

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

BRENTWOOD ORCHARD GROVE NORTH SUBDIVISION

APRIL 2024

Prepared for:

City of Brentwood – City Hall
150 City Park Way
Brentwood, CA 94513
(925) 516-5400

Prepared by:

De Novo Planning Group
1020 Suncastr Lane, Suite 106
El Dorado Hills, CA 95762
(916) 949-3231

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



INITIAL STUDY AND
MITIGATED NEGATIVE DECLARATION

FOR THE

BRENTWOOD ORCHARD GROVE NORTH SUBDIVISION

APRIL 2024

Prepared for:

City of Brentwood – City Hall
150 City Park Way
Brentwood, CA 94513
(925) 516-5400

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 949-3231

Proposed Mitigated Negative Declaration for the Brentwood Orchard Grove North Subdivision

Lead Agency:

City of Brentwood – City Hall
150 City Park Way
Brentwood, CA 94513

Project Title: Brentwood Orchard Grove North Subdivision Project

Project Location: The Brentwood project site (project site) includes approximately 9.6-acres and is located at 1901 Lone Oak Road between Adams Lane and Lone Oak Road in the northeastern portion of Brentwood. The Project site is generally bound by Adams Lane to the west, Orchard Grove residential subdivision to the south, Lone Oak Road to the east, and vacant land, The Rock Church, and two single-family residences to the north. The Project site is identified by Contra Costa County as Assessor's Parcel Number (APN) 016-040-004.

Project Description: The proposed Project consists of the subdivision of a 9.6-acre site into 34 residential parcels, one onsite bioretention parcel, and a remainder parcel. The proposal results in a density of 3.54 units per gross acre, which would be above the defined General Plan R-VLD density of 1.1 to 3.0 units per gross acre. However, in accordance with the Government Code Section 65915, the Project is entitled to a density bonus if affordable housing units are included in the proposed project.

To satisfy the City's affordable housing ordinance and to qualify as a Density Bonus project under the City's ordinance and State Law, the applicant proposes to provide four (4) duet units. Two (2) of the duet units would be sold to households that qualify as Very Low Income, and two (2) of the duet units would be sold to households that qualify as Moderate Income. Under the State's Density Bonus Law, as codified in Government Code Section 65915, density bonuses are awarded on a sliding scale depending on what percentage of the base project's units are offered to varying levels of affordability. The base project density is 3 units/acre on 9.6 acres, or 29 units before applying any Density Bonus.

The proposed Project is requesting a Density Bonus of 17.2% to increase the base 29-unit Project by five units to a 34-unit project. To comply with Density Bonus law and the City's density bonus ordinance, the project is required to provide a minimum of 5% of the units as affordable units to Very Low Income qualified buyers before applying any Density Bonus. The two proposed Very Low Income units represent 6% of the total project ($2/34=5.88\%$ rounded up to 6%). The State's sliding scale allows for a 22.5% density bonus for projects that offer 6% Very Low Income units. As such, the proposed 34 units are within the allowances provided for under State Density Bonus Law.

The majority of lots on site would range between approximately 8,000 sf and 13,000 sf in size. The proposed market rate home designs will consist of four floor plans, two single story (2,836 sq. ft. and 3,048 sq. ft.) and two, two-story (3,518 sf and 3,988 sf +/-). The affordable homes are proposed as two floor plans constructed as a duet. The duet plans are 1,976 sq. ft. and 2,073 sq. ft. and both are designed as 4-bedroom 3-bathroom two story homes. The identical architecture has recently been approved for use on the applicant's Orchard Grove project adjacent and to the south of this parcel (Tract 9532).

The southeast corner of the property contains the family home of the property owner. The Project as proposed will preserve the existing single family home in its current location as a 14,500 sq. ft. lot with perimeter conditions that will be negotiated with the property owner. A barn structure also exists behind the existing single family home and will be removed as part of the project improvements.

The proposed new public street internal to the Project will be a loop road that takes access from two locations off the internal street for Tract 9532, Orchard Grove, and will share the two existing access points to Adams Lane. Pursuant to the requirements of the City's engineering department, Adams Lane will be widened along the project frontage in a manner to be determined with City of Brentwood engineering and traffic divisions. The Project will require a maintenance access connection to Lone Oak for the City to maintain the proposed detention basin.

The proposed Project would involve the construction of the necessary infrastructure to serve the proposed neighborhood and would include plans to connect to existing City infrastructure to provide water and sewer, to the site. The Project includes installation of 8-inch water and sanitary sewer lines and 18-inch and 24-inch storm drain lines within the internal street rights-of-way (ROW). Storm water quality for the site will be achieved with a bioretention basin constructed at or near the north east corner of the site. Storm drainage is proposed to then be conveyed through a new 36-inch storm drain pipe on Lone Oak, connecting to an existing 42-inch storm main and outfall on Marsh Creek. The bioretention basin parcel and adjacent landscape areas with storm drain pipe will be

dedicated in fee to the City of Brentwood and a Landscape and Lighting Assessment District will be established to provide funding for the maintenance of the basins and surrounding landscape. This same assessment district will provide funding for maintenance of the frontage improvements along Adams Lane.

Various storm drainage supporting structures would be located throughout the Project site directing the storm drainage flows into the bioretention area and storm drain inlets.

Findings:

In accordance with the California Environmental Quality Act, the City of Brentwood has prepared an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. The Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of City of Brentwood staff. On the basis of the Initial Study, the City of Brentwood hereby finds:

Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the project has incorporated specific provisions to reduce impacts to a less than significant level and/or the mitigation measures described herein have been added to the project. A Mitigated Negative Declaration has thus been prepared.

The Initial Study, which provides the basis and reasons for this determination, is attached and/or referenced herein and is hereby made a part of this document.

Signature

Date

Proposed Mitigation Measures:

The following Mitigation Measures are extracted from the Initial Study. These measures are designed to avoid or minimize potentially significant impacts, and thereby reduce them to an insignificant level. A Mitigation Monitoring and Reporting Program (MMRP) is an integral part of project implementation to ensure that mitigation is properly implemented by the City and the implementing agencies. The MMRP will describe actions required to implement the appropriate mitigation for each CEQA category including identifying the responsible agency, program timing, and program monitoring requirements. Based on the analysis and conclusions of the Initial Study, the impacts of proposed project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented below.

AESTHETICS

Mitigation Measure AES-1: *In conjunction with development of the proposed project, the developer shall shield all on-site lighting so that nighttime lighting is directed within the project site and does not illuminate adjacent properties. A detailed lighting plan shall be submitted for the review and approval by the Community Development Department and the Engineering Department in conjunction with the project improvement plans. The lighting plan shall indicate the locations and design of the shielded light fixtures.*

AGRICULTURAL RESOURCES

Mitigation Measure AG-1: *Pursuant to City of Brentwood Municipal Section 17.730.030, the Project applicant must preserve agricultural lands by paying an in-lieu fee established by City Council resolution. The fee may be adjusted annually but may not be increased by more than ten percent during any twelve-month period.*

AIR QUALITY

Mitigation Measure AIR-1: *Prior to the issuance of a grading permit, the applicant/developer shall prepare an Erosion Prevention and Dust Control Plan. The plan shall be followed by the project's grading contractor and submitted to the Engineering Department, which will be responsible for field verification of the plan during construction.*

The plan shall comply with the City's grading ordinance and shall include the following control measures and other measures as determined by the Engineering Department to be necessary for the proposed project:

- *Cover all trucks hauling construction and demolition debris from the site;*
- *Water all exposed or disturbed soil surfaces at least twice daily;*
- *Use watering to control dust generation during demolition of structures or break-up of pavement;*
- *Pave, apply water three time daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas;*
- *Sweep daily (with water sweepers) all paved parking areas and staging areas;*
- *Provide daily clean-up of mud and dirt carried onto paved streets from the site;*
- *Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);*
- *Limit traffic speeds on unpaved roads to 15 mph;*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways;*
- *Replant vegetation in disturbed areas as quickly as possible;*
- *Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;*
- *Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) or construction areas;*
- *Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph;*
- *Limit the area subject to excavation, grading, and other construction activity at any one time;*
- *Unnecessary idling of construction equipment shall be avoided;*
- *Equipment engines shall be maintained in proper working condition per manufacturers' specifications;*
- *During periods of heavier air pollution (May to October), the construction period shall be lengthened to minimize the amount of equipment operating at one time;*
- *Where feasible, the construction equipment shall use cleaner fuels, add-on control devices and conversion to cleaner engines.*

Mitigation Measure AIR-2: During periods of high dust in the grading phase, crews must use National Institute for Occupational Safety and Health (NIOSH) approved N95 masks or better or other more stringent measures in accordance with the California Division of Occupational Safety and Health regulation.

Mitigation Measure AIR-3: The operator cab of area grading and construction equipment must be enclosed and air-conditioned.

BIOLOGICAL RESOURCES

Mitigation Measure BIO-1: Prior to any ground disturbance related to activities covered under the ECCCHCP, the project applicant will need to comply with the required species-specific avoidance and minimization requirements for Western Burrowing Owl, Swainson's Hawk, California Red-Legged, and Golden Eagle, as outlined in Section IV.2, Required Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring, of the Project's Planning Survey Report (see Appendix A of this Initial Study).

Mitigation Measure BIO-2: Prior to the issuance of grading or construction permits for the project site, the developer shall submit an application and obtain coverage under the ECCCHCP. This will include payment of the applicable ECCCHCP per-acre fee in effect for Zone I in compliance with Section 16.168.070 of the Brentwood Municipal Code. The developer shall receive a Certificate of Coverage from the City of Brentwood and submit a construction monitoring report to the ECCC Habitat Conservancy for review and approval. The Certificate of Coverage will confirm the fee has been received, that other ECCC HCP/NCCP requirements have been met or will be performed, and will authorize take of covered species.

CULTURAL RESOURCES

Mitigation Measure CUL-1: Prior to grading permit issuance, the developer shall submit plans to the Community Development Department for review and approval which indicate (via notation on the improvement plans) that if historic and/or cultural resources are encountered during site grading or other site work, all such work shall be halted immediately within 25 feet of the area of discovery and the developer shall immediately notify the Community Development Department of the discovery. In such case, the developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.

Mitigation Measure CUL-2: Pursuant to State Health and Safety Code §7050.5 (c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for reinterment of the human remains and any associated artifacts. Additional work is not to take place within the immediate vicinity of the find until the identified appropriate actions have been implemented.

GEOLOGY AND SOILS

Mitigation Measure GEO-1: All project buildings shall be designed in conformance with the current edition of the California Building Code (CBC), as adopted and amended by the City of Brentwood.

Mitigation Measure GEO-2: Prior to final design approval and issuance of building permits for each phase of the project, the project applicant shall incorporate the recommendations included in the Geotechnical Exploration prepared by ENGeo (dated June 5, 2023) into the project design and specifications related to the following topics:

- Earthwork
 - General Site Clearing
 - Undocumented Fill Removal
 - Over-Optimum Soil Moisture Conditions
 - Acceptable Fill
 - Engineered Fill Compaction
 - Slopes
 - Site Drainage
- Foundation Design

- *Post-Tensioned Mat Foundations*
- *Exterior Flatwork*
- *Trench Backfill*
- *Soundwall and Retaining Walls*
 - *Lateral Soil Pressures*
 - *Retaining Wall Drainage*
 - *Backfill*
 - *Foundations*
- *Pavement Design*
 - *Flexible Pavements*
 - *Subgrade and Aggregate Base Compaction*

Mitigation Measure GEO-3: All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design.

Mitigation Measure GEO-4: Prior to grading permit issuance, the applicant shall submit a final grading plan to the City Engineer for review and approval. If the grading plan differs significantly from the proposed grading illustrated on the approved project plans, plans that are consistent with the new revised grading plan shall be provided for review and approval by the City Engineer.

Mitigation Measure GEO-5: Any applicant for a grading permit shall submit an erosion control plan to the City Engineer for review and approval. The plan shall identify protective measures to be taken during construction, supplemental measures to be taken during the rainy season, the sequenced timing of grading and construction, and subsequent revegetation and landscaping work to ensure water quality in creeks and tributaries in the General Plan Area is not degraded from its present level. All protective measures shall be shown on the grading plans and specify the entity responsible for completing and/or monitoring the measure and include the circumstances and/or timing for implementation.

Mitigation Measure GEO-6: Grading, soil disturbance, or compaction shall not occur during periods of rain or on ground that contains freestanding water. Soil that has been soaked and wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limit approved by a Soils Engineer. Approval by a Soils Engineer shall be obtained prior to the continuance of grading operations. Confirmation of this approval shall be provided to the Engineering Department prior to commencement of grading.

Mitigation Measure GEO-7: Should construction or grading activities result in the discovery of unique paleontological resources, all work within 100 feet of the discovery shall cease. The Community Development Director shall be notified, and the resources shall be examined by a qualified archaeologist, paleontologist, or historian, at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist, paleontologist, or historian shall submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure HAZ-1: Prior to demolition activities, the project applicant shall incorporate the recommendations included in the Phase I Environmental Site Assessment prepared by ENGEO (dated June 5, 2023) be performed by a qualified geologist.

HYDROLOGY AND WATER QUALITY

Mitigation Measure HYD-1: Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges consistent with the requirements established in 15.52.60(F): Erosion and Sediment Control of the City's Municipal Code. The SWPPP shall be submitted to the City

Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.

Mitigation Measure HYD-2: *Prior to the completion of construction, the applicant shall prepare and submit, for the City's review, an acceptable Stormwater Control Operation and Maintenance Plan. In addition, prior to the sale, transfer, or permanent occupancy of the site the applicant shall be responsible for paying for the long-term maintenance of treatment facilities, and executing a Stormwater Management Facilities Operation and Maintenance Agreement and Right of Entry in the form provided by the City of Brentwood. The applicant shall accept the responsibility for maintenance of stormwater management facilities until such responsibility is transferred to another entity.*

The applicant shall submit, with the application of building permits, a draft Stormwater Facilities and Maintenance Plan, including detailed maintenance requirements and a maintenance schedule for the review and approval by the City Engineer. Typical routine maintenance consists of the following:

- *Limit the use of fertilizers and/or pesticides. Mosquito larvicides shall be applied only when absolutely necessary.*
- *Replace and amend plants and soils as necessary to ensure the planters are effective and attractive. Plants must remain healthy and trimmed if overgrown. Soils must be maintained to efficiently filter the storm water.*
- *Visually inspect for ponding water to ensure that filtration is occurring.*
- *After all major storm events, remove bubble-up risers for obstructions and remove if necessary.*
- *Continue general landscape maintenance, including pruning and cleanup throughout the year.*
- *Irrigate throughout the dry season. Irrigation shall be provided with sufficient quantity and frequency to allow plants to thrive.*
- *Excavate, clean and or replace filter media (sand, gravel, topsoil) to ensure adequate infiltration rate (annually or as needed).*

Mitigation Measure HYD-3: *Design of both the on-site drainage facilities shall meet with the approval of both the City Engineer and the Contra Costa County Flood Control and Water Conservation District prior to the issuance of grading permits.*

Mitigation Measure HYD-4: *Contra Costa County Flood Control and Water Conservation District drainage fees for the Drainage Area shall be paid prior to issuance of grading permits to the satisfaction of the City Engineer.*

Mitigation Measure HYD-5: *The applicant/developer shall ensure that the project site shall drain into a street, public drain, or approved private drain, in such a manner that un-drained depressions shall not occur. Satisfaction of this measure shall be subject to the approval of the City Engineer.*

Mitigation Measure HYD-6: *The construction plans shall indicate roof drains emptying into a pipe leading to the project bioswale areas for the review and approval of the City Engineer prior to the issuance of building permits.*

Mitigation Measure HYD-7: *The improvement plans shall indicate concentrated drainage flows not crossing sidewalks or driveways for the review and approval of the City Engineer prior to the issuance of grading permits.*

NOISE

Mitigation Measure NOI-1: *Prior to issuance of buildings permits for any residential unit, the construction drawings shall include a suitable form of forced-air mechanical ventilation for each unit, as determined by the Brentwood Building Official, so that windows could be kept closed at the occupant's discretion to control interior noise and achieve the City's interior 45 dBA Ldn noise standard.*

Mitigation Measure NOI-2: *Prior to issuance of building permits, a qualified acoustical consultant shall review the final set of construction documents to calculate expected interior noise levels as required by the City of Brentwood to confirm that the design results in interior noise levels reduced to 45 dBA CNEL or lower. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City along with the building plans and approved prior to issuance of a building permit. Potential measures could include, but would not be*

limited to, incorporation of noise insulating building materials such as windows or exterior doors with STC ratings of up to STC 28. The exact window and door sound ratings would depend on the final design of the buildings including the size of windows/doors and composition of exterior walls.

Mitigation Measure NOI-3: Prior to approval of project improvement plans, the improvement plans for the proposed project shall show a perimeter wall in the locations recommended by the Environmental Noise Study prepared by Salter, Inc. (dated November 3, 2023), per the approval of the City Engineer. Other types of barrier may be employed but shall be reviewed by an acoustical engineer prior to being constructed to ensure compliance with General Plan noise level requirements.

Mitigation Measure NOI-4: Construction activities shall be limited to the hours set forth below:

Monday-Friday 7:00 AM to 6:00 PM

Saturday 8:00 AM to 5:00 PM

Construction shall be prohibited on Sundays and City holidays. These criteria shall be included in the grading plan submitted by the applicant/developer for review and approval of the Community Development Director prior to issuance of grading permits. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the City Engineer.

Mitigation Measure NOI-5: The project contractor shall ensure that the following construction noise BMPs are met on-site during all phases of construction:

- All equipment driven by internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.
- Unnecessary idling of internal combustion engines shall be prohibited.
- Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.
- Construction site and access road speed limits shall be established and enforced during the construction period.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- Project-related public address or music systems shall not be audible at any adjacent receptor.
- Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.
- The construction contractor shall designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

Construction noise BMPs shall be included in the grading plan submitted by the developer for review and approval by the Community Development Director prior to grading permit issuance.

