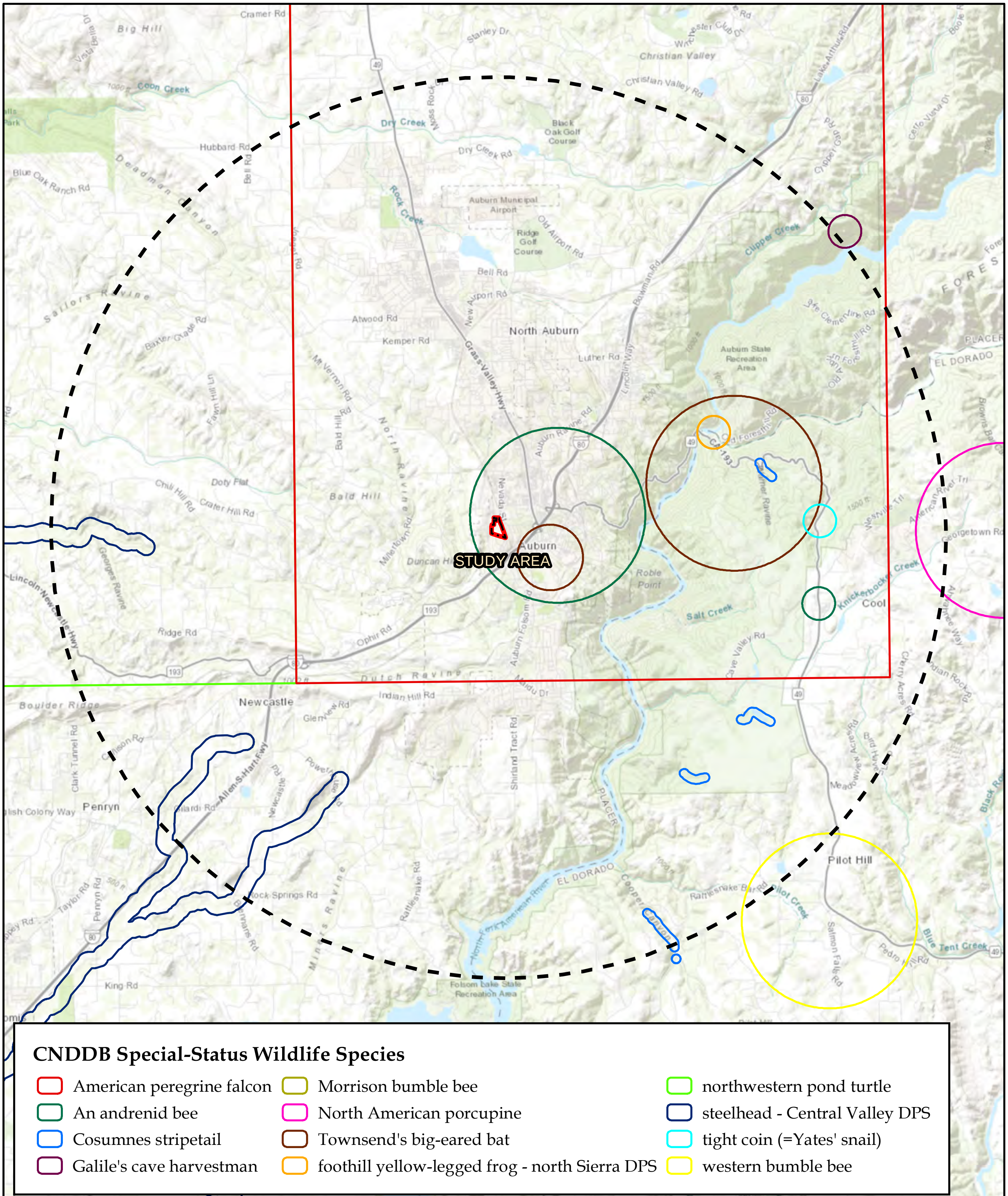
July 2024

Figure 4a

CNDDB OCCURRENCES MAP

Meade-Blocker

City of Auburn, Placer County, CA



Salix consulting, inc.

N

0 5,000 10,000

Feet

Study Area (±13.2 acres)

5-Mile Radius

Figure 4b

CNDDB OCCURRENCES MAP

Meade-Blocker

City of Auburn, Placer County, CA

Looking north along edge of parking lot and study area.
Photo Date: 7-9-24.

Looking south over northeast area of site.
Photo Date: 7-9-24.

Salix consulting, inc.

Figure 5a

SITE PHOTOS

Blocker Drive

City of Auburn, Placer County, CA

One of road cuts in central area of site.
Photo Date: 7-9-24.

One of road cuts above riparian zone.
Photo Date: 7-9-24.

Salix consulting, inc.

Figure 5b

SITE PHOTOS

Blocker Drive

City of Auburn, Placer County, CA

Looking into riparian/stream zone from eastern area parking lot.
Photo Date: 7-9-24.

Looking into stream zone at southern end.
Photo Date: 7-9-24.

Salix consulting, inc.

Figure 5c

SITE PHOTOS

Blocker Drive

City of Auburn, Placer County, CA

Appendix F

Environmental Noise Assessment

Auburn Industry Center

City of Auburn, California

March 19, 2024

Project #240207

Prepared for:

Stephen Meade
scmeade59@gmail.com

Prepared by:

Saxelby Acoustics LLC

Luke Saxelby, INCE Bd. Cert.
Principal Consultant
Board Certified, Institute of Noise Control Engineering (INCE)

INTRODUCTION

The Auburn Light Industry Project is located in the City of Auburn, California. The project will consist of 100,000 square feet of industrial space. Single family residential uses are located to the south and west of the project site and commercial land uses are located to the north and east. The purpose of this analysis is to predict the noise generation associated with these uses and to achieve compliance with the applicable city of Auburn noise level standards.