PUBLIC SERVICES

Mitigation Measure PUB-1: *Prior to building permit issuance for any residential development, the developer shall submit to the Community Development Department proof that the appropriate school mitigation fees have been paid pursuant to Proposition 1A/SB 50.*

Mitigation Measure PUB-2: *Prior to building permit issuance, the project applicant shall pay the proportional required park in-lieu fees as determined by the Parks and Recreation Department and the Community Development Department, in accordance with the City's Development Fee Program and Brentwood Municipal Code Section 16.150.020.B.*

TRIBAL CULTURAL RESOURCES

Mitigation Measure TRI-1 *If cultural resources are discovered during project-related construction activities, all ground disturbances within a minimum of 50 feet of the find shall be halted until a qualified professional archaeologist can evaluate the discovery. The archaeologist shall examine the resources, assess their significance, and recommend appropriate procedures to the lead agency to either further investigate or mitigate adverse impacts. If the find is determined by the lead agency in consultation with the Native American tribe traditionally and culturally affiliated with the geographic area of the project site to be a tribal cultural resource and the discovered archaeological resource cannot be avoided, then applicable mitigation measures for the resource shall be discussed with the geographically affiliated tribe. Applicable mitigation measures that also take into account the cultural values and meaning of the discovered tribal cultural resource, including confidentiality if requested by the tribe, shall be completed (e.g., preservation in place, data recovery program pursuant to PRC §21083.2[i]). During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site.*

TABLE OF CONTENTS

INITIAL STUDY	3
Project Title.....	3
Purpose of the Initial Study	3
Project Location and Setting	4
Project Description	5
Environmental Factors Potentially Affected:.....	16
Determination:.....	16
Evaluation of Environmental Impacts:.....	16
Environmental Checklist:	19
I. AESTHETICS	19
II. AGRICULTURE AND FORESTRY RESOURCES	22
III. AIR QUALITY.....	25
IV. BIOLOGICAL RESOURCES	33
V. CULTURAL RESOURCES	40
VI. ENERGY	42
VII. GEOLOGY AND SOILS	47
VIII. GREENHOUSE GAS EMISSIONS	53
IX. HAZARDS AND HAZARDOUS MATERIALS	544
X. HYDROLOGY AND WATER QUALITY	548
XI. LAND USE AND PLANNING	64
XII. MINERAL RESOURCES	65
XIII. NOISE.....	66
XIV. POPULATION AND HOUSING.....	75
XV. PUBLIC SERVICES	76
XVI. RECREATION	81
XVII. TRANSPORTATION	82
XVIII. TRIBAL CULTURAL RESOURCES.....	87
XIX. UTILITIES AND SERVICE SYSTEMS.....	89
XX. WILDFIRE	93
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.....	95
References	97

This page left intentionally blank

INITIAL STUDY

PROJECT TITLE

Brentwood Orchard Grove North Subdivision Project

LEAD AGENCY NAME AND ADDRESS

City of Brentwood
150 City Park Way
Brentwood, CA 94513

CONTACT PERSON AND PHONE NUMBER

Sarah Yuwiler, Associate Planner
City of Brentwood
Community Development Department

(925) 516-5136 PROJECT SPONSOR'S NAME AND ADDRESS

Shea Homes, Limited Partnership
c/o David Best
2630 Center Drive
Livermore, CA 94551
(925) 245-3631

PURPOSE OF THE INITIAL STUDY

An Initial Study (IS) is a preliminary analysis, prepared pursuant to the California Environmental Quality Act (CEQA), to determine the potential environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project may have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). It also functions as an evidentiary document containing information, which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a “Less Than Significant” or “No Impact” level. Under CEQA, if there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA regulations (known as the “CEQA Guidelines”) Section 15063, to determine if the proposed Orchard Grove North Subdivision (Project) may have a significant effect upon the environment. Based upon the findings and mitigation measures contained within this report, a Mitigated Negative Declaration (MND) will be prepared.

BACKGROUND

On July 22, 2014, the City of Brentwood City Council adopted a comprehensive General Plan Update, which was last updated in 1993 (a partial update involving the Growth Management, Land Use, and Circulation Elements was completed in 2001). An Environmental Impact Report (EIR) prepared for the General Plan Update, addressed the potential impacts associated with full build-out of the General Plan Land Use Diagram. The 2014 Brentwood General Plan Update EIR was certified by the Brentwood City Council on July 22, 2014. The General Plan Update Land Use Map designates the Project site as Residential Very Low Density (R-VLD). Residential Very Low Density land uses are required to have a density of between 1.1 and 3.0 dwelling units per gross acre, with a mid-range of 2.0 units per gross acre. In accordance with Sections 15152, 15168 and 15183 of the CEQA Guidelines and Section 21083.3(b) of the Public Resources Code, this IS will tier from the previously certified EIR (SCH# 2014022058) prepared for the General Plan Update. The General Plan EIR is available for review on the City's website at <https://www.brentwoodca.gov/gov/cd/planning/ceqa.asp>. The zoning designation of the Project site is Single Family Residential Estate (R-1-E).

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The approximately 9.6-acre Project site is located at 1901 Lone Oak Road between Adams Lane and Lone Oak Road in the northeastern portion of Brentwood. The Project site is generally bound by Adams Lane to the west, Orchard Grove residential subdivision to the south, Lone Oak Road to the east, and vacant land, The Rock Church, and two single-family residences to the north. The Project site is identified by Contra Costa County as Assessor's Parcel Number (APN) 016-040-004. The Project's location is shown in Figure 1.

EXISTING SITE USES

With exception of an existing single family residence and barn structure, the Project site is primarily an undeveloped, open grassland field that previously contained agricultural uses. The Project site appears to be periodically mowed and/or disked, consisting mostly of disturbed ruderal grassland vegetation. Figure 2 displays the aerial view of the Project site and surrounding area.

SURROUNDING LAND USES

The General Plan designates lands adjacent to the Project site as R-VLD and Semi-Public Facility (SPF) to the north, R-VLD to the east and south, and Park (P) and School (SCH) to the southwest and west across Adams Lane, respectively. Current uses within these areas include the Marsh Creek Elementary School and Blue Goose Park to the west, The Rock Church and vacant land to the north, and single family residential to the east and south.

GENERAL PLAN DESIGNATIONS

The Project site is currently designated Residential Very Low Density (R-VLD) by the City of Brentwood General Plan Land Use Map. The R-VLD designation accommodates fairly large lots for single family residences in an identifiable, suburban residential neighborhood, or cluster-style development designed with open space and other amenities. Neighborhoods with either

development type will be part of the Brentwood urban area to be provided with urban public facilities and services. The permitted density range is 1.1 to 3.0 units per gross acre, with a midrange of 2.0 units per gross acre.

ZONING DESIGNATIONS

The Project site is currently zoned (R-1-E) Single-Family Residential. As stated in Chapter 17.130 of the City's Municipal Code, the R-1-E zone allows for single family residential type uses with a minimum lot area of 14,500 square feet. The Project applicant has requested a density bonus, in order to provide a variety of lot sizes on the Project site.

PROJECT DESCRIPTION

The proposed Project consists of the subdivision of a 9.6-acre site into 34 residential parcels, one onsite bioretention parcel, and a designated 0.4-acre remainder parcel. The proposal results in a density of 3.54 units per gross acre, which would be above the defined General Plan R-VLD density of 1.1 to 3.0 units per gross acre. However, in accordance with the Government Code Section 65915, the Project is entitled to a density bonus if sufficient affordable housing units are included in the proposed project.

To satisfy the City's affordable housing ordinance and to qualify as a Density Bonus project under the City's ordinance and State Law, the applicant proposes for provide four (4) duet units. Two (2) of the duet units would be sold to households that qualify as Very Low Income, and two (2) of the duet units would be sold to households that qualify as Moderate Income. Under the State's Density Bonus Law, as codified in Government Code Section 65915, density bonuses are awarded on a sliding scale depending on what percentage of the base project's units are offered to varying levels of affordability. The base project density is 3 units/acre on 9.6 acres, or 29 units before applying any Density Bonus.

The proposed Project is requesting a Density Bonus of 17.2% to increase the base 29-unit Project by five units to a 34-unit project. To comply with Density Bonus law and the City's density bonus ordinance, the project is required to provide a minimum of 5% of the units as affordable units to Very Low Income qualified buyers before applying any Density Bonus. The two proposed Very Low Income units represents 6% of the total project ($2/34=5.88\%$ rounded up to 6%). The State's sliding scale allows for a 22.5% density bonus for projects that offer 6% Very Low Income units. As such, the proposed 34 units are within the allowances provided for under State Density Bonus Law.

The majority of lots on site would range between approximately 8,000 sf and 13,000 sf in size. The proposed market rate home designs will consist of four floor plans, two single story (2,836 sq. ft. and 3,048 sq. ft.) and two, two-story (3,518 sf and 3,988 sf +/-). The affordable homes are proposed as two floor plans constructed as a duet. The duet plans are 1,976 sq. ft. and 2,073 sq. ft., and both are designed as 4-bedroom, 3-bathroom two story homes. The identical architecture has recently been approved for use on the applicant's Orchard Grove project adjacent and to the south of this parcel (Tract 9532).

The southeast corner of the property contains the family home of the property owner. The Project as proposed will preserve the existing single family home in its current location as a 14,500 sq. ft. lot with perimeter conditions that will be negotiated with the property owner. A barn structure also exists behind the existing single family home and will be removed as part of the project improvements.

The proposed new public street internal to the Project will be a loop road that takes access from two locations off the internal street for Tract 9532, Orchard Grove, and will share the two existing access points to Adams Lane. Pursuant to the requirements of the City's engineering department, Adams Lane will be widened along the project frontage in a manner to be determined with City of Brentwood engineering and traffic divisions. The Project will require a maintenance access connection to Lone Oak for the City to maintain the proposed detention basin. The proposed site plan layout is shown in Figure 3.

The proposed Project would involve the construction of the necessary infrastructure to serve the proposed neighborhood and would include plans to connect to existing City infrastructure to provide water and sewer, to the site. The Project includes installation of 8-inch water and sanitary sewer lines and 18-inch and 24-inch storm drain lines within the internal street rights-of-way (ROW). Storm water quality for the site will be achieved with a bioretention basin constructed at or near the north east corner of the site. Storm drainage is proposed to then be conveyed through a new 36-inch storm drain pipe on Lone Oak, connecting to an existing 42-inch storm main and outfall on Marsh Creek. The bioretention basin parcel and adjacent landscape areas with storm drain pipe will be dedicated in fee to the City of Brentwood and a Landscape and Lighting Assessment District will be established to provide funding for the maintenance of the basins and surrounding landscape. This same assessment district will provide funding for maintenance of the frontage improvements along Adams Lane.

Various storm drainage supporting structures would be located throughout the Project site directing the storm drainage flows into the bioretention area and storm drain inlets.

DENSITY BONUS

As described above, the proposed Project requests a Density Bonus pursuant to the City's Density Bonus program, Chapter 17.720 Brentwood Municipal Code, and state law. To satisfy the affordable housing requirements, the proposed Project will provide four affordable duet units, each on lots that are at a minimum of 40' wide by 60' deep in size. In total there are proposed to be 34 homes in the Project over 9.6 acres, which calculates to 3.54 units per acre and is consistent with the currently designated General Plan R-VLD maximum density, plus 5% density bonus as prescribed by law and ordinance. The proposed Density Bonus Project would be eligible for a density bonus of up to 22.5% of the base number of units, concessions and waivers of otherwise applicable development standards and regulations, and reduced parking ratios, all in accordance with the State Density Bonus statute (Government Code section 65915).

Requested Waivers

The proposed Project is requesting the following waivers or reductions of development standards that would otherwise physically preclude construction of the proposed density bonus project:

- a) Minimum lot sizes for the market rate units shall be reduced to 8,000 sq. ft. from 10,000+ sq. ft.
- b) Minimum lot dimensions for the market rate units shall be reduced from 100 feet wide to 80 feet wide as measured at the rear lot line, and 100 feet deep
- c) Minimum lot dimensions for duet units shall be 40' wide as measured at the rear lot line, by 75' deep.
- d) Minimum front yard setbacks shall be 20' to garage and 15' to living space
- e) Minimum side yard setback shall be 7' with a 20' aggregate on the market rate units
- f) Minimum side yard setbacks shall be zero on the lot line defining the common wall between duets.
- g) Minimum rear yard setback shall be 15'.

Requested Concessions

The proposed Project is requesting the following concession:

- a) General Plan Transition Policy (LU-2a) requiring a minimum 20,000 square foot lot sizes shall not apply on the northern edge of the proposed development.

Reduced Parking Ratios

The applicant is not requesting the reduction of any parking standards, requirements, or city parking policies.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Brentwood is the Lead Agency for the proposed Project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050.

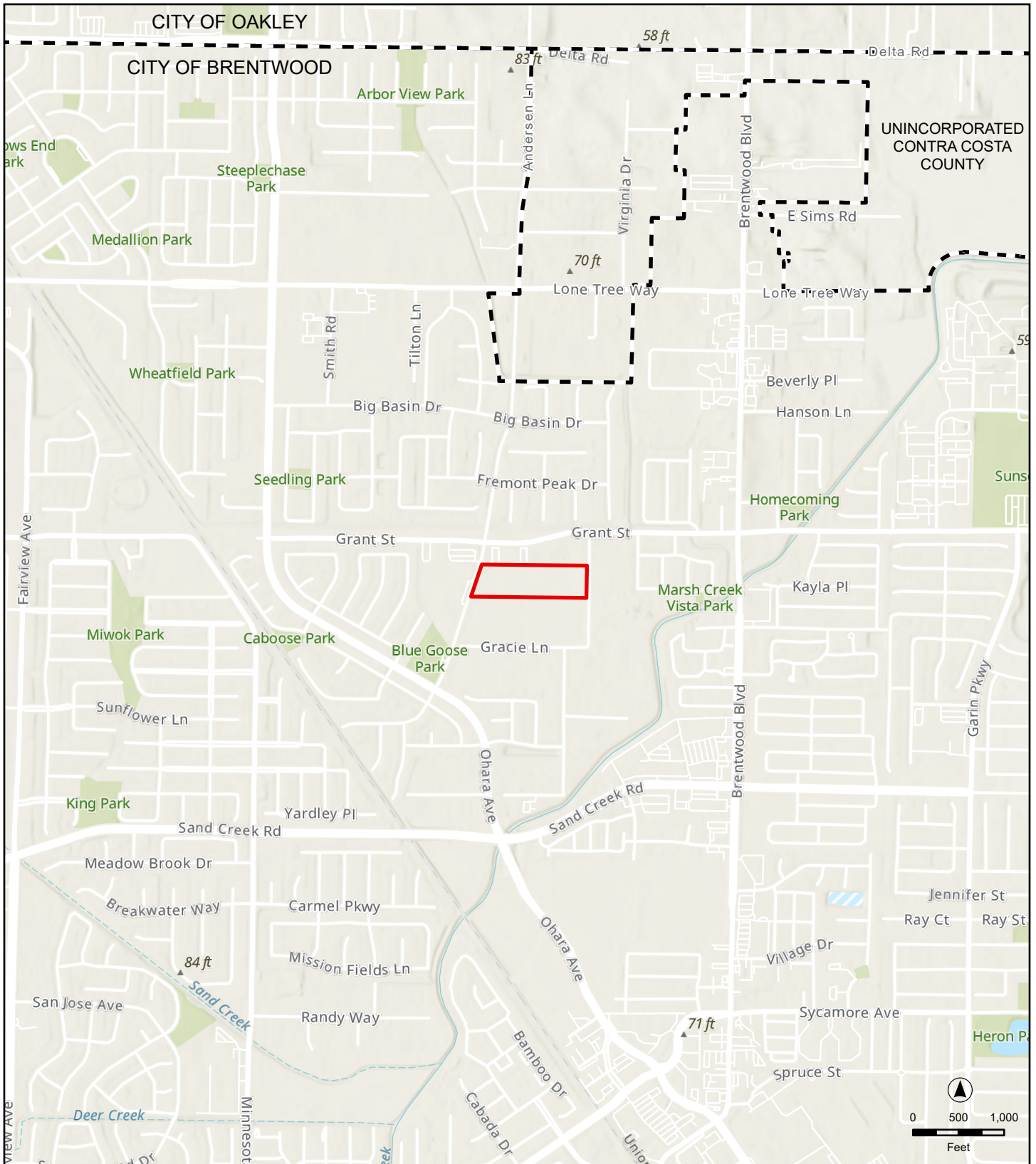
The applicant is requesting the following:

- Adoption of the Mitigated Negative Declaration (MND) and adoption of the Mitigation Monitoring and Reporting Program (MMRP)
- Approval of a Density Bonus to allow 3.54 units per acre density within the Residential Very Low Density (R-VLD) land use designation.

- Approval of Tentative Subdivision Map 9649 to subdivide approximately 9.6 acres into 34 single-family detached residential parcels, one bioretention parcel, and one remainder parcel.
- Approval of an encroachment permit to construct offsite improvements to widen Adams Lane.
- Design Review of the proposed residential structures.

The following agencies may be required to issue permits or approve certain aspects of the proposed Project:

- Bay Area Air Quality Management District (BAAQMD) - Approval of construction-related air quality permits.
- East Contra Costa County Habitat Conservancy (ECCCHP) - Review of project application to determine consistency with the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (ECCCHCP/NCCP).



Legend

- Project Location
- City Boundary

BRENTWOOD ORCHARD GROVE NORTH

Figure 1. Project Location Vicinity Map

This page left intentionally blank



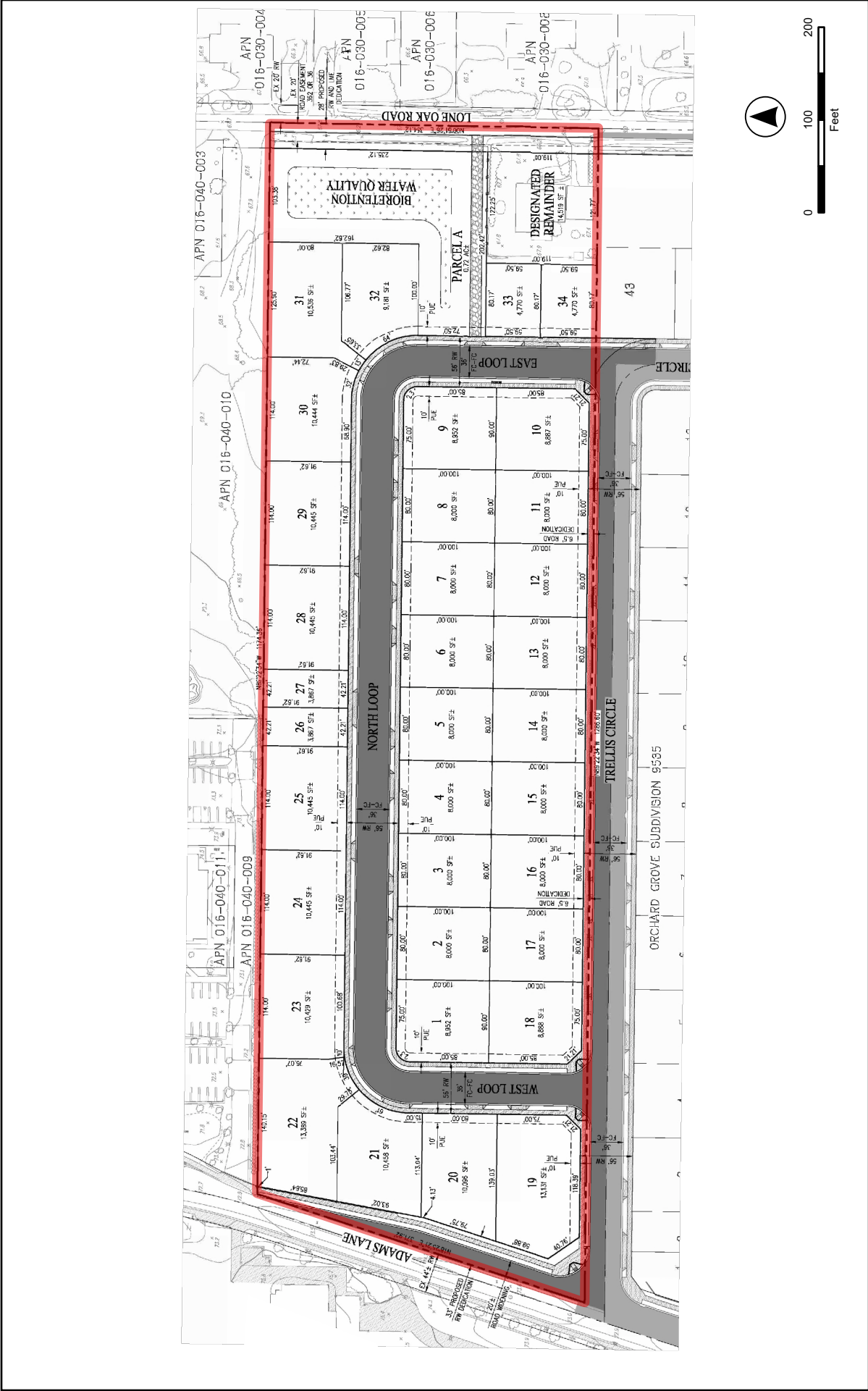
Legend

 Project Location

BRENTWOOD ORCHARD GROVE NORTH

Figure 2. Aerial View of Project Site

This page left intentionally blank



BRENTWOOD ORCHARD GROVE NORTH

Figure 3. Site Plan

Legend

- Project Location

This page left intentionally blank

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION:

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

EVALUATION INSTRUCTIONS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA provisions and processes, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where the analyses are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a

- previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
 - 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
 - 9) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance

EVALUATION OF ENVIRONMENTAL IMPACTS:

In each area of potential impact listed in this section, there are one or more questions that assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one that is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the Project.