Figure 1 shows the project site plan. **Figure 2** shows an aerial photo of the project site and noise measurement locations.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

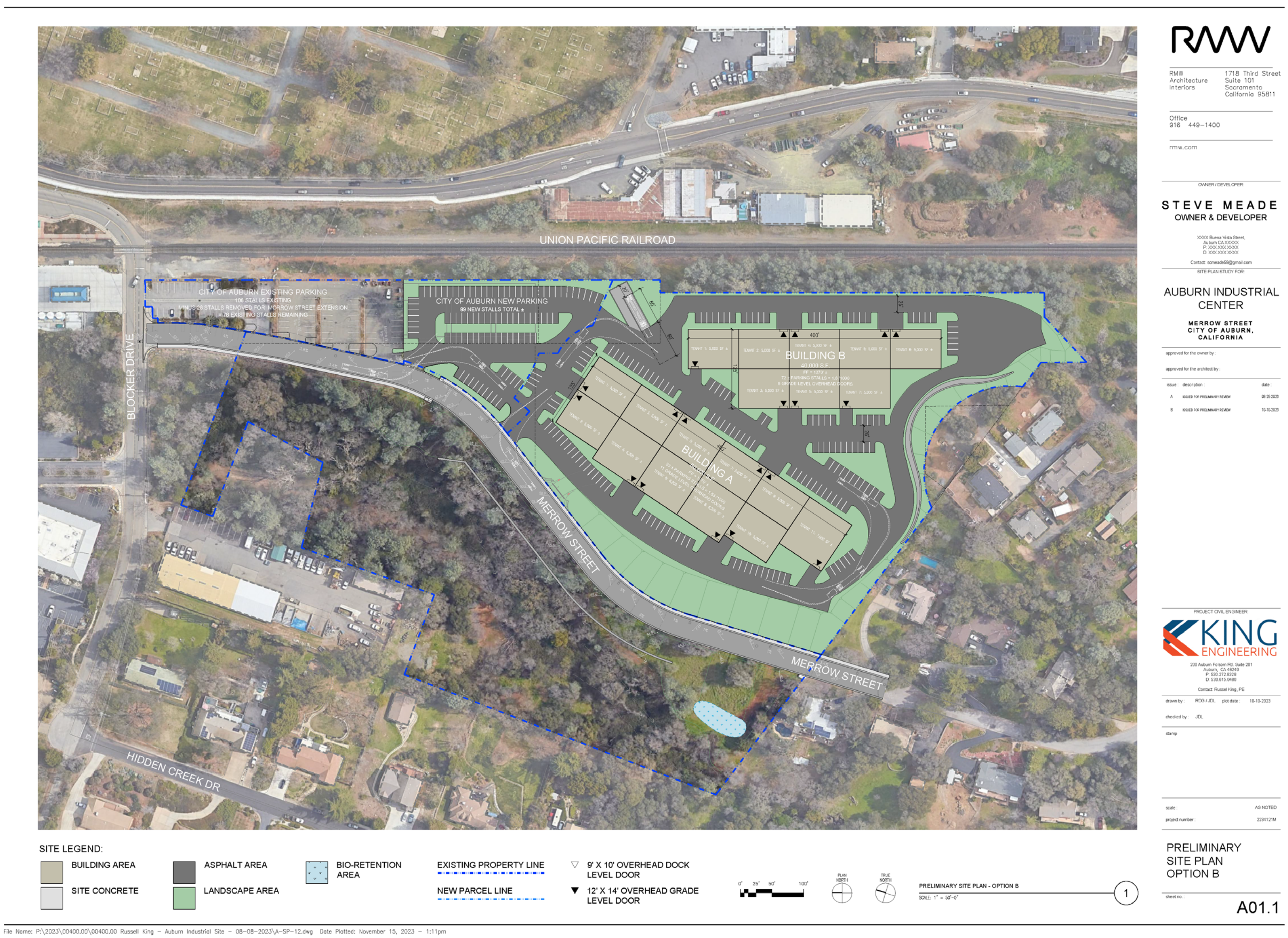
Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

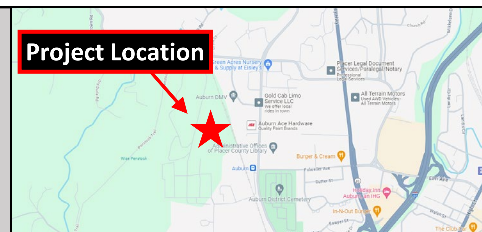
Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.



Auburn Industry Center

City of Auburn, California



SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

Figure 1

Project Site Plan

Auburn Industry Center

City of Auburn, California

Figure 2

Noise Measurement Sites

Legend

- Project Site
- Noise Measurement Site - Long Term
- Noise Measurement Site - Short Term

0 ft 100 ft 250 ft 400 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/13/2024

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The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING AMBIENT NOISE LEVELS

The existing noise environment in the project area is defined primarily by noise from the Union Pacific Railroad line north of the project.

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurement at one location on the project site and a short-term noise level measurement at one location. Noise measurement locations are shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 820 and 831 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL 200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 150 ft. to CL of UP	3/7/2024	63	55	51	70	57	51	72
ST-1: 425 ft. to CL of UP.	3/8/2024	N/A	45	45	49	N/A	N/A	N/A

Notes:

- *All values shown in dBA*
- *Daytime hours: 7:00 a.m. to 10:00 p.m.*
- *Nighttime Hours: 10:00 p.m. to 7:00 a.m.*
- *Source: Saxelby Acoustics 2024*

REGULATORY CONTEXT

FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

STATE

There are no state regulations related to noise that apply to the Proposed Project.

LOCAL

City of Auburn General Plan

Policy 1.1 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table VIII-1 **(Table 3)** at existing or planned noise-sensitive uses, an acoustical; analyses shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 2.2 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table VIII-1 **(Table 3)** as measured immediately within the property line of lands designated for noise-sensitive uses. This policy does not apply to noise sources associated with agricultural operations on lands zoned for agricultural uses.

TABLE 3: NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS AFFECTED BY OR INCLUDING NON-TRANSPORTATION SOURCES

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	55	45
Maximum level, dB	75	65

Source: Table VIII-1
Notes :
Each of the noise levels specified above shall be lowered by five dB for simple tones noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise levels standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).
For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroads line operations and aircraft in flight, including takeoffs and landings. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are presumed to be subject to local regulations, such as a noise control ordinance.

EVALUATION OF PROJECT OPERATIONAL NOISE ON EXISTING SENSITIVE RECEPTORS

The primary noise source on the proposed project site would be operation noise from the light industrial operational noise, with the addition of on-site circulation. Saxelby Acoustics assumes that the proposed project will only operate during the hours of 7:00 a.m. to 7:00 p.m.

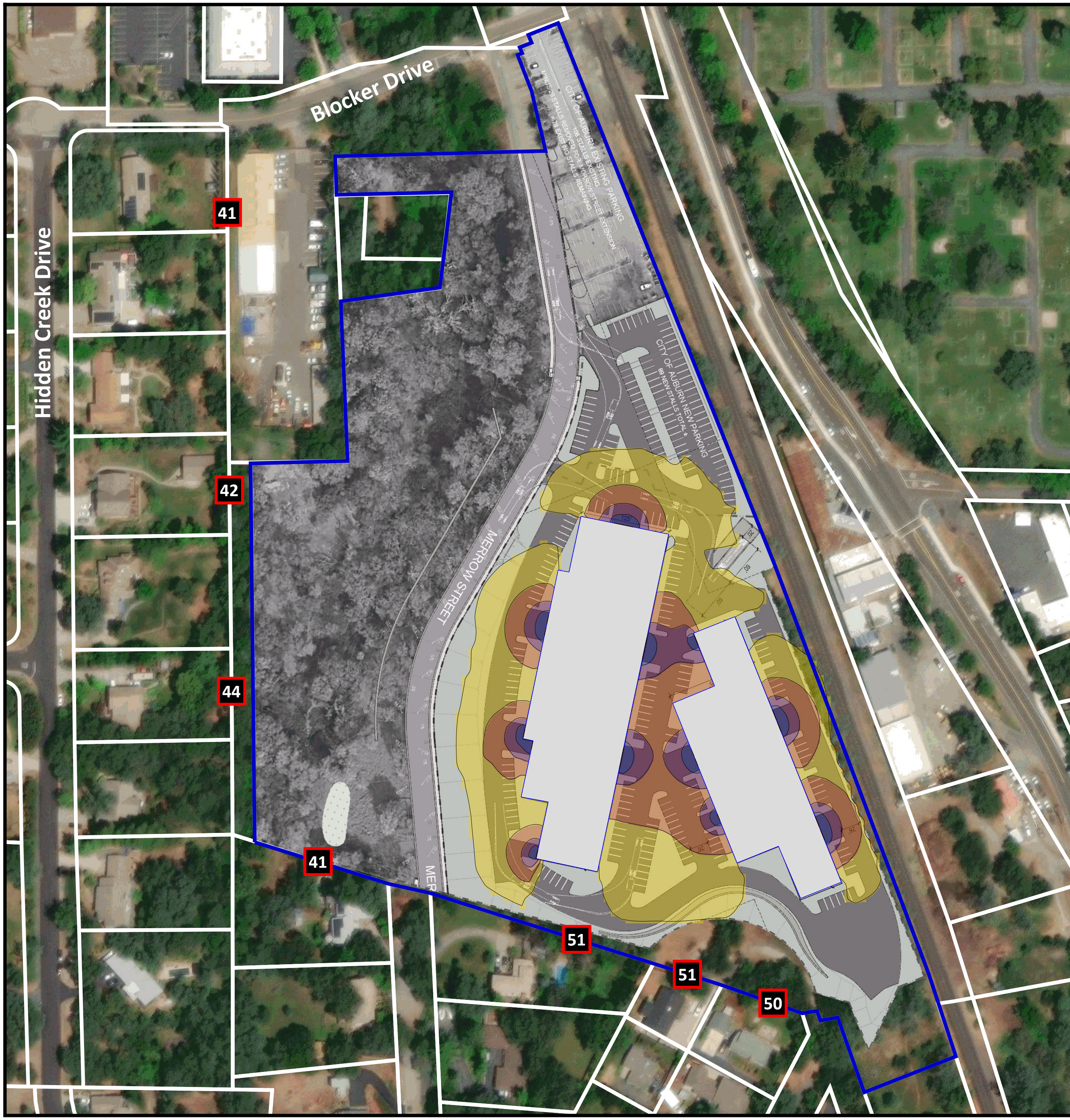
The following is a list of assumptions used for noise modeling. The data used is based upon a combination of manufacturer's provided data and Saxelby Acoustics data from similar operations.

On-Site Circulation: The light industrial of the project is projected to generate 74 trips in the peak hour (W-Trans 2024). Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. Nighttime traffic outside of the AM or PM peak hour is estimated to be approximately 1/2 of daytime trips during nighttime hours (10:00 p.m. to 7:00 a.m.). Saxelby Acoustics data.

HVAC: Assumes a single rooftop HVAC unit for each industrial unit, a total of nineteen. The units were assumed to have a sound level rating of 89 dBA. Manufacturer's data.

Light Industrial: The proposed project includes the construction of nineteen industrial units in the proposed buildings. The units could be used for various types of commercial and industrial activities including but not limited to assembly, light manufacturing, and storage. The units include roll-up doors which could allow noise to spill to the exterior of the building. Therefore, Saxelby Acoustics analyzed noise generation of these units assuming that all doors were open and continuous noise generation from every unit were to occur. Assumed noise levels were 55 dBA L_{eq} at a distance of 60 feet outside of the doors. The analysis assumes that operation will only occur during the hours of 7:00 a.m. to 7:00 p.m. This level of noise generation is typical of industrial use with moderate noise generation including the use of tools, air compressors, vacuums, etc. Saxelby Acoustics data.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed amenities, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. **Figures 3 and 4** show the noise level contours resulting from operation of the project during daytime (7:00 a.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.), respectively.



Auburn Industry Center

City of Auburn, California

Figure 3

Daytime Non-Transportation
Noise Contours
Leq,d, dB(A)

Noise Level, dB(A)