This page left intentionally blank.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 18 environmental topic areas.

I. AESTHETICS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. The City of Brentwood is located in the eastern valley area of Contra Costa County, immediately east of the Diablo Range, which includes Mount Diablo. The City of Brentwood has recognized views of Mount Diablo as an important visual resource to be preserved (see Policy COS 7-3 of the Conservation and Open Space Element of the Brentwood General Plan).

According to the 2014 Brentwood General Plan Update EIR and the California Scenic Highway Mapping System, administered by Caltrans, the City of Brentwood does not contain officially designated State Scenic Highways¹. However, it should be noted that the segment of State Route 4 (SR 4) located approximately 2 miles to the west of the Project site is listed as an Eligible State Scenic Highway, but has not yet been officially designated. The Project would not damage any scenic resources, such as trees, rock outcroppings, or historic buildings, within a State Scenic Highway, and is not a visible feature from the SR 4 corridor. Additionally, the Project site is not designated as a scenic vista. The 2014 Brentwood General Plan Update EIR identifies SR 4 as a local scenic route due to the distant panoramic vistas of the Diablo Range and Mount Diablo in particular. Mount Diablo is located to the west of SR 4 and the proposed Project is located to the

¹ City of Brentwood. 2014 Brentwood General Plan Update EIR [pg. 3.1-5]. July 22, 2014.

east of SR 4, and close to the northern edge of the city. As a result, the Project structures would not impede views of Mount Diablo currently afforded to travelers along SR 4, or impede views of Mount Diablo from residents residing in the City of Brentwood.

The proposed Project would not remove trees, rock outcroppings, and historic buildings within a state scenic highway, and is not designated as a scenic vista. Therefore, this is considered a **less than significant** impact.

Response c): Less than Significant. While the Project site is current vacant, with the exception of a single family existing home within the designated remainder parcel, it is located within an urbanized area. The development of the site would change the existing visual setting from vacant land, to a suburban-scale residential setting consisting of 34 residential units. The Project includes a 0.72-acre bio retention parcel (Parcel A) in the northeast corner of the Project site to provide buffering between the proposed Project and the existing ranchette homes to the east. This configuration will provide a visual buffer to the reduce impacts of the development on the existing residents and protect the integrity of the surrounding land use patterns. In addition, the proposed Project is consistent with (R-VLD) land uses identified in the City’s General Plan and General Plan Land Use Map, with the density bonus as prescribed by state law and ordinance. Implementation of the proposed Project would alter the visual appearance on the Project site through the removal of a limited number of trees and subsequent housing development. The proposed Project site is identified for urban land uses in the Brentwood General Plan. The proposed Project is consistent with the overriding considerations that were adopted for the General Plan. As such, implementation of the proposed Project would not create new impacts over and above those identified in the General Plan Final EIR nor significantly change previously identified impacts, even at the additional density proposed.

The final project design would be approved by the City through its design review process. Through this process, the Planning Commission would ensure the design meets the criteria set forth in Municipal Code Section 17.820.007 and the City’s Interim Objective Design Standards. As a result, development of the Project site would result in a **less than significant** impact with respect to substantially degrading the existing visual character or quality of the site and its surroundings.

Response d): Less than Significant with Mitigation. The Project site presently contains only a single family residence and barn structure with associated light sources. As a result, limited light or glare is currently emitted from the Project site. The change from a largely vacant property to a residential development including 34 residences and associated street lighting would generate new permanent sources of light and glare. The Project site is adjacent to single family residences to the east and south, a school to the west, and a church to the north. The structures located in the immediate vicinity of the site would be considered sensitive receptors, which could be adversely affected by additional sources of light and glare. However, the Project would not include reflective building materials, and vehicle headlight glare would not be exacerbated, given the existing level of traffic on Adams Lane and Lone Tree Way, and landscaping and fencing that would contain project vehicle light sources. However, street and safety lighting located along the

project streets may be visible from surrounding locations. Therefore, the increase in light produced by the proposed Project would be considered potentially significant.

Implementation of Mitigation Measure AES-1 would reduce the potential impacts related to light and glare to **less than significant**.

Mitigation Measure(s)

Mitigation Measure AES-1: *In conjunction with development of the proposed project, the developer shall shield all on-site lighting so that nighttime lighting is directed within the project site and does not illuminate adjacent properties. A detailed lighting plan shall be submitted for the review and approval by the Community Development Department and the Engineering Department in conjunction with the project improvement plans. The lighting plan shall indicate the locations and design of the shielded light fixtures.*

II. AGRICULTURE AND FOREST RESOURCES: WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 non-agricultural use?		X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), or timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production as defined by Government Code section 51104(g)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant with Mitigation. The 9.6-acre development plan area contained past agricultural operations that have since ceased.

Figure 3.2-1 of the City of Brentwood General Plan EIR identifies the Project site, as mapped by the USDA, as “Prime Farmland.” Prime Farmland is defined by the California Department of Conservation Farmland Mapping and Monitoring Program as: *“land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks.”* Additionally, the soils within the Project site are Capay Clay (0 to 3 percent slopes). According to the “Summary by Map Unit” included in the Contra Costa County Soil Survey, Capay Clay is a Class II soils and considered prime farmland if irrigated as defined by the United States Department of Agriculture Natural Resource Conservation Service (USDA NRSC)². Class II soils

² USDA NRSC. *Soil Data Access Prime and other Important Farmlands*. Accessed November 8, 2023. URL: https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1338623.html

are typically irrigated to farm sugar beets, tomatoes, head lettuce, almonds, walnuts, apricots, and barley.

Section 17.730.020 of the Brentwood Municipal Code, Agricultural Preservation Program, states that, “agricultural land” requiring mitigation, includes: “*those land areas of Contra Costa County specifically designated as agricultural core (AC) or agricultural lands (AL) as defined in the Contra Costa County general plan; those land areas near the city designated as agricultural conservation (AC) as defined in the Brentwood general plan; and/or other lands upon which agricultural activities, uses, operations or facilities exist or could exist that contain Class I, II, III or IV soils as defined by the United States Department of Agriculture Natural Resource Conservation Service.*”

Removal of the site’s prime farmland soil for agricultural use was addressed as a potentially significant effect in the City of Brentwood General Plan and General Plan EIR, and there is no new information known to the City showing that such effect from this project will be more significant than described in the General Plan EIR. The General Plan EIR states that Brentwood Municipal Code Section 17.730.030 includes the City’s Agricultural Land Mitigation Requirements to mitigate and offset the loss of valuable farmland resources. Specifically, this Municipal Code Section requires agricultural land mitigation measures be applied to subdivision projects and/or any other discretionary land use entitlement that will permanently change agricultural land over one acre in size within the City’s jurisdiction to a non-agricultural use. To this end, appropriate agricultural land mitigation measures noted in the General Plan EIR will be implemented with this project (see Mitigation Measure AG-1). Therefore, no further analysis of this potential effect is necessary.

As noted above, the site contains Class II and Prime Agricultural soils, as defined by the USDA NRSC. The proposed Project is therefore subject in compliance with Chapter 17.730, Agricultural Preservation Program, of the Brentwood Municipal Code. Implementation of the following mitigation measure would bring the proposed Project in compliance with Chapter 17.730 of the Brentwood Municipal Code. Thus, through implementation of Mitigation Measure AG-1, impacts related to this environmental topic are considered **less than significant**.

Mitigation Measure(s)

Mitigation Measure AG-1: Pursuant to City of Brentwood Municipal Section 17.730.030, the Project applicant must preserve agricultural lands by paying an in-lieu fee established by City Council resolution. The fee may be adjusted annually but may not be increased by more than ten percent during any twelve-month period.

Response b): No Impact. The Project site is not under Williamson Act contract, nor is the site zoned for agricultural use. The current zoning for the Project site is R-1-E, Single-Family Residential. Therefore, the project would have no impact with respect to conflicting with agricultural zoning or Williamson Act contracts. There is **no impact**.

Responses c) and d): No Impact. The Project site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section

51104[g]). Therefore, the proposed Project would have no impact with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning. Therefore, there is **no impact**.

Responses e): Less than Significant. Individual project impacts relating to the loss of prime farmland are addressed through the required mitigation in item a) above (Mitigation Measure AG-1). The proposed Project would not be anticipated to promote off-site development of existing agricultural land because the proposed infrastructure is sized to serve only the project area. As stated previously, the Project site is also surrounded by urban residential development to the south and east, and bordered on the west by Adams Lane. Overall, the potential effects from the conversion of Farmlands and forest lands to non-agricultural and non-forest uses throughout the City were addressed as potentially significant effects in the General Plan EIR, and there is no new information known to the City showing that such effects from this project will be more significant than described in the General Plan EIR. As previously mentioned, the General Plan EIR's mitigation measures applicable to these effects will be implemented with this project (see Mitigation Measure AG-1). Therefore, no further analysis of these potential effects is necessary. The proposed Project would result in a **less than significant** impact to the existing environment that could individually or cumulatively result in loss of farmland to non-agricultural uses or conversion of forest land to non-forest uses.

III. AIR QUALITY -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

EXISTING SETTING

The Project site is located within the boundaries of the Bay Area Air Quality Management District (BAAQMD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Francisco Bay Area Air Basin (SFBAAB) and has jurisdiction over most air quality matters within its borders.

RESPONSES TO CHECKLIST QUESTIONS

Response a): No Impact. The SFBAAB is currently designated as a nonattainment area for State and federal ozone, State and federal particulate matter 2.5 microns in diameter (PM_{2.5}), and State particulate matter 10 microns in diameter (PM₁₀) standards. The BAAQMD, in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG), prepared the 2005 Ozone Strategy, which is a roadmap depicting how the Bay Area will achieve compliance with the State one-hour air quality standard for ozone as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. More recently, the state adopted the 2017 Clean Air Plan (CAP), adopted on April 19, 2017. The 2017 CAP was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Even more recently, the state adopted the 2022 State Strategy for the Implementation Plan, on September 22, 2022, which includes a comprehensive strategy to meet federal ozone standards over the subsequent 15 years. Although the California Clean Air Act does not require the region to submit a plan for achieving the State PM₁₀ standard, these plans are expected to also reduce PM₁₀ emissions. In addition, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2017 CAP. The control strategy serves as the backbone of the BAAQMD's current PM control program. To fulfill federal air quality planning requirements, the BAAQMD adopted a PM_{2.5} emissions inventory for year 2010, which was submitted to the U.S. Environmental Protection Agency (USEPA) on January 14, 2013 for inclusion in the State Implementation Plan (SIP).

The current plan in place to achieve progress toward attainment of the federal ozone standards is the *Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard*. The USEPA recently revoked the 1-hour federal ozone standard; however, the region is designated nonattainment for the new 8-hour standard that replaced the older one-hour standard. Until the region either adopts an approved attainment plan or attains the standard and adopts a maintenance plan, the *Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard* remains the currently applicable federally-approved plan.

The aforementioned applicable air quality plans contain mobile source controls, stationary source controls, and transportation control measures (TCMs) to be implemented in the region to attain the State and federal ozone standards within the SFBAAB. The plans are based on population and employment projections provided by local governments, usually developed as part of the General Plan update process. The proposed project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the Ozone Attainment Plan's growth assumptions, in terms of population, employment, or regional growth in Vehicle Miles Traveled (VMT). The growth assumptions are based on ABAG projections that are, in turn, based on the City's General Plan. The proposed project site was designated for Residential Very Low Density uses in the Brentwood General Plan in effect at the time ABAG projections were forecast. The proposed project is consistent with the General Plan land use designation; therefore, the project would be considered consistent with the growth assumptions of the applicable air quality plans. As a result, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans. There is **no impact** relative to this topic.

Responses b): Less than Significant. Air pollutant emissions related to the proposed project would include both construction phase emissions and, upon project buildout, operational emissions (such as from vehicle trips generated by the proposed project). Construction phase emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from clearing and grading activities, wind-borne dust generated from exposed soils, and off-gassing from asphalt paving and painting. Construction-related emissions can vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. Operational air pollutant emissions of the proposed project would be generated by residential vehicle trips and electricity use at the project site, and visitor vehicle exhaust. Both construction and operation of the proposed project would result in the generation of emissions of carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_x), and particulate matter (PM₁₀). Emissions of ROG and NO_x are referred to as "precursors" to ozone formation. These two pollutants, when released into the atmosphere, undergo photochemical reactions in the presence of sunlight to form ozone. These ozone-forming photochemical reactions do not occur as readily in the cooler months of the year, and therefore, emissions of ROG and NO_x are of greatest concern during the warmer months of summer.

According to the CEQA Guidelines, an air quality impact may be considered significant if the proposed project's implementation would result in, or potentially result in, conditions, which

violate any existing local, State or federal air quality regulations. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants designated as nonattainment in the area, the BAAQMD has established significance thresholds associated with development projects for emissions of reactive organic gases (ROG), nitrogen oxide (NO_x), PM₁₀, and PM_{2.5}. The BAAQMD's significance thresholds, expressed in pounds per day (lbs/day) for project-level and tons per year (tons/yr) for cumulative, listed in Table 1, are recommended for use in the evaluation of air quality impacts associated with proposed development projects.

Table 1: BAAQMD Thresholds of Significance

Pollutant	Construction Average Daily Emissions (lbs/day)	Operational Average Daily Emissions (lbs/day)	Cumulative Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82	82	15
PM _{2.5}	54	54	10

Source: BAAQMD, 2022 CEQA Guidelines.

In addition, the BAAQMD identifies screening criteria for development projects, which provide a conservative indication of whether a development could result in potentially significant air quality impacts. If the screening criteria are exceeded by a project, a detailed air quality assessment of that project's air pollutant emissions would be required. The project is made up of single-family residences. The screening criteria for a single-family residential development are if the development is less than or equal to the following screening level sizes:

- 325 dwelling units for operational criteria pollutants;
- 56 dwelling units for operational greenhouse gas (GHG) (addressed in Section VIII); or
- 114 dwelling units for construction criteria pollutants.

Accordingly, if a single-family development is less than or equal to the screening size for operational or construction criteria pollutants, or for operational GHG, the development would not be expected to result in potentially significant air quality impacts, and a detailed air quality assessment would not be required.

Per CEQA Guidelines Section 15064.7, the City has elected to use the BAAQMD's thresholds of significance and methodology for assessing the significance of impacts relating to criteria pollutants for this project, as they are based on substantial evidence and remain the most up-to-date, scientifically-based method available to evaluate air quality impacts. Thus, the BAAQMD's thresholds of significance presented in Table 1, and the screening criteria, are utilized for this analysis.

Implementation of the proposed project would contribute local emissions in the area during both the construction and operation of the proposed project. As the proposed project involves the development of 34 dwelling units, the project does not exceed the screening criteria for operational or construction-related criteria pollutants resulting from a single-family residential

development. As such, the proposed project would not be expected to result in potentially significant operational or construction-related air quality impacts.

As discussed previously, the proposed project falls under the screening criteria for operational and construction criteria air pollutants and precursors. BAAQMD has determined that if the project meets the screening criteria, the project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the Thresholds of Significance. Therefore, implementation of the proposed project would result in a **less-than-significant** impact to air quality from criteria air pollutant and precursor emissions.

It should be noted that the project is required to comply with all BAAQMD rules and regulations for construction, including implementation of the BAAQMD's recommended Basic Construction Mitigation Measures. The Basic Construction Mitigation Measures include, but are not limited to, watering exposed surfaces, covering all haul truck loads, removing all visible mud or dirt track-out, limiting vehicle speeds on unpaved roads, and minimizing idling time.

Response c): Less than Significant with Mitigation. Emissions of carbon monoxide (CO) are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In addition to screening criteria for criteria pollutants and GHG, BAAQMD has established screening criteria for localized CO emissions, including the following:

- Consistency with applicable congestion management programs;
- Increases in traffic volumes at intersections to more than 44,000 vehicles per hour; or
- Increases in traffic volumes at intersections to more than 24,000 vehicles per hour due to project-generated traffic where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

As the City has elected to use the BAAQMD's thresholds and methodology for this project, the BAAQMD's screening criteria for localized CO emissions presented above are utilized for this analysis.

A General Plan amendment is not required for the proposed project. The proposal results in a density of 3.54 units per gross acre, which would be above the defined General Plan R-VLD density of 1.1 to 3.0 units per gross acre. However, in accordance with the Government Code Section 65915, the Project is entitled to a density bonus if sufficient affordable housing units are included in the proposed project. As such, the project would be considered consistent with the growth assumptions of the General Plan. Subsequently, the project would result in similar mobile source emissions as currently anticipated for the site. In addition, none of the affected intersections currently experience traffic volumes of 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited), and the project would not increase traffic volumes to greater than 44,000 vehicles per hour at any affected intersections (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited).

Therefore, according to the BAAQMD screening criteria above, the proposed project would not be expected to result in substantial increase in levels of CO at surrounding intersections, and the project would not generate or be subjected to localized concentrations of CO in excess of applicable standards.

Toxic Air Contaminants (TACs) are also a category of environmental concern. The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, 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 engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

Children, pregnant women, the elderly, and those with existing health problems are considered more sensitive to air pollution than others. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. The proposed project includes the development of single-family residences, the occupants of which would be considered sensitive receptors. Additionally, surrounding single family residences located just south and east of the project site, Marsh Creek Elementary to the west of the project site, and the church (which hosts the Vineyard Academy School) located directly to the north would also be considered sensitive receptors. The CARB, per its Handbook, considers that any project placing sensitive receptors within 500 feet of a major roadway or freeway may have the potential to expose those receptors to DPM. Similarly, the BAAQMD recommends placement of overlay zones at least 500 feet from all freeways and high volume roadways. The nearest freeway, SR 4, is located over 2 miles to the west of the project site. Therefore, the project site is not located within 500 feet of any freeway or high volume roadway, and would not be subjected to substantial concentrations of DPM associated with roadways.