55 < <= 60
60 < <= 65
65 < <= 70
70 <

Legend

Project Building
Parcel Lines
Project Site

Scale 1:200

0 40 80 160 240 320 feet

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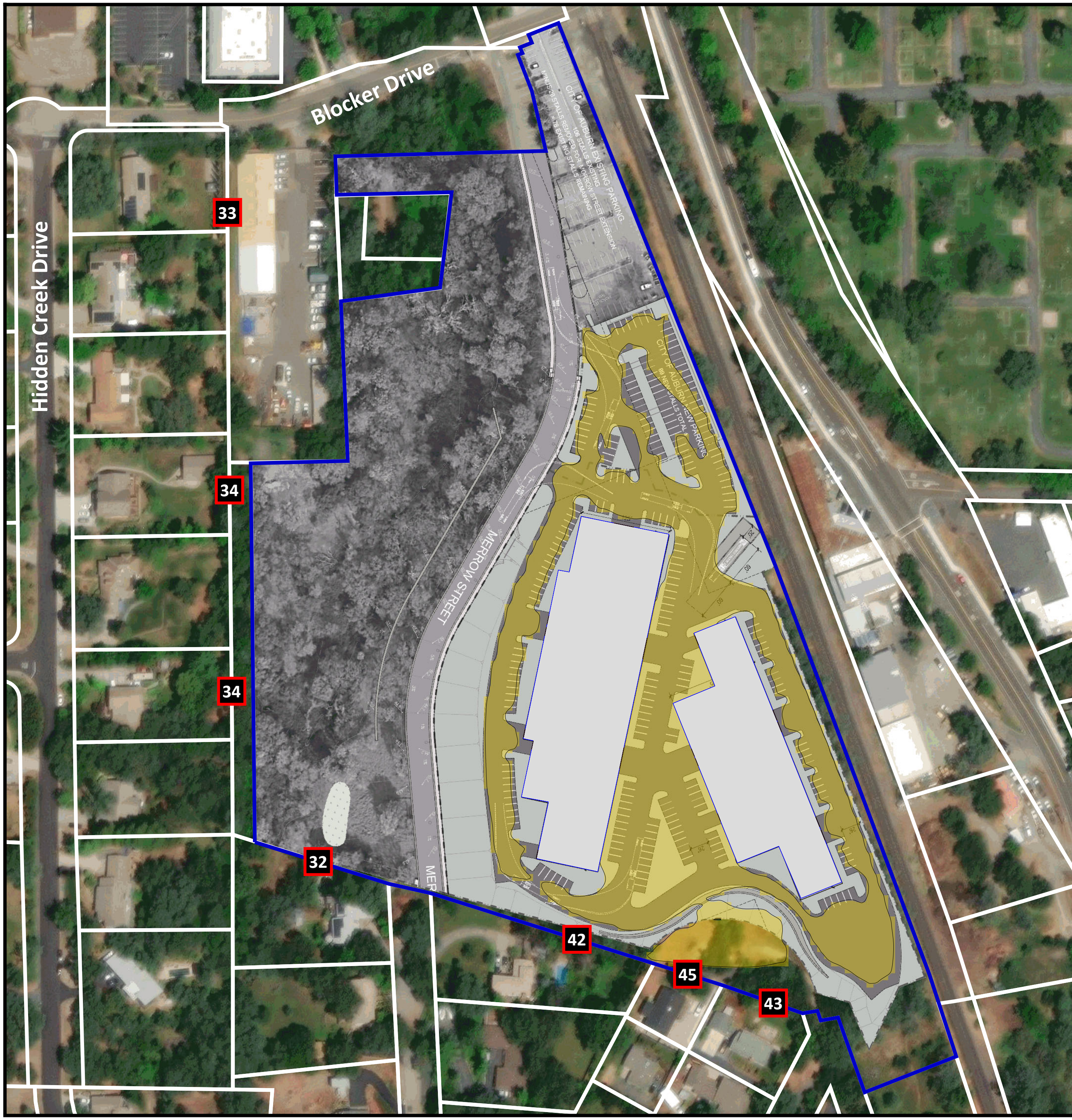

Auburn Industry Center

City of Auburn, California

Figure 4

Nighttime Non-Transportation Noise Contours
Leq,n, dB(A)

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Operational Noise at Existing Sensitive Receptors

As shown on **Figures 3 and 4**, the project is predicted to expose adjacent noise sensitive receptors at the closest parcel line to noise levels up to 51 dBA, L_{eq} during daytime (7:00 a.m. to 10:00 p.m.) and 45 dBA, L_{eq} during nighttime (10:00 p.m. to 7:00 a.m.) hours. The predicted project noise levels would meet the City of Auburn daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise standard for non-transportation noise sources of 55 dBA, L_{eq} and 45 dBA, L_{eq}, respectively.

It should be noted that maximum noise levels generated by the light industrial operations, HVAC units, and on-site vehicle circulation are predicted to be 20 dBA, or less, than the average (L_{eq}) values. The City of Auburn maximum (L_{max}) nighttime noise level standard is 75 dBA L_{max}, which is 20 dBA higher than the L_{eq} standard. Therefore, where average noise levels are in compliance with the L_{eq} standards, maximum noise levels will also meet the City's standards. Based upon the predicted average noise levels of 51 dBA, the maximum noise levels will be 71 dBA, L_{max} during daytime (7:00 a.m. to 10:00 p.m.) hours and comply with the City maximum standards.

CONCLUSIONS

The proposed project is predicted to comply with the City of Auburn noise level standards with no additional noise control measures.

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SoundPLAN. SoundPLAN GmbH. Backnang, Germany. http://www.soundplan.eu/english/

Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

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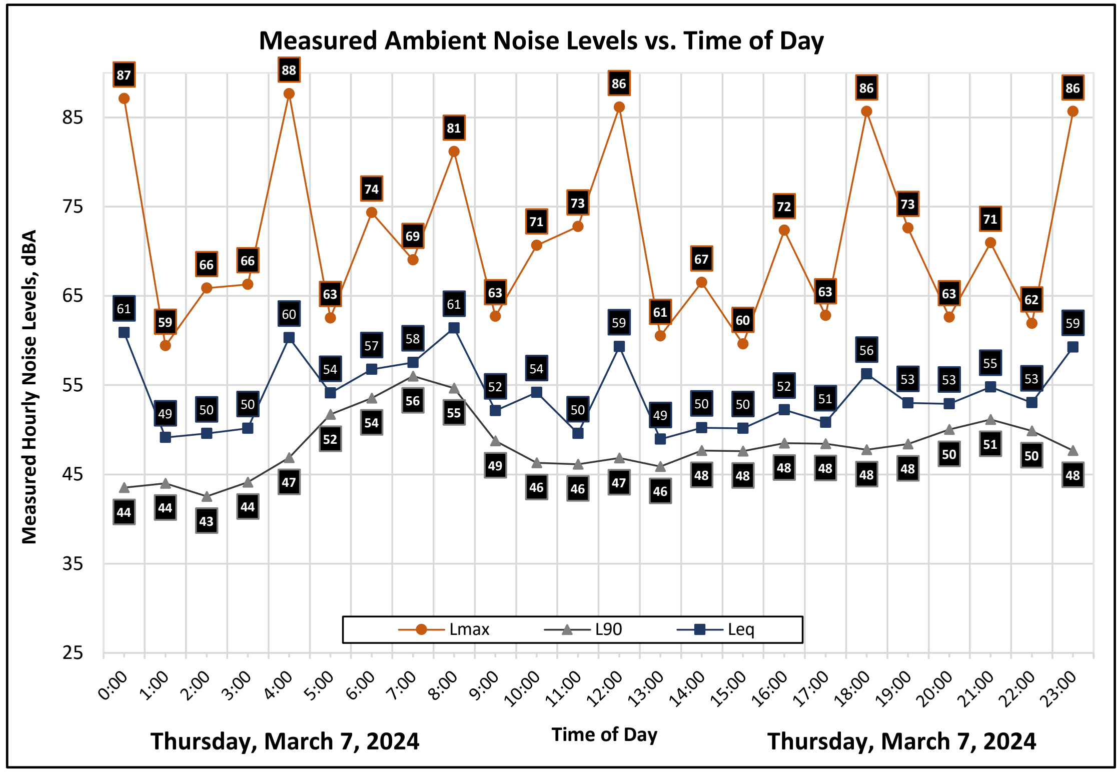
Appendix B: Continuous and Short-Term Ambient Noise Measurement Results

Appendix B1: Continuous Noise Monitoring Results

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Thursday, March 7, 2024	0:00	61	87	48	44
Thursday, March 7, 2024	1:00	49	59	48	44
Thursday, March 7, 2024	2:00	50	66	47	43
Thursday, March 7, 2024	3:00	50	66	48	44
Thursday, March 7, 2024	4:00	60	88	51	47
Thursday, March 7, 2024	5:00	54	63	54	52
Thursday, March 7, 2024	6:00	57	74	56	54
Thursday, March 7, 2024	7:00	58	69	57	56
Thursday, March 7, 2024	8:00	61	81	56	55
Thursday, March 7, 2024	9:00	52	63	52	49
Thursday, March 7, 2024	10:00	54	71	48	46
Thursday, March 7, 2024	11:00	50	73	48	46
Thursday, March 7, 2024	12:00	59	86	49	47
Thursday, March 7, 2024	13:00	49	61	48	46
Thursday, March 7, 2024	14:00	50	67	49	48
Thursday, March 7, 2024	15:00	50	60	50	48
Thursday, March 7, 2024	16:00	52	72	50	48
Thursday, March 7, 2024	17:00	51	63	50	48
Thursday, March 7, 2024	18:00	56	86	50	48
Thursday, March 7, 2024	19:00	53	73	50	48
Thursday, March 7, 2024	20:00	53	63	52	50
Thursday, March 7, 2024	21:00	55	71	53	51
Thursday, March 7, 2024	22:00	53	62	53	50
Thursday, March 7, 2024	23:00	59	86	51	48

Statistics	Leq	Lmax	L50	L90
Day Average	55	70	51	49
Night Average	57	72	51	47
Day Low	49	60	48	46
Day High	61	86	57	56
Night Low	49	59	47	43
Night High	61	88	56	54
Ldn	63	Day %		55
CNEL	63	Night %		45

Site: LT-1
Project: Auburn Industry Center
Meter: LDL 820-1
Location: Northern Project Boundary
Calibrator: CAL200
Coordinates: (38.8992648, -121.0820043)



Appendix B2 : Short Term Noise Monitoring Results

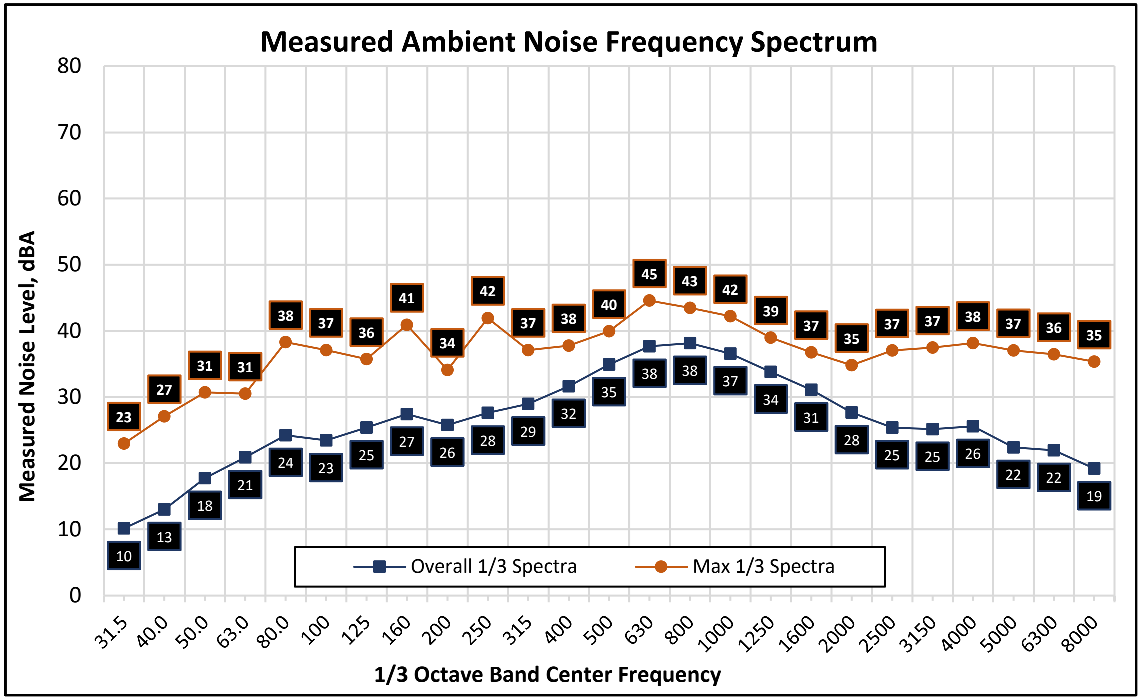
Site: ST-1
Project: Life Time Overland Park
Location: Southeast Boundary of Project Site
Coordinates: (38.8999252, -121.0833327)
Meter: LDL 831-1
Calibrator: CAL200

Start: 2024-03-08 12:23:55
Stop: 2024-03-08 12:33:55
SLM: SoundAdvisor™ Model 831C
Serial: 11709

Measurement Results, dBA	
Duration:	0:10
L_{eq}:	45
L_{max}:	49
L_{min}:	40
L_{50}:	45
L_{90}:	43

Notes

Primary noise source was distant traffic noise from Metcalf Avenue and natural sounds such as birds and insects. Secondary noise sources include traffic on W 97th Terrace.