The project does not involve long-term operation of any stationary diesel engine or other major on-site stationary source of TACs. Relatively few vehicle trips associated with operations of the proposed use would be expected to be composed of diesel-fueled vehicles. Therefore, the project would not generate any substantial concentrations of TACs during operations. Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road heavy-duty diesel equipment used for site grading, paving, and other construction activities result in the generation of DPM. The residences located south of the Project site and the church to the north would be considered the nearest existing sensitive receptor to the project site and could become exposed to DPM emissions from the site during construction activities. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. In addition, only portions of the site would be disturbed at a time during buildout of the

proposed Project, with operation of construction equipment regulated and occurring intermittently throughout the course of a day. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be very low. Because health risks associated with exposure to DPM or any TAC are correlated with high concentrations over a long period of exposure (e.g., over a 70-year lifetime), the temporary, intermittent construction-related DPM emissions would not be expected to cause any health risks to nearby sensitive receptors. Thus, construction of the proposed project would not expose any nearby existing sensitive receptors to any short-term substantial concentrations of TACs.

Valley Fever is an infection caused by inhalation of the spores of the *Coccidioides immitis fungus*, which grows in soils and are released during earthmoving. The ecological factors that appear to be most conducive to survival and replication of the spores are high summer temperature, mild winters, sparse rainfall, and alkaline, sandy soils. Given that the project site has been in active cultivation and the immediate vicinity consists of urbanized development, the project site is in an area that would lead to a low probability of having *C. immitis* growth sites and exposure from disturbed soil. Nonetheless, construction activities would generate fugitive dust that has some risk of containing *C. immitis* spores. Without adequate dust management, implementation of the project may result in human health impacts due to exposure to fungus spores that cause Valley Fever. The Project will minimize the generation of fugitive dust during construction activities by complying with the dust management BMP's set forth in Mitigation Measure AIR-1.

In conclusion, with the implementation of the following mitigations measures the proposed project would not expose sensitive receptors to substantial concentrations of any TACs or fungus spores which cause Valley Fever after mitigation. Therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be considered **less than significant with mitigation**.

Mitigation Measure(s)

Mitigation Measure AIR-1: *Prior to the issuance of a grading permit, the applicant/developer shall prepare an Erosion Prevention and Dust Control Plan. The plan shall be followed by the project's grading contractor and submitted to the Engineering Department, which will be responsible for field verification of the plan during construction.*

The plan shall comply with the City's grading ordinance and shall include the following control measures and other measures as determined by the Engineering Department to be necessary for the proposed project:

- *Cover all trucks hauling construction and demolition debris from the site;*
- *Water all exposed or disturbed soil surfaces at least twice daily;*
- *Use watering to control dust generation during demolition of structures or break-up of pavement;*
- *Pave, apply water three time daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas;*
- *Sweep daily (with water sweepers) all paved parking areas and staging areas;*
- *Provide daily clean-up of mud and dirt carried onto paved streets from the site;*

- *Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);*
- *Limit traffic speeds on unpaved roads to 15 mph;*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways;*
- *Replant vegetation in disturbed areas as quickly as possible;*
- *Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;*
- *Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) or construction areas;*
- *Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph;*
- *Limit the area subject to excavation, grading, and other construction activity at any one time;*
- *Unnecessary idling of construction equipment shall be avoided;*
- *Equipment engines shall be maintained in proper working condition per manufacturers' specifications;*
- *During periods of heavier air pollution (May to October), the construction period shall be lengthened to minimize the amount of equipment operating at one time;*
- *Where feasible, the construction equipment shall use cleaner fuels, add-on control devices and conversion to cleaner engines.*

Mitigation Measure AIR-2: *During periods of high dust in the grading phase, crews must use National Institute for Occupational Safety and Health (NIOSH) approved N95 masks or better or other more stringent measures in accordance with the California Division of Occupational Safety and Health regulations.*

Mitigation Measure AIR-3: *The operator cab of area grading and construction equipment must be enclosed and air-conditioned.*

Response d): Less than Significant. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The proposed Project site is located around developed areas and is surrounded by residential land uses, as well as school and church facilities, that are generally not associated with objectionable odors. Accordingly, the proposed Project is not located in the vicinity of any substantial objectionable odor sources such as those mentioned above.

Operation of the proposed Project would not generate notable odors. The proposed Project is a residential development, which is compatible with the surrounding land uses. Residential land uses are not typically associated with the creation of substantial objectionable odors. Occasional mild odors may be generated during landscaping maintenance (equipment exhaust), but the project would not otherwise generate odors.

The proposed Project is not anticipated to produce any objectionable odors (or other emissions) at buildout that would affect a substantial number of people. Construction activities associated with the proposed project, such as paving and painting are likely to temporarily generate objectionable odors. Since odor-generating construction activities would be temporary, and are only likely to be detected by residents closest to the project site, impacts from temporary project-related odors are expected to be **less than significant** and no mitigation is required.

IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
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?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. The following discussion is based primarily on the Planning Survey report (see Appendix A) prepared for the project site by Moore Biological Consultants (Moore)³. Moore conducted a search of the California Natural Diversity Data Base (CNDDB) for the 7.5-minute Brentwood topographic quadrangle, which encompassed approximately 60 square miles surrounding the project site. The intent of the CNDDB search was to identify wildlife and plant species, prior to the field survey, with documented occurrences within the project vicinity or have the potential to occur based on suitable habitat and geographical distribution.

On April 12, 21, and 28, and May 5, 2023, Moore conducted field surveys of the project site to make observations of the current site conditions and note the surrounding land uses, general

³ Moore Biological Consultants. *Orchard Grove II*. August 2023.

habitat types, and plant and wildlife species. Currently, the site is primarily vacant, with exception of the single family home and barn on the designated remainder parcel, and vegetated with ruderal grassland vegetation that appears to be periodically mowed and/or disked. There are no trees on the site. There is a notable row of large eucalyptus trees just north of the northern fence line and a few other large trees on parcels in close proximity to the site, which may require limited removal, such as trimming or pruning, subsequent to project development.

The project site is located within the boundaries of the *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan* (ECCCHCP/NCCP), which provides a framework to protect the natural resources of eastern Contra Costa. The ECCCHCP/NCCP streamlines the environmental permitting process for impacts on endangered species and requires the payment of a Development Fee to mitigate impacts to covered species. The project site is located within Fee Zone 1 of the Fee Payment Zones within the ECCCHCP/NCCP. According to the project's Planning Survey Report, the 10.04-acre project site consists of 9.41 acres classified as ruderal and 0.63 acres as Urban. As per the ECCCHCP/NCCP, the proposed project would be subject to payment of all applicable fees prior to construction.

Special Status Plant Species

The California annual grassland series (Sawyer and Keeler-Wolf, 1995) best describes this highly disturbed upland grassland vegetation on-site. The CNDDDB and USFWS Species List included eight plant species that have previously been documented in the greater project vicinity, including big tarplant (*Blepharizonia plumosa ssp. plumosa*), Adobe navarretia (*Navarretia nigelliformis ssp. radians*), Alkali milkvetch (*Astragalus tener ssp. tener*), Brittle scale (*Atriplex depressa*), Contra Costa goldfields (*Lasthenia conjugens*), Diablo Helianthella (*Helianthella castanea*), Diamond-petaled poppy (*Eschscholzia rhombipetala*), Large-flowered fiddleneck (*Amsinckia grandiflora*), Mount Diablo buckwheat (*Eriogonum truncatum*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), Mount Diablo Manzanita (*Arctostaphylos auriculata*), Recurved larkspur (*Delphinium recurvatum*), Round-leaved filaree (*California macrophylla*), San Joaquin spearscale (*Extriplex joaquiniana*), Showy madia (*Madia radiata*), San Joaquin spearscale (*Extriplex joaquiniana*), Brewers western flax (*Hesperolinon breweri*), and caper-fruited tropidocarpum (*Tropidocarpum capparideum*).

Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as, vernal pools, marches and swamps, seasonal wetlands, riparian scrub, and areas with unusual soils. All of the plants identified occur in unique habitat types that are not present on-site. The site consists of disturbed ruderal grassland vegetation that is routinely mowed and/or disked; the grasslands in the site do not provide suitable for any special-status plant species. Marsh Creek, at the location of the outfall structure, does not contain suitable marsh or swamp habitat to support special-status plants that require specialized aquatic habitats. Due to lack of suitable habitat, it is very unlikely that special-status plants occur in the project site. Therefore, the project is not expected to impact any covered or no-take plants.

Special Status Wildlife Species

The CNNDB search identified that the following special-status wildlife species have previously been recorded in the project area: Swainson's hawk (*Bufo swainsoni*), western burrowing owl

(*Athene cunicularia*), Giant garter snake (*Thamnophis gigas*), California red-legged frog (*Rana draytonii*), San Joaquin kit fox (*Vulpes macrotis mutica*), Townsend's big-eared bat (*Corynorhinus townsendii*), Golden Eagle (*Aquila chrysaetos*), western pond turtle (*Emys marmorata*), California tiger salamander (*Ambystoma californiense*), vernal pool fairy shrimp (*Branchinecta lynchi*).

While the project site may have provided habitat for special-status wildlife species at some time in the past, farming and development have substantially modified natural habitats in the greater project vicinity, including in the Project site. There is no suitable habitat in the site for ringtail (*Bassariscus astutus*), a “fully protected species,” per California Fish and Game Code Section 4700. Similarly, there is no suitable nesting habitat in the site for peregrine falcon (*Falco peregrinus*), a “fully protected species,” per California Fish and Game Code Section 3511.

Of the wildlife species identified in the CNDDDB, western burrowing owl, Swainson's hawk, and Golden Eagle are the only species with potential to occur in the site on more than a transitory or very occasional basis and are discussed further below. Additionally, Marsh Creek upstream of the outfall site is modeled as potential habitat for California red-legged frog in the ECCCHCP. Although not expected to occur in Marsh Creek near the outfall, this species is discussed below for completeness.

Western Burrowing Owl: The Migratory Bird Treaty Act (MBTA) and Fish and Game Code of California protect western burrowing owls year-round, as well as their nests during the nesting season (February 1 through August 31). Western burrowing owls are a year-long resident in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation. The body of the site is ruderal grassland that is within the range of western burrowing owl (*Athene cunicularia*). The CNDDDB (2023) contains numerous records of nesting burrowing owl within 0.5 miles of the project site. The Project site was inspected for burrowing owls and ground squirrel burrows with evidence of burrowing owl occupancy (i.e., white wash, pellets, feathers). Comprehensive inspection of potential burrowing owl habitat was accomplished by walking meandering transects throughout the site. No western burrowing owls or burrows with evidence of burrowing owl occupancy were observed. However, western burrowing owls are fairly widespread in this part of the county and there were several occurrences of burrowing owls in the search area within a mile of the site. Therefore, this species could occur in the site in the future if burrow habitat is available. Mitigation Measure BIO-1 would ensure that any potential impacts to western burrowing owls is reduced to a **less than significant level**.

Swainson's Hawk: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The MBTA and Fish and Game Code of California protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15). Swainson's hawk are found in the Central Valley primarily during their breeding season, with a population known to winter in the San Joaquin Valley.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. The site primarily consists of ruderal grassland and is along the western edge of the nesting range of Swainson's hawks (*Buteo*

swainsoni). The CNDDDB (2023) contains a record of a nesting Swainson's hawk in the row of eucalyptus trees along the northern fence line in the site. The grassland in the site provides suitable Swainson's hawk foraging habitat. The row of large eucalyptus trees along the north fence line contains a large raptor stick nest and Swainson's hawks have nested in these trees in the past. The row of trees and the nest were inspected numerous times in 2023 during the Swainson's hawk nesting season and this nest was not utilized this year by any raptor species. No other raptor stick nests were observed in any of the trees visible from the site. Due to the suitable raptor nest in a tree adjacent to the north edge of the site and the presence of suitable nest trees in parcels near the site, it is likely Swainson's hawks or other raptors will nest somewhere near the site in the future. Due to the strong nest site affinity of this species, it is possible Swainson's hawks will return to this same general area to nest in future years. Therefore, the project would be required to implement standard avoidance and minimization measures under the ECCCHCP, as required by Mitigation Measure BIO-1. Implementation of Mitigation Measure BIO-1 would ensure that any potential impacts to Swainson's hawks are reduced to a **less than significant** level.

Golden Eagle: The site is ruderal grassland that is within the range of golden eagles (*Aquila chrysaetos*). The CNDDDB (2023) contains no occurrences of golden eagle within 0.5 miles of the site. There are a few potential nest trees in close proximity to the site. Aside from the nest observed in the row of eucalyptus trees along the north fence line, no raptor stick nests were observed in trees on or visible from the site. No golden eagles were observed during the recent survey and this species nests more often on cliffs in remote natural areas than in trees near urban areas. Therefore, impacts to Golden Eagle are **less than significant**. *Nesting Raptors and Migratory Birds:* While the project site does not contain any trees (with the exception of the row of large eucalyptus trees just north of the northern fence line on the adjacent property and a few other large trees on parcels in close proximity to the site) or shrubs, grasslands on the site and trees and shrubs along the Project frontages may be used by other raptors and migratory birds protected by the Migratory Bird Treaty Act for foraging. The site does not and is not likely to provide adequate nesting habitat for any of the raptors (white-tailed kite, peregrine falcon, or golden eagle); nor does it contain adequate habitat for ringtails. However, construction activities that adversely affect the nesting success of raptors and migratory birds (i.e., lead to the abandonment of active nests) or result in mortality of individual birds constitute a violation of State and federal laws. Therefore, Mitigation Measure BIO-1 would ensure that any potential impact is reduced to a **less than significant level**.

Western Pond Turtle: The western pond turtle is a state species of concern, but is not a listed species at the state or federal level. Western pond turtles are associated with permanent or nearly permanent bodies of water with adequate basking sites such as logs, rocks or open mud banks. Pond turtles construct nests in sandy banks along slow-moving streams and ponds in the spring and the young usually hatch in 2 to 3 months. The nearest occurrence of western pond turtle in the CNDDDB (2020) search area is approximately 3.5 miles northeast of the project site.

Although no western pond turtles were seen, several red-eared sliders were observed swimming in Marsh Creek and basking along the shoreline near the outfall structure during the July 2020

survey. The presence of red-eared sliders in Marsh Creek indicates the creek also provides potentially suitable habitat for western pond turtle. The banks along Marsh Creek at the outfall site are steep and vegetated in highly disturbed ruderal grasses and weeds. In the event western pond turtles are present in this section of the creek, it is unlikely they would ascend the steep bank and nest near the outfall location. Therefore, impacts to western pond turtle are **less than significant**.

California Red-Legged Frog: California red-legged frog was listed by the USFWS as a threatened species in May 1996. California red-legged frog is also classified by CDFW as a Species of Special Concern. Once abundant in low-elevation Sierra Nevada and Coastal foothills streams, this species now occurs in a patchy distribution throughout a fraction of its historic range. The California red-legged frog typically breeds in perennial or nearly perennial well-shaded woodland ponds or the deeper plunge-pools of well-shaded streams. The nearest occurrence of California red-legged frog in the CNDDDB (2020) is a 2005 record approximately 3.5 miles southwest of the site. The site is not within designated critical habitat for California red-legged frog (USFWS, 2006a).

Marsh Creek provides low quality, yet potentially suitable habitat California red-legged frog. The project site is “potential migration and aestivation habitat” in the modeled range of California red-legged frog as mapped in Appendix D of the ECCCHCP. Just south of the proposed storm drain outfall site, Marsh Creek is mapped as “potential breeding habitat” for this species. At and downstream of the proposed outfall site, Marsh Creek is not mapped as potential breeding habitat in Appendix D of the ECCCHCP.

Although considered highly unlikely, California red-legged frog could potentially travel across the on-site grasslands while dispersing from Marsh Creek, but due to intensive disking, they would not be expected to aestivate on the site. There are no notable plunge pools within Marsh Creek providing highly suitable breeding habitat; most of the creek consist of shallow runs. In any case, implementation of Mitigation Measure BIO-1 would ensure that any potential impacts to California red-legged frog are reduced to a **less than significant** level.

Conclusion

Due to the disturbed nature of the Project site’s ruderal annual grassland cover type, suitable habitat does not exist to support special-status plant species known to occur within the annual grassland cover type of East Contra Costa County. While the presence of special-status wildlife species is relatively unlikely, based upon the current land cover types found on-site, in accordance with the ECCCHCP, wildlife species surveys are required to determine whether any special-status wildlife species are occupying the project site prior to initiating on-site ground disturbance and vegetation removal. If the necessary preconstruction surveys are not carried out, the Project could result in a potentially significant 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 U.S. Fish and Wildlife Service (USFWS), or the California Department of Fish and Wildlife (CDFW). The following mitigation measures would reduce the above-stated special-status wildlife impacts to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure BIO-1: *Prior to any ground disturbance related to activities covered under the ECCCHCP, the project applicant will need to comply with the required species-specific avoidance and minimization requirements for Western Burrowing Owl, Swainson’s Hawk, California Red-Legged, and Golden Eagle, as outlined in Section IV.2, Required Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring, of the Project’s Planning Survey Report (see Appendix A of this Initial Study).*

Responses b), c): Less than Significant. Riparian habitats are described as the land and vegetation that is situated along the bank of a stream or river. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded). Vernal pools are seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. Vernal pools range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland.

As noted in the Planning Survey, while there are no wetlands within the project site, Marsh Creek meets the technical and regulatory criteria of jurisdictional Waters of the U.S. and is defined as a “Riverine” feature in the National Wetlands Inventory (NWI). Marsh Creek is a perennial stream that has been realigned and channelized in the vicinity of the proposed storm drain outfall along the west bank of Marsh Creek. There are no acres of jurisdictional Waters of the U.S. in the Project site. However, storm water from the Project site will be detained in a water quality treatment basin in the northeast part of the site prior to its discharge to an existing storm drain system, eventually conveying water to the Marsh Creek channel to the east of the site. Appropriate permits from Army Corps of Engineers, CDFW, and the Regional Water Quality Control Board (RWQCB) would be required. Therefore, implementation of the project would have a **less than significant** impact relative to any riparian habitat, seasonal wetlands, or vernal pools as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.

Responses d): Less than Significant. As noted in the Planning Survey, the Project site is within designated critical habitat for delta smelt. However, the project would not change regional drainage patterns. Additionally, the Planning Survey identifies that construction of the project would have no effect on off-site waterways and no effect on the suitability of delta waterways for delta smelt. Given that the Project site provides limited habitat due to previous cultivation and construction of the project would have no effect on the suitability of delta waterways for delta smelt, impacts related to the movement of any resident or migratory wildlife species or with established resident or migratory wildlife corridors, or impeding the use of wildlife nursery sites are considered **less than significant**.

Responses e): Less than Significant. The City of Brentwood has not adopted a tree preservation ordinance that would govern the project site; however, the City of Brentwood General Plan Policy

COS 1-9 encourages the protection and incorporation of existing, native, mature, non-orchard trees as part of new developments. As previously noted, no trees are located on the Project site. There is a notable row of large eucalyptus trees just north of the northern fence line and a few other large trees on parcels in close proximity to the site, which may require limited removal, such as trimming or pruning, subsequent to project development. Therefore, the proposed project would have a **less than significant** related to conflicting with local policies or ordinances protecting biological resources.

Responses: f): Less than Significant with Mitigation. Vegetation on the project site currently consists of ruderal vegetation. The site is within the boundaries of the ECCCHCP/NCCP. In July 2007, the ECCCHCP/NCCP was adopted by Contra Costa County, the City of Brentwood, other member cities, the USFWS and the CDFW. The ECCCHCP/NCCP provides guidance for the mitigation of impacts to covered species. Mitigation of impacts is accomplished through the payment of a Development Fee. The Development Fee requires payment based on a cost per acre for all acres converted to non-habitat with the cost per acre based on the quality of the habitat converted. The fees are used to acquire higher value habitats in preserved areas and to fund their restoration and management. Because the City of Brentwood is a signatory to the ECCCHCP/NCCP, anticipated project impacts could be mitigated through the payment of Development Impact fees to the ECCCHCP/NCCP Conservancy. The project site is mapped in “Fee Zone 1” in the ECCCHCP/NCCP and pursuant to Section 16.168.070 of the Brentwood Municipal Code will be required to pay a Development Fee. Implementation of Mitigation Measure BIO-2 ensures that this impact would **be less than significant**.

Mitigation Measure(s)

Mitigation Measure BIO-2: *Prior to the issuance of grading or construction permits for the project site, the developer shall submit an application and obtain coverage under the ECCCHCP. This will include payment of the applicable ECCCHCP per-acre fee in effect for Zone I in compliance with Section 16.168.070 of the Brentwood Municipal Code. The developer shall receive a Certificate of Coverage from the City of Brentwood and submit a construction monitoring report to the ECCCHCP Habitat Conservancy for review and approval. The Certificate of Coverage will confirm the fee has been received, that other ECCCHCP/NCCP requirements have been met or will be performed, and will authorize take of covered species.*

V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): No Impact. An Archaeological Assessment Report, dated December 2019, was prepared for the project site by Basin Research Associates (see Appendix B). A field survey was conducted by Basin Research Associates on November 21, 2019, which noted the site appeared recently tilled and did not contain any buildings or significant architectural resources.

The report included a prehistoric and historic site records and literature search completed by the California Historical Resources Information Search, Northwest Information Center, Sonoma State University, Rohnert Park on December 4, 2019 (CHRIS/NWIC File 19-0815). The CHRIS/NWIC record search noted that no prehistoric or historic era archaeological sites have been recorded, reported, or identified in or adjacent to the proposed project site. Additionally, seven reports are on file at the CHRIS/NWIC for portions of the project site and surrounding areas, which were all negative for archaeological resources. Additionally, the record search indicated that the project site does not contain any recorded buildings or structures listed on the State Office of Historic Preservation Historic Property Directory (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places).

It should be noted that the 2014 Brentwood General Plan Update EIR identifies 24 historic properties in the Brentwood Planning Area. None of the 24 properties listed are within the proposed project site⁴. Additionally, there are no existing buildings, structures, or objects on the within the 9.6-acre Project site. The proposed project would remove the existing barn but preserve the home of the 0.4-acre designated remainder parcel. However, neither are considered identified or recorded historical resources under Section 15064.5 in the CEQA handbook. Therefore, there is nothing on the site that could be considered a “historical resource” under Section 15064.5 in the CEQA handbook.

For the above-stated reasons, development of the proposed project would have **no impact** on historical resources.

⁴ City of Brentwood. 2014 Brentwood General Plan Update EIR [pg. 3.5-7]. July 22, 2014.

Responses b), c): Less than Significant with Mitigation. As noted above, the Archaeological Assessment Report prepared by Basin Research Associates included a CHRIS/NWIC record search of the project site and surrounding area (CHRIS/NWIC File 19-0815). The CHRIS/NWIC record search noted that no prehistoric or historic era archaeological sites have been recorded, reported, or identified in or adjacent to the project site. Additionally, the field survey conducted by Basin Research Associates on November 21, 2019 found no prehistoric, combined prehistoric/historic or historic era archaeological materials or significant architectural resources were observed on-site.

Given that no known archaeological resources are associated with the project site, the subject parcel is considered of low archaeological sensitivity for prehistoric cultural resources. However, ground-disturbing activities may have the potential to uncover buried cultural deposits. As a result, during construction and excavation activities, previously unknown archaeological resources, including human bone, may be uncovered, resulting in a potentially significant impact. Implementation of the following mitigation measures would reduce the construction-related impacts to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure CUL-1: *Prior to grading permit issuance, the developer shall submit plans to the Community Development Department for review and approval which indicate (via notation on the improvement plans) that if historic and/or cultural resources are encountered during site grading or other site work, all such work shall be halted immediately within 25 feet of the area of discovery and the developer shall immediately notify the Community Development Department of the discovery. In such case, the developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.*

Mitigation Measure CUL-2: *Pursuant to State Health and Safety Code §7050.5 (c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for reinternment of the human remains and any associated artifacts. Additional work is not to take place within the immediate vicinity of the find until the identified appropriate actions have been implemented.*

VI. ENERGY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100[b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered “wasteful, inefficient, and unnecessary” if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation. In addition, Appendix G of the State CEQA Guidelines requires an analysis of the project’s impact relating to energy consumption.

The proposed project includes the construction of 34 single-family residential units. The amount of energy used at the project site would directly correlate to the size of the proposed units, the energy consumption of associated unit appliances, and outdoor lighting. Other major sources of proposed project energy consumption include fuel used by vehicle trips generated during project construction and operation, and fuel used by off-road construction vehicles during construction.

The following discussion provides calculated levels of energy use expected for the proposed project, based on commonly used modelling software (i.e. CalEEMod v.2022.1 and the California Air Resource Board’s EMFAC2021). It should be noted that many of the assumptions provided by CalEEMod are conservative relative to the proposed project. Therefore, this discussion provides a conservative estimate of proposed project emissions.

Electricity and Natural Gas

Electricity and natural gas used by the proposed project would be used primarily to power on-site buildings. Total annual electricity (kWh) and natural gas (kBtu) usage associated with the operation of the proposed project are shown in Table 2, below (as provided by CalEEMod).

According to Calico's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

Table 2: Project Operational Natural Gas and Electricity Usage

<i>Emissions^(a)</i>	<i>Natural Gas (kBtu/year)</i>	<i>Electricity (kWh/year)</i>
Single Family Housing	1,571,545	210,285
Total	1,571,545	210,285

SOURCE: CALEEMOD (v.2022.1)

Energy usage during the operational phases of the proposed project would be typical for a project of this kind, and therefore would not represent a wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, the proposed project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

On-Road Vehicles (Operation)

The proposed project would generate vehicle trips during its operational phase. In order to calculate new daily vehicle trips and operational on-road vehicle energy usage and emissions, default average daily trips and trip lengths generated by CalEEMod were used, which are based on the project land use, location and urbanization level parameters De Novo (the Initial Study consultant) selected within CalEEMod (i.e. "Single Family Housing" Land Use, "Bay Area Air Quality Management District" project location, and "Urban" setting, respectively). These values are provided by the individual districts or use a default average for the state, depending on the location of the proposed project (CAPCOA, 2021). Based on the CalEEMod modeling results, the project would generate approximately 2,264 average daily vehicle miles travelled (Average Daily VMT). Using fleet mix data provide by CalEEMod (v2022.1), and Year 2023 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2021, De Novo derived weighted MPG factors for operational on-road vehicles of approximately 26.1 MPG for gasoline vehicles. With this information, De Novo calculated as a conservative estimate that the unmitigated proposed project would generate vehicle trips that would use a total of approximately 87 gallons of gasoline per day, on average, or 31,666 gallons of gasoline fuel per year. Vehicles generated by project operation were all assumed to use gasoline, for the sake of simplicity, since the vast majority of vehicles generated by the Project during operation would be gasoline vehicles. See Appendix C for a detailed calculation.

On-Road Vehicles (Construction)

The proposed project would also generate on-road vehicle trips during project construction (from construction workers and vendors). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2023 gasoline and diesel MPG factors provided by EMFAC2021. For the purposes of simplicity, it was assumed that all worker vehicles used gasoline as a fuel source (as opposed to diesel fuel or alternative sources) and all vendor

and/or haul vehicles used diesel fuel as a fuel source (as opposed to gasoline or alternative sources). Table 3, below, describes gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed project would occur during the building construction phase. See Appendix C for a detailed calculation.

Table 3: On-Road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	# of Days	Total Daily Worker Trips^(a)	Total Daily Vendor Trips^(a)	Total Daily Hauling Trips^(a)	Gallons of Gasoline Fuel^(b)	Gallons of Diesel Fuel^(b)
Demolition	20	15	-	2	130	133
Site Preparation	10	18	-	-	78	-
Grading	20	15	-	-	130	-
Building Construction	230	12	4	-	1,220	1,115
Paving	20	15	-	-	130	-
Architectural Coating	20	2	-	-	21	-
Total	N/A	N/A	N/A	-	1,709	1,248

NOTE: ^(a) PROVIDED BY CALEEMOD. ^(b) SEE APPENDIX C FOR FURTHER DETAIL

SOURCE: CALEEMOD (v.20221); EMFAC2021.

Off-Road Vehicles (Construction)

Off-road construction vehicles would use diesel fuel during the construction phase of the proposed project. A non-exhaustive list of off-road constructive vehicles expected to be used during the construction phase of the proposed project includes: cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO₂ emissions expected to be generated by the proposed project (as provided by the CalEEMod output), and a CO₂ to diesel fuel conversion factor (provided by the U.S. Energy Information Administration), the proposed project would use a total of approximately 8,097 gallons of diesel fuel for off-road construction vehicles (during the site preparation and grading phases of the proposed project). Detailed calculations are provided in Appendix C.

Other

Proposed project landscape maintenance activities would generally require the use fossil fuel (i.e. gasoline) energy. For example, lawn mowers require the use of fuel for power. As an approximation, it is estimated that landscape care maintenance would require approximately two individuals one full day per month, or 208 hours per year (or 104 hours per year per landscaper). Assuming an average of approximately 0.5 gallons of gasoline used per person-hour, the proposed project would require the use of approximately 56 gallons of gasoline per year to power landscape maintenance equipment. The energy used to power landscape maintenance equipment would not differ substantially from the energy required for landscape maintenance for similar projects.

The proposed project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or on-site stationary sources (such as on-site diesel generators) for electricity generation. The proposed project will install a solar system on every home to satisfy the majority of each home's estimated energy use, which would reduce the need for fossil fuel-based energy (for proposed project buildings), including for electricity.

Conclusion

The proposed project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed project, and from off-road construction activities associated with the proposed project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

The proposed project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 50% mix of renewable energy resources by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the site, maintains sufficient capacity to serve the proposed project. The proposed project would comply with all existing energy standards, including those established by the City of Brentwood, and would not result in significant adverse impacts on energy resources. Furthermore, existing connections exist between the Project site and nearby pedestrian and bicycle pathways, and public transit access, such as the Adams Lane (Blue Goose Park) bus stop, exists nearby, reducing the need for local motor vehicle travel. Although improvements to the City's pedestrian, bicycle, and public transit systems would provide further opportunities for alternative transit, the proposed project would be linked closely with existing networks that, in large part, are sufficient for most residents of the proposed project and the City of Brentwood as a whole. For these reasons, the proposed project would not be expected cause an inefficient, wasteful, or

unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the CEQA Guidelines. This is a ***less than significant*** impact.

VII. GEOLOGY AND SOILS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		X		
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
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?		X		
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?		X		
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant with Mitigation. The following discussion is based primarily on a Geotechnical Exploration Report dated June 5, 2023 prepared by ENGE0 (see Appendix D) for the project site.

According to the report, the site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone; however, large (>M_w7) earthquakes have historically occurred in the Bay

Area and along the margins of the Central Valley with many earthquakes of low magnitude occurring every year. The nearest earthquake faults zoned as active by the State of California Geological Survey are the Greenville fault located about 8.5 miles to the southwest and the Great Valley Fault located approximately 9 miles to the west, mapped as Quaternary Age. The Greenville Fault is considered to be capable of a moment magnitude earthquake of 6.8 to 7.0. The Great Valley fault is a blind thrust fault with no known surface expression; the postulated fault location has been based on regional seismic activity and isolated subsurface information. Portions of the Great Valley fault are considered seismically active thrust faults; however, since the Great Valley fault segments are not known to extend to the ground surface, the State of California has not defined Earthquake Fault Hazard Zones around the postulated traces.

Other active faults in the San Francisco Bay Area capable producing significant ground shaking at the site include the Concord-Green Valley Fault (16 miles west), the Calaveras Fault (19 miles southwest), the Hayward Fault (28 miles southwest), and the San Andreas Fault (46 miles southwest).

Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Ground Rupture

Because the property does not have known active faults crossing the site, and the site is not located within an Earthquake Fault Special Study Zone, ground rupture is unlikely at the subject property.

Ground Shaking

An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the site, similar to that which has occurred in the past. The project would be built using standard engineering and seismic safety design techniques. Building design at the project site would be completed in conformance with the recommendations of the geotechnical investigation required by Mitigation Measure GEO-2 below, as reviewed and approved by the City of Brentwood Building Division. The structures would meet the requirements of applicable Building and Fire Codes, including the 2022 California Building Code (CBC), as adopted or updated by the City of Brentwood. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures would be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Ground Lurching

Ground lurching is a result of the rolling motion imparted to the ground surface during energy released by an earthquake. Such rolling motion could cause ground cracks to form in weaker soils. The potential for the formation of these cracks is considered greater at contacts between deep alluvium and bedrock. Such an occurrence is possible at the site as in other locations in the Bay Area, but based on the site location, the offset is expected to be very minor.

Conclusion

The project site is not within an Alquist-Priolo Special Studies Zone; however, the Brentwood area is located in a seismically active zone. Six active faults are located within an approximate 50-mile radius of the project site. The nearest State of California zoned, active fault is the Greenville fault located about 8.5 miles to the southwest of the project site. Development of the proposed project in this seismically active zone could expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault and/or strong seismic ground shaking. Therefore, a potentially significant impact could result. In accordance with Action SA 1 of the City of Brentwood General Plan, a geotechnical report was prepared by ENGEO for the project, which included a number of earthwork, foundation, and design recommendations to be incorporated into the project design plans and specifications. These recommendations have been incorporated into Mitigation Measure GEO-2. Implementation of the following mitigation measures would ensure the potential impacts are **less than significant**.

Mitigation Measure(s)

Mitigation Measure GEO-1: All project buildings shall be designed in conformance with the current edition of the California Building Code (CBC), as adopted and amended by the City of Brentwood.

Mitigation Measure GEO-2: Prior to final design approval and issuance of building permits for each phase of the project, the project applicant shall incorporate the recommendations included in the Geotechnical Exploration prepared by ENGEO (dated June 5, 2023) into the project design and specifications related to the following topics:

- *Earthwork*
 - *General Site Clearing*
 - *Undocumented Fill Removal*
 - *Over-Optimum Soil Moisture Conditions*
 - *Acceptable Fill*
 - *Engineered Fill Compaction*
 - *Slopes*
 - *Site Drainage*
- *Foundation Design*
 - *Post-Tensioned Mat Foundations*
 - *Exterior Flatwork*
 - *Trench Backfill*
- *Soundwall and Retaining Walls*
 - *Lateral Soil Pressures*

- *Retaining Wall Drainage*
- *Backfill*
- *Foundations*
- *Pavement Design*
 - *Flexible Pavements*
 - *Subgrade and Aggregate Base Compaction*

Mitigation Measure GEO-3: All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design.

Responses a.iii), c): Less than Significant with Mitigation. Soil liquefaction results from loss of strength during cyclic loading, such as that which is imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, and fine-grained sands. The Geotechnical Exploration Report prepared by ENGEO noted the site contained fine-grained clayey soils was encountered during the site visit. For these reasons, ENGEO notes the potential for liquefaction at the site is low during seismic shaking and liquefaction-induced settlements are estimated to be negligible. Additionally, Mitigation Measure GEO-2 requires the implementation of recommendations included in ENGEO's Geotechnical Exploration Report to ensure that all on-site fill soils are properly compacted and comply with the applicable safety requirements established by the CBC to reduce risks associated with unstable soils and excavations and fills, and that any issues with soil corrosive and liquefaction are addressed at the design level. Implementation of Mitigation Measure GEO-2 would reduce impacts to **less than significant** levels related to soil stability, and the potential result in, lateral spreading, subsidence, liquefaction or collapse.

Mitigation Measure(s)

Implement Mitigation Measure GEO-2

Responses a, iv): Less than Significant. The Geotechnical Exploration Report prepared by ENGEO noted the site is relatively flat and that the risk of landslides is considered low to negligible. This is a **less than significant** impact.

Response b): Less than Significant with Mitigation. The project site currently consists of primarily undeveloped land, with exception of the existing single family residence and barn of the 0.4-acre designated remainder parcel. According to the project site plans prepared for the proposed project, development of the proposed project would result in the creation of new impervious surface areas throughout the project site. The development of the project site would also cause ground disturbance of top soil. The ground disturbance would be limited to the areas proposed for grading and excavation, including the residential building pads and drainage, sewer, and water infrastructure improvements. After grading and excavation, and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for

wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Without implementation of appropriate Best Management Practices (BMPs) related to prevention of soil erosion during construction, development of the project would result in a potentially significant impact with respect to soil erosion.

Implementation of the following mitigation measures would ensure the impact is **less than significant**.

Mitigation Measure(s)

Mitigation Measure GEO-4: *Prior to grading permit issuance, the applicant shall submit a final grading plan to the City Engineer for review and approval. If the grading plan differs significantly from the proposed grading illustrated on the approved project plans, plans that are consistent with the new revised grading plan shall be provided for review and approval by the City Engineer.*

Mitigation Measure GEO-5: *Any applicant for a grading permit shall submit an erosion control plan to the City Engineer for review and approval. The plan shall identify protective measures to be taken during construction, supplemental measures to be taken during the rainy season, the sequenced timing of grading and construction, and subsequent revegetation and landscaping work to ensure water quality in creeks and tributaries in the General Plan Area is not degraded from its present level. All protective measures shall be shown on the grading plans and specify the entity responsible for completing and/or monitoring the measure and include the circumstances and/or timing for implementation.*

Mitigation Measure GEO-6: *Grading, soil disturbance, or compaction shall not occur during periods of rain or on ground that contains freestanding water. Soil that has been soaked and wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limit approved by a Soils Engineer. Approval by a Soils Engineer shall be obtained prior to the continuance of grading operations. Confirmation of this approval shall be provided to the Engineering Department prior to commencement of grading.*

Response d): Less than Significant with Mitigation. Expansive soils shrink/swell when subjected to moisture fluctuations, which could cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Building damage due to moisture changes in expansive soils could be reduced by appropriate grading practices and using post-tensioned slab foundations or similarly stiffened foundation systems which are designed to resist the deflections associated with soil expansion. ENGeo's Geotechnical Exploration Report notes that the near surface soils on-site exhibit a high expansion potential. Therefore, because of the potential presence of expansive soils on the site, a **potentially significant** impact could occur. To reduce the potential for damage to the planned structures, ENGeo recommends that all residential structures be supported on properly designed post-tensioned (PT) mat foundations bearing on engineered fill or compacted native soils. In addition, ENGeo recommends that other structural elements, such as pavements and flatwork, be designed for highly expansive soil conditions. Implementation of Mitigation Measure GEO-2 ensures the project applicant

incorporates the above recommendations into the design of the project, as well as a number of other earthwork and design recommendations to ensure the safety and welfare of future project residence. Therefore, this impact is considered **less than significant with mitigation**.