Richard Walker

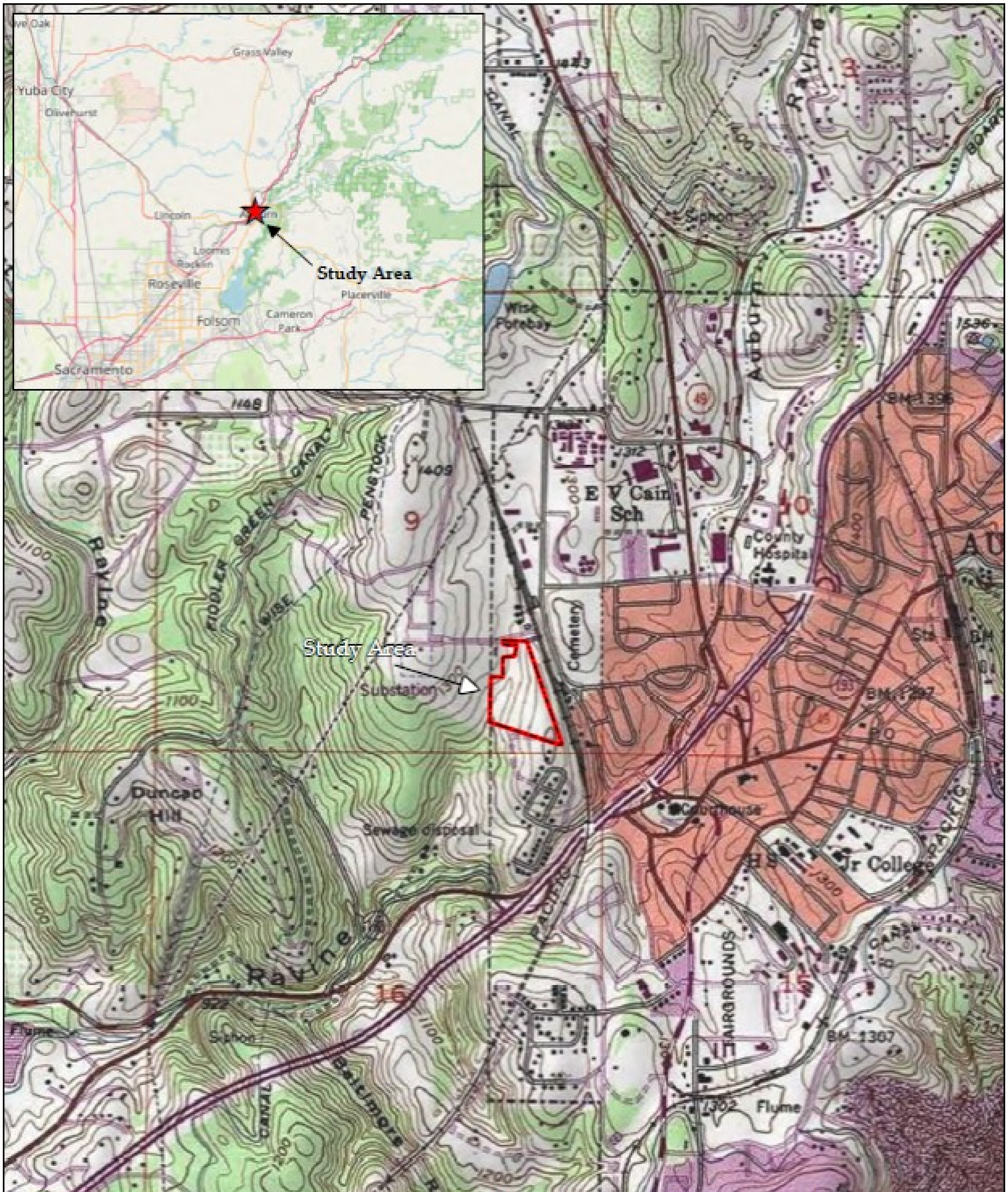
From:	Richard Walker
Sent:	Tuesday, December 3, 2024 11:57 AM
To:	c.prout@colfaxrancheria.com; ctvctpreservation@gmail.com; pcubbler@colfaxrancheria.com; shelly@nevadacityrancheria.org; kmoreno@ssband.org; dumurray@ssband.org; info@ssband.org; matayaba@ssband.org; jsarmento@ssband.org; kperry@ssband.org; tsi-akim-maidu@att.net; bguth@auburnrancheria.com; serrell.smokey@washoetribe.us; darrel.cruz@washoetribe.us; hgriffin@wiltonrancheria-nsn.gov; cpd@wiltonrancheria-nsn.gov; dbrown@wiltonrancheria-nsn.gov
Cc:	Larch McNeill; Tia Klumpp
Subject:	Auburn, CA - AB 52 Consultation
Importance:	High

Dear Tribes,

The Auburn City Planning Department is pleased to provide the location and description of a proposed flexible industrial and commercial space facility that requires compliance with the California Environmental Quality Act (CEQA). According to the CEQA Mitigated Negative Declaration that was prepared for the project, the project will have no impacts on tribal cultural resources. However, California Assembly Bill (AB 52) requires public agencies to consult with tribes during the CEQA process. Therefore, the city planning department is requesting your review of the proposed project location and description, and any comments or concerns that you may have regarding the proposed project and its potential for impacts on tribal cultural resources. Please respond by email or by telephone at 424-404-7504. Thank you for your assistance, have a good day.

Project Location:

The project site consists of a 7.25-acres (±315,893 SF) portion of APN 001-051-049-0000, located at 11500 Blocker Dr, Auburn, CA 95603, on the north side of Merrow Street and south of Blocker Drive and west of Nevada Street in the City of Auburn, California, Section 09, Township 12 North, and Range 8 East. The project site is currently undeveloped with no buildings or other on-site structures.



Salix consulting, inc.

N

0 1,000 2,000
Feet

Source Maps: USGS Topographic Map
Auburn (1981) Quad 1:24,000
Section 09 Township 2N Range 12E

Figure 1
SITE AND VICINITY MAP
Meade-Blocker
City of Auburn, Placer County, CA

Project Description:

Proposed Project: The project proposes up to 100,633 square feet of flexible industrial and commercial space spread across two metal buildings. Building A is 60,633 square feet and Building B is 40,000 square feet. Both buildings are one-story and will be Type VB construction.

Buildings have been designed to be divisible into multiple tenant spaces and end uses would include office, research and development, warehousing, distribution, e-commerce fulfillment, flex spaces, light industrial, and manufacturing. Suites would range in size from 3,500 to 6,200 square feet in size and each would have a grade level sectional overhead door. Suites could be combined based on tenant needs. It is estimated that approximately 30 percent of the building square footage would be office space and 70 percent would be warehousing and manufacturing use. Upon completion, it is estimated that between 100 to 150 will be employed on site depending on end users. The project would be developed in one or multiple phases; optimizing the buildout to meet current and future market demands. It is anticipated that full build-out would be completed in approximately three years but will be tenant-driven.

The areas around the main entries of the buildings are enhanced with tinted glazing in aluminum frames and overhead steel-framed painted canopies. The placement of these enhancements is focused at the locations most visible from the public roadways. No outdoor storage is proposed. Hazardous materials stored onsite in regulated quantities would be required to notify Placer County's Environmental Health Services, complete an electronic submittal to the California Environmental Reporting System (CERS) and pay required fees, and obtain an EPA ID number from the Department of Toxic Substances Control.

Site Access and Parking: There are two site entrance driveways along a proposed extension of Merrow Street. Truck access will be accommodated via the northern-most site access driveway, which will serve as a shared visitor, employee, and semi-truck access drive. The southern site entrance will be for vehicle access. The site plan proposes a total of 165 vehicle parking stalls for employees and/or visitors. The northern portion of the site has been reconfigured with the adjacent lot (belonging to the City of Auburn) to provide shared access drives and more parking area for the Auburn Train Station.