Mitigation Measure(s)

Implementation of Mitigation Measure GEO-2.

Response e): No Impact. The project has been designed to connect to the existing City sewer system and septic systems will not be used. Therefore, **no impact** would occur related to soils incapable of adequately supporting the use of septic tanks.

Response f) Less than Significant with Mitigation. The City's General Plan indicates that known paleontological resources do not exist within the City Planning Area. However, development allowed under the General Plan could result in the discovery and disturbance of previously unknown or undiscovered paleontological resources. Geologic formations, including the Upper Cretaceous marine sedimentary rocks and various Quaternary subunits, that have a moderate to high potential for paleontological resources, are present throughout many areas of the City. Therefore, previously unknown paleontological resources could exist within the project site. Thus, ground-disturbing activity associated with implementation of the proposed project, would have the potential to disturb or destroy such resources. Therefore, the proposed project could result in the direct or indirect destruction of a unique paleontological resource, resulting in a potentially significant impact. Action COS 6e of the City of Brentwood General Plan requires all new development projects to comply with procedures upon discovery of unique paleontological resources. Consistent with Action COS 6e, Mitigation Measure GEO-7 would require ensure impacts related to disturbance of paleontological resources would be less than significant. Implementation of Mitigation Measure GEO-7 would ensure this impact is considered **less than significant**.

Mitigation Measure(s)

Mitigation Measure GEO-7: *Should construction or grading activities result in the discovery of unique paleontological resources, all work within 100 feet of the discovery shall cease. The Community Development Director shall be notified, and the resources shall be examined by a qualified archaeologist, paleontologist, or historian, at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist, paleontologist, or historian shall submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.*

VIII. GREENHOUSE GAS EMISSIONS – WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. Implementation of the proposed project would cumulatively contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O). Sources of GHG emissions include area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr).

The BAAQMD identifies screening criteria for development projects, which provide a conservative indication of whether a development could result in a potentially significant impact associated with GHG emissions. If the screening criterion for GHG is met by a project, an assessment of that project's GHG emissions would be required. The operational GHG screening criterion for a single-family residential development is if the development is less than or equal to 56 dwelling units. Because the proposed project consists of a total of 34 single-family residential dwelling units, a GHG assessment is not required for the proposed project.

Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts associated with the generation of GHG emissions would be considered **less than significant**.

IX. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
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?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant with Mitigation. The following discussion addresses potential hazards associated with existing site conditions of the Project site, as well as the potential use of hazardous materials during operation of the proposed Project.

Existing Site Conditions and Associated Hazards

A Phase I Environmental Site Assessments (Phase I Report), dated June 5, 2023, was prepared for the project site at APN 016-040-004 by ENGE0 (see Appendix E).

As part of the Phase I Report, ENGE0 conducted a review of property records, previous environmental reports, and historical record sources to determine the previous site uses and if there are any environmental liens and/or activity use limitations on the property. ENGE0 also conducted a review of federal, state and local regulatory agency databases provided by

Environmental Data Resources (EDR) to evaluate the likelihood of contamination incidents at and near the site. The database sources and the search distances are in general accordance with the requirements of ASTM E 1527-13. The purpose of the records review was to obtain reasonably available information to help identify Recognized Environmental Conditions (RECs).

The results of the records search and review of regulatory agency records/databases found no documentation of hazardous materials violations or discharge on the property. Furthermore, no contaminated facilities within the appropriate ASTM search distances would be expected to impact the project site. To confirm site conditions, ENGEO conducted a reconnaissance of the project site on May 2, 2023. Results of the site reconnaissance and records searches are as follows:

Site Reconnaissance

No hazardous substances or petroleum products were observed within the Property during the site reconnaissance. No above-ground storage tanks or evidence of existing underground storage tanks were observed during the site reconnaissance. Additionally, no odors, pools of potentially hazardous liquids, drums, polychlorinated biphenyls, pits, pond, lagoons, stained soil, stressed vegetation, solid waste/debris, wastewater, stockpiles/fill material, wells, or septic tanks were found or observed within the project site during the site reconnaissance.

Structures

An existing single family residence and barn are located on the 0.4-acre designated remainder parcel at the southeastern corner of the Project site. The rest of the property consists of a fallow agricultural field. A chicken coop is located at the southern exterior of the barn. The interior of the barn was not available to view during the site reconnaissance.

Hazardous Substance

No hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts that are currently present at the site; and no unidentified substance containers (when open or damaged, and containing unidentified substances suspected of being hazardous or petroleum products) were observed at the Site.

ENGEO concluded that the assessment has revealed no evidence of Recognized Environmental Conditions, Controlled Recognized Environmental Conditions or Historical Recognized Environmental Conditions in connection with the Site. However, due to the project site's historical agriculture use, ENGEO recommended that the interior of the existing barn is viewed prior to demolition to determine if hazardous materials are present, or other environmental conditions.

Proposed Project Uses

The proposed project has limited potential for the routine transport, use, or disposal of hazardous materials. The proposed residential uses would not involve the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Hazardous materials associated with the residential uses would consist mostly of typical household-type cleaning products and fertilizers, which would be utilized in small quantities and in accordance with label instructions.

Conclusion

Development of the proposed project would include the construction of 34 residential units and associated infrastructure. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would not involve the routine transport, use, or disposal of hazardous materials. Additionally, the Phase I prepared for the project site identified no RECs at the project site. However, ENGeo recommends that the interior of the barn be viewed prior to demolition to determine if hazardous materials are present, or other environmental conditions. ENGeo concluded that the findings of the assessment are based on a sufficient level of information obtained at the time of assessment to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. ENGeo notes that the data gap of the identified barn does not affect the conclusions as to the presence or lack of presence of RECs at the Property. Nevertheless, the recommendation has been incorporated into Mitigation Measure HAZ-1. Implementation of the following mitigation measures would ensure the potential impacts are **less than significant**.

Mitigation Measure(s)

Mitigation Measure HAZ-1: *Prior to demolition activities, the project applicant shall incorporate the recommendations included in the Phase I Environmental Site Assessment prepared by ENGeo (dated June 5, 2023) be performed by a qualified geologist.*

Response c): Less than Significant. The nearest existing or proposed schools are Marsh Creek Elementary School, located approximately 150 feet to the northwest across Adams Lane, and the Rock Church, located directly north of the Project site, which hosts the Vineyard Academy private school. As discussed above in Responses a) and b), the proposed project has limited potential for the routine transport, use, or disposal of hazardous materials. The proposed residential uses would not involve the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Therefore, the project would have a **less than significant** impact with respect to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.

Response d): No impact. In preparing the Phase 1 Report (2023), ENGeo performed a search of Federal, State, and local hazardous materials/sites databases regarding the project site and nearby properties. The project site is not listed on the Standard Environmental Record source databases. ENGeo identified four facilities within the ASTM search distances of the project site, including:

- Amber Davis (1900 Lone Oak Road) – RCRA NONGEN / NLR
- Clemons, Earl (1800 Lone Oak Road) - Contra Costa Co. Site List
- Proposed Fourth Middle School Site (2340 Smith Road) - US Brownfields, Finds
- Dutra, Leroy (Smith Lane) – Envirostor database;
- Skipolini Property (7281 Lone Tree Way) – Envirostor database;
- Sand Creek Elementary (Sand Creek Road) – Envirostor database; and
- Chevron, Minnesota Avenue (Cambrian Place) – GeoTracker (Clean-Up Program Site).

Based on the distances to the identified database sites, regional topographic gradient, and the environmental database review findings, ENGEO believes it is unlikely that any of the above-stated database sites pose an environmental risk to the property. Additionally, no orphan properties appear within the ASTM recommended radius search criteria.

The project site has not been identified in any of the hazardous databases, nor is the site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, the proposed project would have **no impact** under this criterion.

Responses e): No impact. The project site is not within an airport land use plan or within two miles of an airport. The nearest airport, Funny Farm Airfield, is a private airfield located approximately 3.0 miles east of the project site. Therefore, implementation of the proposed project would result in **no impact** to this environmental topic.

Response f): Less than significant. The Brentwood General Plan currently designates the proposed project site for residential very low density uses, such as those proposed for the project. Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. Therefore, the impact would be **less than significant**.

Response g): No impact. The site is not located within an area where wildland fires occur. The site is predominately surrounded by existing development that has a low potential for wildland fires. Therefore, **no impact** would occur.

X. HYDROLOGY AND WATER QUALITY – WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;		X		
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		X		
(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; or		X		
(iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant with Mitigation.

During the early stages of construction activities, topsoil would be exposed due to grading and partial leveling of the site. After grading and leveling and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. Performance Standard NDCC-13 of the City’s National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State’s General Construction Permit prior to receipt of any construction permits. The State’s

General Construction Permit requires a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the site. A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project, including post-construction impacts. The City of Brentwood requires all development projects to use BMPs to treat runoff.

In summary, disturbance of the on-site soils during construction activities could result in a potentially significant impact to water quality should adequate BMPs not be incorporated during construction in accordance with SWRCB regulations.

Implementation of the following mitigation measures would reduce the above impact to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure HYD-1: *Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges consistent with the requirements established in 15.52.60(F): Erosion and Sediment Control of the City's Municipal Code. The SWPPP shall be submitted to the City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.*

Mitigation Measure HYD-2: *Prior to the completion of construction, the applicant shall prepare and submit, for the City's review, an acceptable Stormwater Control Operation and Maintenance Plan. In addition, prior to the sale, transfer, or permanent occupancy of the site the applicant shall be responsible for paying for the long-term maintenance of treatment facilities, and executing a Stormwater Management Facilities Operation and Maintenance Agreement and Right of Entry in the form provided by the City of Brentwood. The applicant shall accept the responsibility for maintenance of stormwater management facilities until such responsibility is transferred to another entity.*

The applicant shall submit, with the application of building permits, a draft Stormwater Facilities and Maintenance Plan, including detailed maintenance requirements and a maintenance schedule for the review and approval by the City Engineer. Required routine maintenance shall consist of the following:

- *Limit the use of fertilizers and/or pesticides. Mosquito larvicides shall be applied only when absolutely necessary.*
- *Replace and amend plants and soils as necessary to ensure the planters are effective and attractive. Plants must remain healthy and trimmed if overgrown. Soils must be maintained to efficiently filter the storm water.*

- *Visually inspect for ponding water to ensure that filtration is occurring.*
- *After all major storm events, remove bubble-up risers for obstructions and remove if necessary.*
- *Continue general landscape maintenance, including pruning and cleanup throughout the year.*
- *Irrigate throughout the dry season. Irrigation shall be provided with sufficient quantity and frequency to allow plants to thrive.*
- *Excavate, clean and or replace filter media (sand, gravel, topsoil) to insure adequate infiltration rate (annually or as needed).*

Mitigation Measure HYD-3: *Design of both the on-site drainage facilities shall meet with the approval of both the City Engineer and the Contra Costa County Flood Control and Water Conservation District prior to the issuance of grading permits.*

Mitigation Measure HYD-4: *Contra Costa County Flood Control and Water Conservation District drainage fees for the Drainage Area shall be paid prior to issuance of grading permits to the satisfaction of the City Engineer.*

Mitigation Measure HYD-5: *The applicant/developer shall ensure that the project site shall drain into a street, public drain, or approved private drain, in such a manner that un-drained depressions shall not occur. Satisfaction of this measure shall be subject to the approval of the City Engineer.*

Mitigation Measure HYD-6: *The construction plans shall indicate roof drains emptying into a pipe leading to the project bioswale areas for the review and approval of the City Engineer prior to the issuance of building permits.*

Mitigation Measure HYD-7: *The improvement plans shall indicate concentrated drainage flows not crossing sidewalks or driveways for the review and approval of the City Engineer prior to the issuance of grading permits.*

Response b): Less than Significant. The City provides domestic, potable water to its residents using both surface water and groundwater resources. The City has seven active groundwater wells, which provided approximately 30 percent of the potable water supplied during 2010. Brentwood is located within the East Contra Costa Subbasin (ECC Subbasin) of the San Joaquin Valley Groundwater Basin. In February 2019, the Department of Water Resources approved dividing the Tracy Subbasin of the San Joaquin Valley Groundwater Basin into two subbasins (i.e., East Contra Costa Subbasin and the new Tracy Subbasin), thereby creating a separate groundwater basin entirely within Contra Costa County. While the project would create new impervious surface areas on portions of the 9.6-acre project site, the ECC Subbasin comprises 107,596 acres (168 square miles) underlying all or portions of the Cities of Antioch, Oakley, Brentwood, the Town of Discovery Bay and the communities of Bethel Island, Byron and Knightsen. Therefore, recharge of the groundwater basin within which the project site is located comes from many sources over Contra Costa County.

The new impervious surfaces associated with the project would not cause a substantial depletion of recharge within the ECC Subbasin. The proposed project is consistent with the General Plan land use designation for the site, as the potential water demand of future site development was

accounted for and considered in the General Plan EIR and the most recent Urban Water Management Plan. As demonstrated in these documents, the City has adequate supply availability to meet future buildout water demands. Additionally, as noted in the City of Brentwood's 2020 Urban Water Management Plan, the creation of the ECC Subbasin would not negatively affect sustainable groundwater use in the area and does not affect existing or historic water supply coordination with local agencies in the subbasin. Therefore, implementation of the project would not cause a substantial depletion of recharge within the ECC Subbasin.

As discussed above, the City of Brentwood has adequate water supply to meet the demands of the proposed project, as well as future anticipated development allowed under the Brentwood General Plan, as described in greater detail in *Section XIX, Utilities and Service Systems*. The project itself does not include installation of any wells, but would include eventual connections to existing City of Brentwood water infrastructure, including connection to the City's potable water distribution system. The project will also be required to connect to the non-potable water system and provide non-potable irrigation to the bioretention basin, Parcel A. Additionally, the City is currently in the process of developing and expanding infrastructure for non-potable water and will require the applicant to provide stubs to Parcel A for future connection.

Overall, the proposed project would result in a **less than significant** impact with respect to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Responses c.i), c.ii), c.iii, e): Less than Significant with Mitigation

When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed. Buildings, sidewalks, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding if adequate storm drainage facilities are not provided.

The project would create approximately 258,042 square feet of new impervious surface on a site that previously contained zero square feet of impervious surface area, with exception of existing impervious surface of the existing single family residence and barn of the 0.4-acre designated

remainder parcel. The project would be served by existing storm drainage infrastructure. Wastewater, water, and storm drainage lines would be connected via existing lines along the Adams Lane right-of-way. The project will include an onsite stormwater treatment area and drainage management areas to manage water runoff. Stormwater treatment and drainage management would include a bioretention area and grading infrastructure strategies that will ensure adequate drainage. Therefore, project development would not result in a substantial increase in the rate of amount of surface runoff in a manner which would result in flooding, nor would it create or contribute to runoff water that would exceed the capacity of existing or planned stormwater drainage system.

For the proposed project, a bio-retention area is proposed that would channel site stormwater to a catch basin at the northeast corner of the site. Flows will percolate through the basin before being released into the storm drain system.

A long-term maintenance plan is needed to ensure that all proposed stormwater treatment BMPs and facilities function properly. Should the proposed water quality treatment facilities not be maintained properly, a potentially significant impact could occur with respect to creating or contributing runoff water that would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff.

If left uncontrolled, the operation of the proposed project could result in the potential for pollutants to wash down and potentially drain into Marsh Creek. However, all municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide NPDES permit. Known as the “C.3 Standards,” new development and redevelopment projects that create or replace 10,000 or more square feet of impervious surface area must contain and treat stormwater runoff from the site. The proposed project is a C.3 regulated project and is required to include appropriate site design measures, source controls, and hydraulically-sized stormwater treatment measures. These measures would include a bioretention area to treat stormwater runoff before allowing it to proceed into the drainage management area. Compliance with C.3 standards would ensure that the implementation of the proposed Project would not conflict or obstruct a water quality control plan. Additionally, as noted in the City of Brentwood’s 2020 Urban Water Management Plan, the creation of the ECC Subbasin would not negatively affect sustainable groundwater use in the area and does not affect existing or historic water supply coordination with local agencies in the subbasin and therefore the proposed Project would not conflict or obstruct a sustainable groundwater management plan.

The proposed project would not substantially alter the existing drainage pattern of the site or the area. Therefore, with implementation of the following mitigation measure, the proposed project would result in **less than significant** impacts related to the alteration of the existing drainage pattern of the site or area, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

*Mitigation Measure(s)**Implement Mitigation Measure HYD-2*

Responses c.iv): Less than Significant. According to the Flood Insurance Rate Map Panel: 06013C0354G, the project site is not located within a designated flood zone. Therefore, a **less than significant** impact would result from implementation of the proposed project with respect to placing structures within a 100- year floodplain, which would impede or redirect flood flows.

Response d): Less than Significant. Tsunamis are defined as sea waves created by undersea fault displacement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches the shoreline, a high swell of water breaks and washes inland with great force. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period of 1868-1968. Maximum wave height recorded at the Golden Gate tide gauge (where wave heights peak) was 7.4 feet. The available data indicate a standard decrease of original wave height from the Golden Gate to about half original wave height on the shoreline near Richmond, and to nil at the head of the Carquinez Strait. As Brentwood is several miles inland from the Carquinez Strait, the project site is not exposed to flooding risks from tsunamis and adverse impacts are not expected to result. This is a **less than significant** impact.

A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, whose destructive capacity is not as great as that of tsunamis. Seiches are known to have occurred during earthquakes, but none have been recorded in the Bay Area. In addition, the project is not located near a closed body of water. Therefore, risks from seiches and adverse impacts are not expected to result. This is a **less than significant** impact.

XI. LAND USE AND PLANNING - Would the project:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?				X
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?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): No Impact. As noted in the General Plan, the City of Brentwood has planned for orderly, logical development that supports compatibility among adjacent uses. The General Plan goals seek to retain the character of existing communities and ensure that future land uses are compatible with existing uses. Currently, there is one single family home on the site, which will be retained, and a single barn, which will be removed. The site is surrounded by residential neighborhoods. The proposed project, which includes residential development, would not physically divide an established community due to the nature of the site, and its location within city limits. Therefore, the project would have **no impact** related to physically dividing an established community.

Responses b): Less than Significant. The Brentwood General Plan identifies the project site for Residential Very Low Density land uses. The Residential Very Low Density land use requires densities between 1.1 and 3 du/ac. The proposed project consists of the development of 34 single-family residential units on 9.6 acres, which results in approximately 3.54 du/ac, which is within the General Plan density requirements (with application of the State-mandated Density Bonus, as described in greater detail in the project description). Therefore, the proposed project is consistent with the existing General Plan land use designation. The potential for the project to result in a significant impact due to a conflict with policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect is addressed throughout this Initial Study, on a topic by topic basis. As demonstrated in this report, the project would have a **less than significant** impact related to conflicting with applicable land use plans, policies, regulations, or surrounding uses.

XII. MINERAL RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?			X	
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?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. The 2014 Brentwood General Plan Update EIR does not identify significant mineral resources within the area. In addition, Figure 3.6-6 in the 2014 Brentwood General Plan Update EIR does not show an existing active oil and gas well on the project site. Therefore, the impact regarding the loss of availability of a known mineral resource that would be of value to the region, as well as 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, would be **less than significant**.

XIII. NOISE -- WOULD THE PROJECT RESULT IN:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X

BACKGROUND

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.

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 (Leq), 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 Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise. The day/night average level (Ldn) 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 Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

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.

Noise Environment

The Project is located on primarily undeveloped land, with exception of the existing house and barn on the designated remainder parcel, between Lone Oak Drive to the east and Adams Lane to the west. Grant Street is approximately 300 feet to the north of the site. Marsh Creek Elementary School is adjacent to the site, across Adams Lane to the northwest. The Rock Church is also adjacent to the site between it and Grant Street to the north. A similar, previously-approved residential development, currently under construction, is immediately south.

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise resulting from the project:

A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the City of Brentwood General Plan. Specifically, based upon Table N-1 of the City of Brentwood General Plan, residential uses are considered normally acceptable in ambient noise environments up to 60 dBA L_{dn} , and conditionally acceptable in noise environments up to 75 dBA L_{dn} . However, policy N-1 limits exterior noise levels to 65 dBA L_{dn} for new residential uses adjacent to State Route 4 corridor, major arterials within Brentwood, and noise from the UPRR. The City of Brentwood also establishes an interior noise level criterion of 45 dBA L_{dn} for residential uses.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

An Acoustical Study, dated November 3, 2023, was prepared by Charles M. Salter Associates (Salter) for the proposed project in order to determine in detail the potential for noise impacts to persons on the Project site (see Appendix F). The purpose of the study was to quantify the existing and future noise levels at the Project site and compare the noise levels to applicable standards. A summary of the noise levels is provided in Table 4.

Table 4: Summary of Existing Background Noise Measurement Data

<i>Street Name</i>	<i>Estimated Sound Level (dB)</i>	<i>Distance</i>	<i>Major Noise Sources</i>
Lone Oak Road	62	25 feet	Car traffic, garbage trucks
Grant Street	65	25 feet	Car Traffic, Sunday Church, kid activities
Adams Lane	70	25 feet	Kids at recess, school intercom, groundskeepers, parents picking up kids, car traffic

Source: Charles M. Salter Associates – 2023

Based on the General Plan EIR data and City-provided volumes, Salter calculated the expected DNL at the various facades and elevations. Because Salter did not yet have projected future traffic volumes for the roadways, they have added 1 dB to the measured noise level to account for future traffic increases⁵.

Operational Noise Increases at Existing Sensitive Receptors

The proposed project is located in an area consisting predominately of residential, public/quasi-public, and school uses. The project involves the development of 34 detached single-family homes and associated infrastructure. Residential land uses do not generate significant noise levels beyond those associated with typical residential activities (lawn mowers, car doors, voices, etc.), which would be compatible with the adjacent existing residential uses.

Traffic Noise Increases at Existing Sensitive Receptors

Traffic generated by the proposed project has the potential to contribute to roadway noise levels in the vicinity of the project site and throughout other areas of the City. As described above, the proposed Project results in a density of 3.54 units per gross acre, which would be above the defined General Plan R-VLD density of 1.1 to 3.0 units per gross acre. Despite a slight increase in density beyond the defined General Plan land use density of the project site, the project remains consistent the General Plan Land Use designation for the project site due to adherence to state density bonus allowances. Moreover, the proposed development falls well within cumulative buildout projections of the City of Brentwood and the rate of growth anticipated in the buildout of the General Plan since the adoption of the General Plan Environmental Impact Report. Given the fact that the 2014 General Plan designated the project site for R-VLD development, and the proposed project is consistent with the residential densities allowable with the R-VLD designation (with the addition of a state-mandated Density Bonus), the increase in traffic noise resulting from additional vehicle traffic generated from the proposed project has already been evaluated and considered in the General Plan Update EIR analysis. In addition, as discussed further in section *XVII Transportation*, the number of trips associated with the proposed project are not sufficient based on requirements adopted by the Contra Costa Transportation Authority

⁵ The California Department of Transportation assumes a traffic volume increase of three-percent per year, which corresponds to a 1 dB increase in DNL over a ten-year period

(CCTA) in July 2020 to mandate a traffic study. Therefore, no traffic study was required for the project and no substantial increases in traffic noise are predicted.

Traffic Noise at New Sensitive Receptors – Interior Areas

Typical single-family residential construction with dual glazed windows provide about 25 dBA of noise reduction with windows closed. Therefore, standard dual glazed windows would likely suffice to reduce noise to the City’s goal in most instances. Using the drawings from Shea Homes dated December 2022 from the applicant, Salter calculated the window and exterior door sound transmission class (STC) ratings of up to STC 28 would be needed to meet the city’s indoor DNL 45 dB criterion. However, the exact window and door sound ratings would depend on the final design of the buildings, including the size of windows/doors and composition of exterior walls. In addition, most dwelling units would need to have windows in their closed position to meet the indoor noise standard. Therefore, the dwelling units would need an air conditioning or ventilation system in order to provide a habitable environment and meet current State Building Code ventilation requirements. Impacts resulting from interior noise levels exceeding the threshold of significance due to exterior traffic noise would be considered **potentially significant**.

Traffic Noise at New Sensitive Receptors – Exterior Areas

Policy N 1-2 of the City’s Noise Element requires that new single-family residential projects meet acceptable exterior noise levels. According to the City, a Ldn of 60 dBA or less is considered “normally acceptable.” According to Salter’s Acoustical Report, noise levels at the backyards closest to Adams Lane and Grant Street are estimated to reach as high as 70 dB and 65 dB, respectively. These levels are considered to be “Conditionally Acceptable.” Therefore, exterior noise control measures would be required to ensure that future residents are not exposed to exterior noise levels exceeding City standards.

To reduce noise levels, Salter recommended a continuous six-foot-high solid fencing with a minimum surface weight of 3 psf (e.g., ship-lapped 1x wooden boards, marine-grade plywood, CMU, etc.) be built as a barrier to block noise along the backyards of the homes closest to Adams Lane and Grant Street. Implementation of the six-foot high perimeter wall would reduce noise levels to “Normally Acceptable” conditions ensuring that the future residences would not be exposed to exterior noise levels exceeding City standards.

Construction Activities

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Most of the building construction would occur at distances of 50 feet or greater from the nearest residences, school, or church facilities adjacent to the project site. Construction noise associated with streets would be similar to noise that would be associated with public works projects, such as a roadway widening or paving projects.

Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Construction activities are conditionally exempt from the Noise Ordinance during certain hours. Construction activities are exempt from the noise standard from 6 AM to 8 PM Monday through Friday, and from 7 AM to 8 PM on Saturdays and Sundays.

Although construction activities are temporary in nature and would likely occur during normal daytime working hours, construction-related noise could result in sleep interference at existing noise-sensitive land uses in the vicinity of the construction if construction activities were to occur outside the normal daytime hours. Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered **potentially significant**.

Conclusion

Implementation of the following mitigation measures would ensure that future residences at the project site would not be subject to exterior and interior noise levels in excess of the City's standards, and ensure that the project would not result in the generation of significant construction noise impacts, resulting in a **less than significant** impact.

Mitigation Measure(s)

Mitigation Measure NOI-1: *Prior to issuance of buildings permits for any residential unit, the construction drawings shall include a suitable form of forced-air mechanical ventilation for each unit, as determined by the Brentwood Building Official, so that windows could be kept closed at the occupant's discretion to control interior noise and achieve the City's interior 45 dBA Ldn noise standard.*

Mitigation Measure NOI-2: *Prior to issuance of building permits, a qualified acoustical consultant shall review the final set of construction documents to calculate expected interior noise levels as required by the City of Brentwood to confirm that the design results in interior noise levels reduced to 45 dBA CNEL or lower. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City along with the building plans and approved prior to issuance of a building permit. Potential measures could include, but would not be limited to, incorporation of noise insulating building materials such as windows or exterior doors with STC ratings of up to STC 28. The exact window and door sound ratings would depend on the final design of the buildings including the size of windows/doors and composition of exterior walls.*

Mitigation Measure NOI-3: *Prior to approval of project improvement plans, the improvement plans for the proposed project shall show a perimeter wall in the locations recommended by the Environmental Noise Study prepared by Salter, Inc. (dated November 3, 2023), per the approval of the City Engineer. Other types of barrier may be employed but shall be reviewed by an acoustical engineer prior to being constructed to ensure compliance with General Plan noise level requirements.*

Mitigation Measure NOI-4: *Construction activities shall be limited to the hours set forth below:*

Monday-Friday 7:00 AM to 6:00 PM

Saturday 8:00 AM to 5:00 PM

Construction shall be prohibited on Sundays and City holidays. These criteria shall be included in the grading plan submitted by the applicant/developer for review and approval of the Community Development Director prior to issuance of grading permits. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the City Engineer.

Mitigation Measure NOI-5: *The project contractor shall ensure that the following construction noise BMPs are met on-site during all phases of construction:*

- *All equipment driven by internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed “package” equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment.*
- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- *The construction contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited.*
- *Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Construction site and access road speed limits shall be established and enforced during the construction period.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *Project-related public address or music systems shall not be audible at any adjacent receptor.*
- *Adjacent neighbors, including both residential and nonresidential properties, located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *The construction contractor shall designate a “noise disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable*

measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

Construction noise BMPs shall be included in the grading plan submitted by the developer for review and approval by the Community Development Director prior to grading permit issuance.

Response b): Less than Significant. Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. The threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and roadway construction occur.

Sensitive receptors that could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 25 to 50 feet or further from the project site. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. Table 5 shows the typical vibration levels produced by construction equipment.

Table 5: Vibration Levels for Various Construction Equipment

<i>Type of Equipment</i>	<i>Peak Particle Velocity at 25 feet (inches/second)</i>	<i>Peak Particle Velocity at 50 feet (inches/second)</i>	<i>Peak Particle Velocity at 100 feet (inches/second)</i>
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.

Table 5 data indicates that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors that could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. As a result, short-term groundborne vibration impacts would be considered **less than significant** and no mitigation is required.

Response c): No Impact. The project site is not located near an existing airport and is not within an existing airport land use plan. The nearest airport, Funny Farm Airfield, is a private airfield located approximately 3.0 miles east of the project site. Although aircraft-related noise could occasionally be audible at the project site, noise would be extremely minimal. Exterior and interior noise levels resulting from aircraft would be compatible with the proposed project. Therefore, there would be **no impact**.

XIV. POPULATION AND HOUSING -- Would the project:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project would directly result in population growth in the area through the proposed construction of 34 single family dwelling units, generating approximately 109 additional residents (based on 3.22 persons per household⁶). As described above, the proposed Project results in a density of 3.54 units per gross acre, which would be above the defined General Plan R-VLD density of 1.1 to 3.0 units per gross acre. Despite a slight increase in density beyond the defined General Plan land use density of the project site, the project remains consistent the General Plan Land Use designation for the project site due to adherence to state density bonus allowances. Moreover, the proposed development falls well within cumulative buildout projections of the City of Brentwood and the rate of growth anticipated in the buildout of the General Plan since the adoption of the General Plan Environmental Impact Report. Therefore, resulting growth from the proposed project is consistent with the General Plan Land Use designation for the project site, and would fall within the anticipated population growth levels analyzed in the Brentwood General Plan EIR (2014). As discussed below, the utility systems (e.g., water and sewer) serving the project could accommodate the additional demands created by the project and the project includes infrastructure improvements needed to connect the project to these existing utility systems. In addition, as discussed below in Section XV (Public Services), public service providers such as police and fire, could accommodate the additional demands for service created by the project. As a result, the impact would be **less than significant** with respect to inducing population growth because the demands resulting from said growth could be accommodated by existing utility systems and service providers.

Responses b): No Impact. There is one existing home located on the project site, which will be retained. There is **no impact**.

⁶ City of Brentwood. 2014 Brentwood General Plan Update EIR [pg. 3.10-32]. July 22, 2014.

XV. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?		X		
d) Parks?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project is located within the jurisdiction of the Contra Costa County Fire Protection District (CCCFPD). In addition to Administration, Communications, Emergency Medical Services (EMS), Fire Prevention, Support Services, and Training Division, the Operations Division of the CCCFPD staffs 19 engine companies, 5 truck companies, and a Shift Training Captain/Safety Officer daily. The CCCFPD maintains 24 fully staffed stations, and 2 more stations staffed with paid-on-call Reserve Firefighters. Minimum daily staffing is 77 personnel. The 24 on-duty companies are trained and regularly cross-staff numerous specialty response units including 18 wildland fire apparatus, 3 rescue units, a trench rescue unit, a fire rescue boat, and a mobile breathing air support unit. The City of Brentwood is served primarily by Station 92, located at 201 John Muir Parkway, Brentwood. Station 92 is located roughly 4 miles southwest of the project site.

The Brentwood General Plan includes nine policies and four actions (Policies CSF 1-1 through 1-3, and 4-1 through 4-6, and Actions CSF 1a, and 4a-c) to ensure that fire protection services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development pays their fair share of services. Among the action items included in the Brentwood General Plan that are applicable to the project are:

- Action CSF 1a: Requiring new development to pay their fair share fees of the cost of on and off-site community services and facilities;
- Action CSF 4a: Continue to enforce the California Building Code and the California Fire Code to ensure that all construction implements fire-safe techniques, including fire resistant materials, where required;

- Action CSF 4b: As part of the City’s existing development review process for new projects, the City would continue to refer applications to the ECCFPD (now CCCFPD) for determination of the project’s potential impacts on fire protection services. Requirements would be added as conditions of project approval, if appropriate.

The project would comply with these General Plan actions. On July 1, 2022 East Contra Costa Fire Protection District (ECCFPD) merged with CCCFPD. Prior to the merger the City collected Fire Development Impact Fees. All Fire Development Impact Fee funds and assets were transferred to ECCFPD prior to the merger, and the City ceased collecting the Fire Development Impact Fee. Although the City has a Fire Development Impact Fee in effect, pursuant to City Council Resolution 2020-101, payment of the CCCFPD Development Impact Fee will provide a credit against the City’s Fire Development Impact Fee for each residential unit or non-residential building. If the City’s Fire Development Impact Fee for a particular development is higher than the amount of the CCCFPD Development Impact Fee, payment of the CCCFPD Development Impact Fee shall be deemed to fully satisfy payment of the City’s Fire Development Impact Fee⁷. The purpose of the Fire DIF is to provide necessary funding for fire facilities required to serve new development in the City through build-out as defined by the General Plan. The transfer of Fire Development Impact Fee funds to CCCFPD will continue to support this purpose. The project would be required to pay for single-family fire impact fees that support the construction of new fire facilities per new single-family residence prior to building permit issuance. Furthermore, as required by Section 17.635.030 of the Brentwood Municipal Code, the project would be required to annex into a community facilities district (CFD) that imposes a special tax for emergency medical and fire protection services. Participation in such CFD would help avoid impacts related to additional demand for emergency medical and fire protection services resulting from buildout of the project. All project accesses would likewise be designed to City standards that accommodate turning requirements for fire trucks, facilitating entry by emergency vehicles into the project site. In addition to providing additional revenue for fire facilities, the project would be required to comply with all CCCFPD standard conditions of approval related to provision of fire flow, roadway widths, etc. The project is also subject to the City of Brentwood residential life safety sprinkler requirements set forth in Section 15.64.010 of the Municipal Code.

CCCFPD currently has adequate capacity to provide fire protection services for the proposed project without inducing demand for an additional fire station⁸. Additionally, the 2014 Brentwood General Plan Update EIR concluded implementation of the General Plan would result in a less than significant impact related to the provision of public services throughout the City.⁹ The project is consistent with the General Plan designation for the site; therefore, the additional demand for fire protection services resulting from the proposed project has already been

⁷ City of Brentwood. *Development Impact Fee Report* [pg. 8 through 9]. June 30, 2023.

⁸ Personal Communication with Steve Aubert, City of Brentwood Fire Department Fire Marshal. February 24, 2020.

⁹ City of Brentwood. *2014 Brentwood General Plan Update EIR* [pg. 3.12-23]. July 22, 2014.

evaluated in the General Plan EIR. Given the project’s compliance with the relevant General Plan policies and actions related to fire service, the impact from the proposed project, consistent with the General Plan EIR determination, would be **less than significant** regarding the need for the construction of new fire protection facilities which could cause significant environmental impacts.

Response b): Less than Significant. The City of Brentwood Police Department would provide police protection services to the project site. Currently, the Brentwood Police Department provides law enforcement and police protection services throughout the City. Established in 1948, the Brentwood Police Department is a full service law enforcement agency that is charged with the enforcement of local, State, and Federal laws, and with providing 24-hour protection of the lives and property of the public. The Police Department functions both as an instrument of public service and as a tool for the distribution of information, guidance, and direction.

The Brentwood Police Department services an area of approximately 14 square miles. As of November 2022, the Department had 72 sworn police officers and another 31 civilian support staff. In addition to the permanent staff, the Department had approximately 20 volunteers who are citizens of the community and assist with day to day operations.

The department is located at 9100 Brentwood Boulevard, approximately 2.54 miles southeast from the project site.

The Brentwood General Plan includes eight policies and five actions (Policies CSF 1-1 through 1-3, and 3-1 through 3-5; and Actions CSF 1a and 3a-d) to ensure that police protection services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development pays their fair share of services. Among the policies and actions items included in the Brentwood General Plan that are applicable to the project are:

- Policy CSF 3-4: Emphasize the use of physical site planning as an effective means of preventing crime. Open spaces, landscaping, parking lots, parks, play areas, and other public spaces should be designed with maximum feasible visual and aural exposure to community residents.
- Policy CSF 3-5: Promote coordination between land use planning and urban design through consultation and coordination with the Police Department during the review of new development applications.
- Action CSF 1a: Requiring new development to pay their fair share fees of the cost of on and off-site community services and facilities;
- Action CSF 3c: As part of the development review process, consult with the police department in order to ensure that the project design facilitates adequate police staffing and that the project addresses its impacts on police services.

The project applicant will be required to comply with these policies and actions. In addition, the City also has Community Facilities Districts (CFD) that generate special tax revenue that can be used for a variety of services, and that are currently being allocated primarily towards public

protection and safety provided by the Brentwood Police Department. These funds amount to approximately \$7,384,407 in revenue as a result of the annual CFD Special Tax¹⁰. These funds could be used to fund new facilities, and maintain existing facilities and equipment, and pay for salaries and benefits.