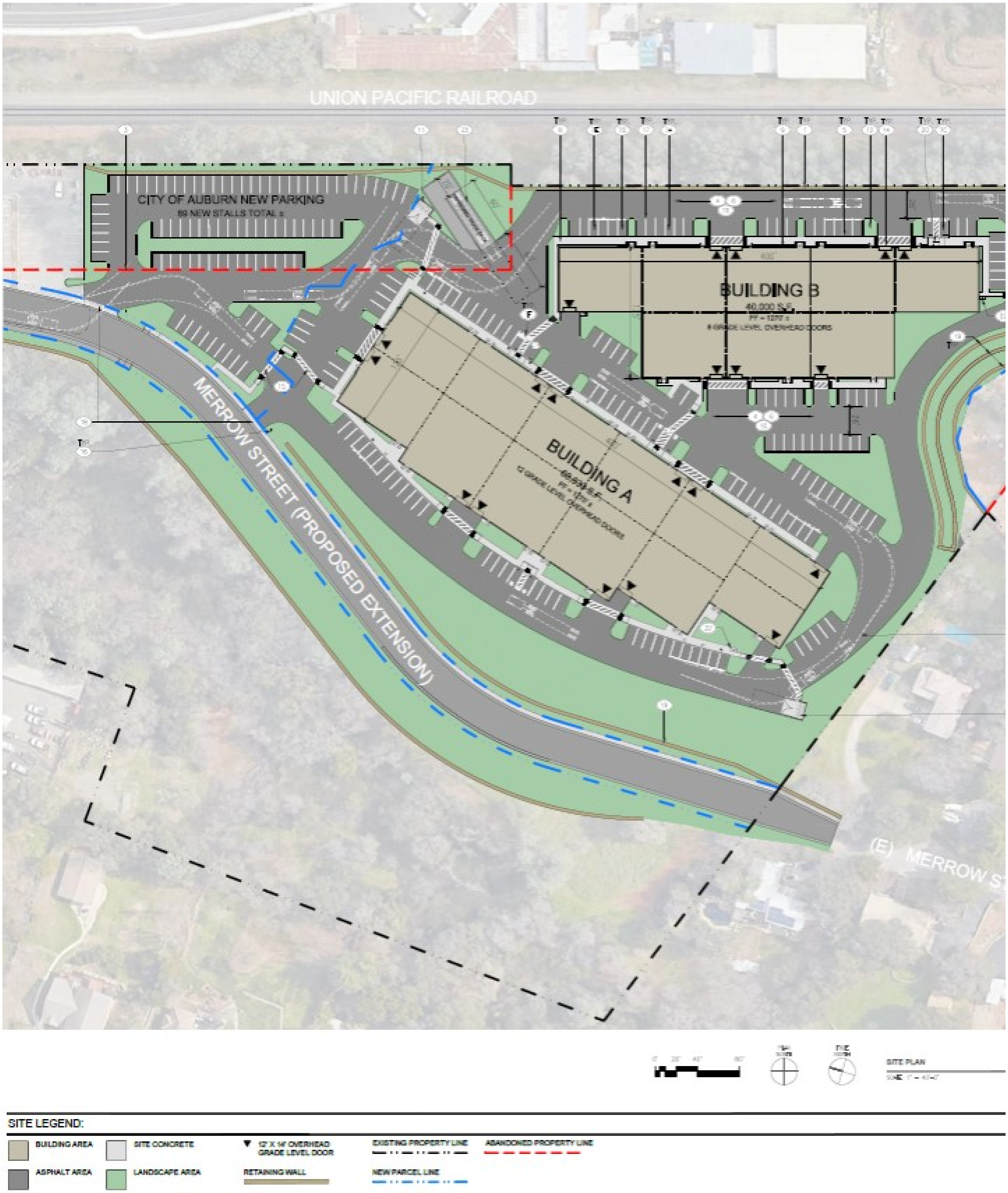
Landscaping: The project will be fully landscaped using plants appropriate for and indigenous to the City of Auburn. Low water use plants will be used extensively, while moderate water use plants will be concentrated at accent points, such as driveways and building entries.

Sustainable Materials & Construction Practices: The project will incorporate a variety of sustainable materials and construction practices to include the following:

1. A storm water pollution prevention plan to minimize contamination, erosion, and dust pollution during construction.
2. Storage and collection of recyclable materials.
3. Construction waste management.
4. Environmental tobacco smoke control.
5. Light pollution reduction.
6. Water efficient landscaping.
7. Water use reduction methods.
8. Low VOC emitting sealants, adhesives, coatings, floorings, and wood materials.

9. Roof structures designed to accommodate additional weight for roof-top photovoltaic electricity generation panel arrays.
10. California Green Building Code compliant electric vehicle charging stations.

In addition, the project architect is a LEED accredited professional and will apply his knowledge of LEED techniques and practices to the project design and construction


UNION PACIFIC RAILROAD
CITY OF AUBURN NEW PARKING
69 NEW STALLS TOTAL ±
BUILDING B
40,000 S.F.
8 GRADE LEVEL OVERHEAD DOORS
BUILDING A
12 GRADE LEVEL OVERHEAD DOORS
MERROW STREET (PROPOSED EXTENSION)
(E) MERROW ST
SITE PLAN
SITE LEGEND:
BUILDING AREA
SITE CONCRETE
12' X 14' OVERHEAD GRADE LEVEL DOOR
EXISTING PROPERTY LINE
ABANDONED PROPERTY LINE
ASPHALT AREA
LANDSCAPE AREA
RETAINING WALL
NEW PARCEL LINE

Richard Walker
Principal Planner

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A SAFEbuilt COMPANY

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SHINGLE SPRINGS BAND
OF MIWOK INDIANS

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(Verona Tract), California
5168 Honpie Road
Placerville, CA 95667
Phone: 530-676-8010
shinglespringsrancheria.com

CULTURAL RESOURCES

December 17, 2024

Interwest

RE: Flexible Industrial and Commercial Space Facility Auburn

Dear Richard Walker,

Thank you for your letter dated December 2, 2024 in regard to the above mentioned project. Based on the information provided, the Shingle Springs Band Of Miwok Indians is not aware of any known cultural resources on this site. However, SSR would like to have continued consultation through updates, as the project progresses. This will foster a greater communication between the Tribe and your agency.

SSR would also like to request any and all completed record searches and or surveys that were done in or around the project area up to and including environmental, archaeological and cultural reports. If during the progress of the project new information or human remains are found, we would like to be able to go over our process with you to protect such important and sacred artifacts (especially near rivers and streams).

If such finds are made, please contact Kara Perry, Director of Site Protection, at (530) 488-4049 or kperry@ssband.org.
Thank you for providing us with this notice and opportunity to comment.

Sincerely,

Kara Perry
Director of Site Protection

Native American Heritage Commission
Native American Contact List
Placer County
11/20/2023

County	Auburn Industrial Center - Consulation	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Email Address	Cultural Affiliation	Counties	Last Updated
Placer	TCLM for C Prout. Respond to Colfax tribe email.	Colfax-Todds Valley Consolidated Tribe	N	Clyde Prout, Chairperson	P.O. Box 4884 Auburn, CA, 95604	(916) 577-3558	c.prout@colfaxrancheria.com	Maidu Miwok	Amador,El Dorado,Nevada,Placer,Sacramento,Yuba	3/28/2023
	TCW with Sally.	Colfax-Todds Valley Consolidated Tribe	N	CTVCT Preservation, Cultural Preservation Dept.	P.O. Box 4884 Auburn, CA, 95604	(530) 320-6032	ctvctpreservation@gmail.com	Maidu Miwok	Amador,El Dorado,Nevada,Placer,Sacramento,Yuba	3/28/2023
	TCLM for P Cubbler.	Colfax-Todds Valley Consolidated Tribe	N	Pamela Cubbler, Vice Chairperson	P.O. Box 4884 Auburn, CA, 95604	(530) 320-3943	pcubbler@colfaxrancheria.com	Maidu Miwok	Amador,El Dorado,Nevada,Placer,Sacramento,Yuba	3/28/2023
	TCLM for R Johnson.	Nevada City Rancheria Nisenan Tribe	N	Richard Johnson, Chairman	P.O. Box 2624 Nevada City, CA, 95959	(530) 570-0846	shelly@nevadacityrancheria.org	Nisenan	Butte,Nevada,Placer,Sierra,Sutter,Yuba	2/15/2022
		Shingle Springs Band of Miwok Indians	F	Krystal Moreno, TEK Program Manager			kmoreno@ssband.org	Maidu Miwok	Amador,El Dorado,Placer,Sacramento,Sutter,Yolo,Yuba	7/13/2023
	TCLM for D Murray.	Shingle Springs Band of Miwok Indians	F	Dustin Murray, Tribal Administrator	P.O Box 1340 Shingle Springs, CA, 95682	(530) 957-8925	dumurray@ssband.org	Maidu Miwok	Amador,El Dorado,Placer,Sacramento,Sutter,Yolo,Yuba	7/13/2023
	TCLM for R Cuellar.	Shingle Springs Band of Miwok Indians	F	Regina Cuellar, Chairperson	5281 Honpie Road Placerville, CA, 95667	(530) 698-1400	info@ssband.org	Maidu Miwok	Amador,El Dorado,Placer,Sacramento,Sutter,Yolo,Yuba	7/13/2023
	TCLM for M Tayaba.	Shingle Springs Band of Miwok Indians	F	Malissa Tayaba, Vice Chairperson; Director of TEK	P.O. Box 1340 Shingle Springs, CA, 95682	(916) 468-2730	matayaba@ssband.org	Maidu Miwok	Amador,El Dorado,Placer,Sacramento,Sutter,Yolo,Yuba	7/13/2023
	TCLM for J Sarmento.	Shingle Springs Band of Miwok Indians	F	James Sarmento, Executive Director of Cultural Resources	5281 Honpie Road Placerville, CA, 95667	(530) 698-1559	jsarmento@ssband.org	Maidu Miwok	Amador,El Dorado,Placer,Sacramento,Sutter,Yolo,Yuba	7/13/2023
	TCLM for C Perry.	Shingle Springs Band of Miwok Indians	F	Kara Perry, Director of Site Protection	5281 Honpie Road Placerville, CA, 95667	(530) 363-5123	kperry@ssband.org	Maidu Miwok	Amador,El Dorado,Placer,Sacramento,Sutter,Yolo,Yuba	7/13/2023
	TCLM for G Coney.	Tsi Akim Maidu	N	Grayson Coney, Cultural Director	P.O. Box 510 Browns Valley, CA, 95918	(530) 383-7234	tsi-akim-maidu@att.net	Maidu	Butte,El Dorado,Lassen,Nevada,Placer,Plumas,Sacramento,Sierra,Yuba	
		Tsi Akim Maidu	N	Don Ryberg, Chairperson	P.O. Box 510 Browns Valley, CA, 95918	(530) 383-7234	tsi-akim-maidu@att.net	Maidu	Butte,El Dorado,Lassen,Nevada,Placer,Plumas,Sacramento,Sierra,Yuba	
	TCLM for Joy Lee. 12/12/24 - tcw Travis who will deliver message to Anna Starkey.	United Auburn Indian Community of the Auburn Rancheria	F	Gene Whitehouse, Chairperson	10720 Indian Hill Road Auburn, CA, 95603	(530) 883-2390	bguth@auburnrancheria.com	Maidu Miwok	Amador,Butte,El Dorado,Nevada,Placer,Plumas,Sacramento,San Joaquin,Sierra,Solano,Sutter,Yolo,Yuba	
	TCLM for S Smokey.	Washoe Tribe of Nevada and California	F	Serrell Smokey, Chairperson	919 Highway 395 North Gardnerville, NV, 89410	(775) 265-8600	serrell.smokey@washoetribe.us	Washoe	Alpine,Amador,Butte,Calaveras,El Dorado,Lassen,Mono,Nevada,Placer,Plumas,Sierra,Tuolumne,Yuba	
		Washoe Tribe of Nevada and California	F	Darrel Cruz, Cultural Resources Department	919 Highway 395 North Gardnerville, NV, 89410	(775) 265-8600	darrel.cruz@washoetribe.us	Washoe	Alpine,Amador,Butte,Calaveras,El Dorado,Lassen,Mono,Nevada,Placer,Plumas,Sierra,Tuolumne,Yuba	
	TCLM for H Griffin.	Wilton Rancheria	F	Herbert Griffin, Executive Director of Cultural Preservation	9728 Kent Street Elk Grove, CA, 95624	(916) 683-6000	hgriffin@wiltonrancheria-nsn.gov	Miwok	Alameda,Alpine,Amador,Contra Costa,El Dorado,Mono,Nevada,Placer,Sacramento,San Joaquin,Solano,Stanislaus,Sutter,Yolo,Yuba	8/7/2023
		Wilton Rancheria	F	Cultural Preservation Department,	9728 Kent Street Elk Grove, CA, 95624	(916) 683-6000	cpd@wiltonrancheria-nsn.gov	Miwok	Alameda,Alpine,Amador,Contra Costa,El Dorado,Mono,Nevada,Placer,Sacramento,San Joaquin,Solano,Stanislaus,Sutter,Yolo,Yuba	8/7/2023
		Wilton Rancheria	F	Dahlton Brown, Executive Director of Administration	9728 Kent Street Elk Grove, CA, 95624	(916) 683-6000	dbrown@wiltonrancheria-nsn.gov	Miwok	Alameda,Alpine,Amador,Contra Costa,El Dorado,Mono,Nevada,Placer,Sacramento,San Joaquin,Solano,Stanislaus,Sutter,Yolo,Yuba	8/7/2023

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Sections 65352.3, 65352.4 et seq. and Public Resources Code Sections 21080.3.1 for the proposed Auburn Industrial Center project, Auburn, CA.

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NAHC Group: All