Therefore, consistent with the General Plan EIR conclusion related to governmental facility impacts resulting from General Plan build-out, the project would have a **less than significant** impact regarding the need for the construction of new police protection facilities that could cause significant environmental impacts.

Response c): Less than Significant with Mitigation. The project site is located within the Liberty Union High School District (LUHSD) and the Brentwood Union School District (BUSD).

LUHSD includes four comprehensive high schools: Liberty High, Freedom High, Heritage High, and Independence High. In addition, the LUHSD includes one continuation high school, La Paloma. According to the LUHSD, the five high schools have a capacity of 6,840. With a total enrollment of 8,233 students, the high schools exceed capacity by 1,393 students. According to a Facility Needs Assessment prepared for the LUHSD in April of 2016, the most recent such assessment available, LUHSD student generation factor for grades nine through 12 is 0.1436 for single-family detached units. With 34 single-family units, the project is expected to generate approximately 5 new high school students. Available capacity does not exist to accommodate these additional students.

The BUSD consists of eight elementary schools and three middle schools. In 2022-2023 school year, the BUSD had a K-8th grade enrollment of 6,152 with K-5th capacity of 6,391. The District's 2023 6-8th grade enrollment is 3,283 with a 6-8th grade capacity of 2,624¹¹. Therefore, the District has excess capacity for another 239 K-5th, but is over capacity for grades 6-8th by approximately 659 students. Utilizing the District's current Student Generation Rates, the 34 units proposed for the proposed project would introduce approximately 11 new K-6th students ($34 * 0.32$) to the District and approximately 4 new 7-8th grade students ($34 * 0.12$). Available capacity exists to accommodate K-5th students anticipated from the project, but not the new 6-8th grade students.

Because the LUHSD is already over capacity; and the BUSD is over capacity for grades K-5th, adding students to the districts may result in further overcrowding and compromising programs. Therefore, the project would have a potentially significant impact regarding the need for the construction of new school facilities that could cause significant environmental impacts.

Under state law, the project would be subject to school facility impact fees to mitigate any potential project-related increases in student enrollment. The LUHSD and BUSD have established the appropriate fee for all development in the City of Brentwood. This fee established by the Districts, following the requirements of State law, is the fair share funding that the City will

¹⁰ City of Brentwood. *2020/21 Combined Community Facilities District Annual Report for Special Taxes Levied*. July 18, 2021. Page 3.

¹¹ Cooperative Strategies. May 2020. Residential and Commercial/Industrial Development School Fee Justification Study: Brentwood Unified School District.

require of this development, if it is approved. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “[...] legislative or adjudicative act...involving ...the planning, use, or development of real property” (Government Code 65996(b)). Pursuant to Section 65995(h) of the California Government Code, the payment of school fees is considered full and complete mitigation for impacts on school facilities. Consistent with State law, implementation of the following mitigation measure would reduce the impacts to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure PUB-1: *Prior to building permit issuance for any residential development, the developer shall submit to the Community Development Department proof that the appropriate school mitigation fees have been paid pursuant to Proposition 1A/SB 50.*

Response d): Less than Significant with Mitigation. The proposed project includes the construction of 34 residences. Applying the Brentwood standard of 3.22 residents per dwelling unit, the proposed project would create housing for approximately 109 additional residents. The Brentwood General Plan calls for 5 acres of park per 1,000 residents. The proposed project would thus require approximately 0.55 acres of park space for these additional residents. However, the proposed project does not include active park space as envisioned in the General Plan. As the project consists of less than 50 residential units, the applicant may pay a fee in lieu of such park land dedication, per Brentwood Municipal Code Section 16.150.030. Therefore, the project could result in a **potentially significant** impact.

Implementation of the following mitigation measure would ensure that the City requirements are satisfied, resulting in a **less than significant** impact.

Mitigation Measure(s)

Mitigation Measure PUB-2: *Prior to building permit issuance, the project applicant shall pay the proportional required park in-lieu fees as determined by the Parks and Recreation Department and the Community Development Department, in accordance with the City’s Development Fee Program and Brentwood Municipal Code Section 16.150.020.B.*

XVI. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		X		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant with Mitigation. As explained above in Question ‘d’ of the Public Services section, the proposed project does not include sufficient park land acreage for the 34 residential units. As a result, and as allowed by Brentwood Municipal Code Section 16.150.030, in-lieu fee payments would be required to meet the City’s park land requirements. Therefore, the proposed project’s impact related to the provision of adequate recreational facilities would be **potentially significant**.

Implementation of the following mitigation measure would reduce the impact to a **less than significant** level.

Mitigation Measure(s)

Implementation of Mitigation Measure PUB-2.

XVII. TRANSPORTATION -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a), b): Less than Significant The proposed new public street internal to the project will be a loop road that takes access from two locations off the internal street for Tract 9532, Orchard Grove, and will share the two existing access points to Adams Lane. Pursuant to the requirements of the City’s Engineering Department, Adams Lane will be widened along the project frontage in a manner to be determined with City of Brentwood Engineering and Traffic divisions. This route generally has two lanes in each direction, turn lanes at intersections and sidewalks. The posted speed limit is 25 mph. As noted in the Project description, the Project will also require a maintenance access connection to Lone Oak Road for the City to maintain the proposed detention basin. The project may also propose emergency vehicle access roads, or other controlled access points to the project site from Lone Oak Road if deemed necessary by the City for emergency services, City maintenance access, or other life safety accommodations. Although the project is not loading houses on Lone Oak Road, the project may dedicate property for the potential future widening of Lone Oak Road as an irrevocable offer of dedication for public road purposes. No other improvements are proposed along Lone Oak Road and the designated remainder parcel except for those necessary to provide for storm drainage, dry utility undergrounding, and a buffer between the detention basin and existing Lone Oak Road pavement.

The project would not have any detrimental effects on the existing and planned bicycle and pedestrian network in Brentwood, nor would it conflict with any plans or planned improvements to these systems. The project is a single family neighborhood largely surrounded by similar residential uses, and as such, the vast majority of people travelling to and from the site would travel in their vehicles. However, it is possible that residents would travel to and from via bicycle or on foot.

Sidewalks exist on the southbound travel lane on Adams Lane, immediately west of the project site. Enhanced street frontage improvements will be provided along Adams Lane that will facilitate pedestrian continuity. As such, the project would not substantially degrade pedestrian conditions.

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of vehicle miles traveled (VMT) attributable to a project is the most appropriate measure of transportation impacts. While changes to driving conditions that increase intersection delay are an important consideration for traffic operations and management, the method of analysis does not fully describe environmental effects associated with fuel consumption, emissions, and public health. Section 15064.3(3) changes the focus of transportation impact analysis in CEQA from measuring impact to drivers to measuring the impact of driving.

A VMT Analysis, dated October 20, 2023, (see Appendix G) was prepared for the project by TJKM Transportation Consultants (TJKM). The purpose of the VMT Analysis is to provide an analysis of the expected VMT that would be generated by the proposed residential development. As the City of Brentwood does not currently have an adopted policy document outlining VMT standards, study requirements, or methodology for conducting project VMT analysis, TJKM has based this analysis on requirements adopted by the CCTA in July 2020 as an amendment to the Growth Management Plan (GMP).

TJKM developed estimated project trip generation for the proposed project based on published trip generation rates from the ITE publication Trip Generation Manual (11th Edition). TJKM used published trip rates for the ITE land uses Single Family Detached Housing (ITE Code 210) and Single Family Attached Housing (ITE Code 215) for this project. The project is expected to generate 362 daily trips, including 27 a.m. peak hour trips (7 inbound trips, 20 outbound trips) and 34 p.m. peak hour trips (21 inbound trips, 13 outbound trips). Peak hour trips refer to the volume of traffic during the busiest times of the day, typically during morning and evening rush hours, whereas total daily trips encompass the entire amount of traffic generated over a full day.

PROJECT VEHICLE MILES TRAVELED

The OPR Technical Advisory (December 2018) provides guidance to analysts and local jurisdictions for implementing VMT as a metric for determining the transportation impact for land use projects. The OPR guidelines state that for analysis purposes, "VMT" refers to automobile VMT, specifically passenger vehicles and light trucks. Heavy truck traffic is typically excluded. The adopted CCTA VMT analysis methodology provides specific procedures and thresholds for land use projects within Contra Costa County.

Screening Criteria

The CCTA VMT methodology provides standards for identifying which projects should be expected to prepare a detailed VMT analysis, based on characteristics such as their size, mix of uses, proximity to transit, or location. These screening criteria are used to quickly determine if a proposed project should be expected to prepare a detailed VMT analysis, as screened out projects

can be presumed to have a less-than-significant impact on VMT. Projects are considered small if they would construct no more than 20 residential units or 10,000 sq. ft. of non-residential space. The project would construct 34 residential units, exceeding the screening criteria for size. Existing residential VMT in the project location must therefore be established in order to determine whether the project is located in a low VMT area, as other screening criteria do not apply. If a project does not meet any screening criteria, it would typically be required to prepare a detailed VMT analysis.

Under the CCTA VMT methodology, a low VMT area is defined as a city or unincorporated portion within one of the CCTA subregions where home-based VMT per resident is at least 15 percent below the countywide or where the commute VMT per employee is at least 15 percent below the regional average. A conservative reading of the methodology would indicate that when the citywide average VMT per resident is above the countywide average, projects cannot be screened out based on location, and a VMT analysis must be completed. In such cases, the appropriate significance thresholds based on countywide or regional average would be applied. The methodology also permits the applicable average VMT for the subject municipality or unincorporated CCTA subregion to be utilized instead of the countywide or regional average, if it is less stringent.

Under the residential use classification outlined in the OPR Technical Advisory, and the CCTA VMT methodology, home-based VMT includes all trips that begin or end at a residence, and home-work (commute) VMT includes trips between a residence and an employment-generating use. The CCTA travel demand model generates weekday VMT per capita by traffic analysis zone (TAZ) within Contra Costa County and throughout the Bay Area, for home-based VMT per resident and commute VMT per employee. For the year 2020, the Contra Costa County average home-based VMT per capita generated by the CCTA travel demand model is 19.78. The Brentwood average is 29.6, and the East Subarea average is 24.9, both higher than the countywide average. Using a conservative reading of the CCTA screening criteria, the proposed project is not located in a low-VMT area and would require a VMT analysis to determine if it has a significant VMT impact.

Existing VMT Generated Per Resident

The project site east of Adams Lane is within the boundaries of two existing TAZs (#30327 and #30328), with the majority of the project area located within TAZ #30327. There is a small amount of geographic overlap between the project boundaries and the other TAZ, and it is expected that this is a minor misalignment between TAZ boundaries and actual roadways, and that the site would be entirely assigned to TAZ #30327 in future model revisions. Within these two TAZs, the majority of residential units are part of subdivisions similar to the proposed project: predominantly single family homes, with a small number of duplexes. Consistent with the analysis of Orchard Grove phase I, TJKM used a weighted average of both TAZs to establish the existing residential VMT at the project location. For these TAZs, based on model simulations for the year 2020, the existing home-based VMT per resident is 20.77 miles. Table 6 shows a summary of the TAZ data for this location. A map view showing these TAZ boundaries is included in Appendix G.

Table 6: Year 2020 VMT Generation

<i>TAZ #</i>	<i>Description</i>	<i>Population</i>	<i>Home Based VMT</i>	<i>Home Based VMT per Capita</i>
30327	Bounded by Adams Ln., Grant St., Gracie Ln., and Marsh Creek	561	10,740	19.1
30328	Bounded by Grant St., railroad tracks, Sand Creek Rd., and TAZs #30326/30327 (approximately following Adams Ln. and O'Hara Ave.)	568	12,710	22.4
Total		57.2	9.4	20.77

Source: TJKM, 2023. CCTA travel demand model, year 2020. Model revision 2016, Kittelson & Associates.

Project-Related Residential VMT

The CCTA VMT methodology requires that baseline and baseline plus project scenarios be evaluated, using the most recent baseline CCTA travel demand model. In general, the baseline plus project scenario would be generated by adding the project to the appropriate TAZ and re-running the model simulations. However, the methodology states that for single-use projects that are very similar to the existing uses in the TAZ, “the analyst may conclude that the project generated home-based VMT per capita or home-work VMT per worker will be the same as the existing VMT per capita or per worker in that TAZ,” and a new travel demand model run with the project is not required. This is the case for the proposed project, as noted above. It is expected that the project’s home-based VMT per capita would be 20.77, the same as the existing VMT per capita in the project location.

Although the proposed project is located entirely within the Brentwood city limits, the travel demand model data incorrectly identifies these two TAZs as being in unincorporated Contra Costa County in the East Subarea. As such, VMT generated at the project location was compared to the average VMT for both the City of Brentwood and the East Subarea, in addition to the countywide average.

For residential projects, CCTA establishes a significance threshold of 15 percent below the subject municipality (or unincorporated CCTA subregion outside of municipalities) average residential VMT, or below the countywide average VMT, whichever is less stringent. The Contra Costa County average home-based VMT per capita generated by the CCTA travel demand model is 19.78. The City of Brentwood average is 29.6, and the East Subarea average is 24.9, both higher than the countywide average and thus less stringent. The corresponding screening thresholds, 15 percent below the average, are 25.16 in the City of Brentwood and 21.16 in the East Subarea. These are both higher than the existing VMT at the project location. Based on CCTA significance thresholds, the project would produce a **less-than-significant impact** on VMT.

CONCLUSION

The proposed development of 34 homes on Adams Lane in Brentwood is expected to generate 362 daily vehicle trips, including 27 a.m. peak hour trips and 34 p.m. peak hour trips. Based on the existing residential VMT generated by other similar homes surrounding the project location, the project is expected to generate VMT per resident that is at least 15 percent below the Brentwood citywide average. Based on adopted CCTA thresholds, the project would produce a less-than-significant impact to VMT.

In summary, impacts related to conflicts with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be less than significant. Additionally, based on the above, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) and would be **less than significant**

Response c): Less than Significant. No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. Parking for the project would be provided by garages and driveways for each residence, and additional on street parking options available for emergency vehicles. The site access, on-site circulation, and parking is adequate. Therefore, the project will not increase hazards due to a geometric design feature or incompatible use. In addition, the project will undergo a comprehensive site plan review by the City. This impact would be **less than significant**.

Responses d): Less than Significant. Access to the site would be via off Adams Lane. All accesses would be designed to City standards that accommodate turning requirements for fire trucks, facilitating entry by emergency vehicles into the project site. Implementation of the proposed project would have a less than significant impact related to emergency access, and would not interfere with an emergency evacuation plan. Therefore, the impact is **less than significant**.

XVIII. TRIBAL CULTURAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) 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:				
i) 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)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.		X		

Background

Assembly Bill 52 (AB 52) requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. The City of Brentwood received requests from two California Native American tribes to be informed through formal notification of proposed projects in the City’s geographic area. On December 4, 2023, tribal notification letters were sent via certified mail informing the tribes of the proposed project. The City received a request for consultation by the Wilton Rancheria tribe with respect to this project.

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant with Mitigation. The City of Brentwood General Plan and EIR do not identify the site as having prehistoric period cultural resources. Additionally, there are no unique cultural resources known to occur on, or within the immediate vicinity of the project site. The site has previously been used for agricultural uses. No instances of cultural resources or human remains have been unearthed on the project site. However, as discussed in *Section V* (Cultural Resources), the project site has the potential for the discovery of prehistoric, ethnohistoric, or historic archaeological sites that may meet the definition of Tribal Cultural Resources. Although no Tribal Cultural Resources have been documented in the project site, the project is located in a region where cultural resources have been recorded and there remains a

potential that undocumented archaeological resources that may meet the Tribal Cultural Resource definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Examples of significant archaeological discoveries that may meet the Tribal Cultural Resources definition would include villages and cemeteries.

Due to the possible presence of undocumented Tribal Cultural Resources within the project site, construction-related impacts on tribal cultural resources would be potentially significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would require appropriate steps to preserve and/or document any previously undiscovered resources that may be encountered during construction activities, including human remains. Implementation of these measures, in addition to Mitigation Measure TRI-1 would reduce this impact to a **less than significant** level.

Mitigation Measure(s)

Implement Mitigation Measures CUL-1 and CUL-2.

Mitigation Measure TRI-1: *If cultural resources are discovered during project-related construction activities, all ground disturbances within a minimum of 50 feet of the find shall be halted until a qualified professional archaeologist can evaluate the discovery. The archaeologist shall examine the resources, assess their significance, and recommend appropriate procedures to the lead agency to either further investigate or mitigate adverse impacts. If the find is determined by the lead agency in consultation with the Native American tribe traditionally and culturally affiliated with the geographic area of the project site to be a tribal cultural resource and the discovered archaeological resource cannot be avoided, then applicable mitigation measures for the resource shall be discussed with the geographically affiliated tribe. Applicable mitigation measures that also take into account the cultural values and meaning of the discovered tribal cultural resource, including confidentiality if requested by the tribe, shall be completed (e.g., preservation in place, data recovery program pursuant to PRC §21083.2[i]). During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site.*

XIX. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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 projects projected demand in addition to the providers existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), and c): Less than Significant. The following discussion addresses available wastewater treatment plant (WWTP) capacity and wastewater infrastructure to serve the project site.

Wastewater Treatment Plant Capacity

The existing WWTP is located on approximately 70 acres of land owned by the City on the north side of Sunset Road and east of Brentwood Boulevard. The WWTP has a current treatment capacity of 5 million gallons per day (mgd) and designed to be expandable to an average dry weather flow (ADWF) capacity of 6.4 mgd. In 2017, the ADWF to the WWTP was 3.8 mgd¹².

The current WWTP system is designed to expand to 10 mgd in 2.5 mgd increments and the City collects development impact fees from new development to fund future expansion efforts. Phase I of the WWTP expansion was completed in 1998-2002, to bring the treatment plant to current levels. Phase II would expand capacity to 7.5 and to accommodate future expansions, of up to 10 MGD by adding oxidation ditches, secondary clarifiers, filters, and related appurtenances. In January 2020, the City of Brentwood Public Works Department completed the engineering plans

¹² Ennis Consulting. 2017. *City of Brentwood Sewer Master Plan [page ii]*. August 1, 2017.

for the WWTP Phase II Expansion and solicited bids for construction. On June 23, 2020, the Brentwood City Council awarded the contract for construction of the WWTP Phase II Expansion. The construction phase is under way and completion is anticipated for Fiscal Year 2024/25. As such, the WWTP would be designed to have sufficient capacity to handle all wastewater flows at build-out per the General Plan.

Buildout of the proposed project would result in the construction of 34 dwelling units generating approximately 110 additional residents (based on 3.22 persons per household). The 2014 Brentwood General Plan Update EIR uses a wastewater generation factor of 85 gallons per day per person of residential development. Therefore, the total wastewater flow from the project site would be about 0.009 MGD. Therefore, the current capacity of the WWTP would be sufficient to handle the wastewater flow from the proposed project. In addition, the proposed project is required to pay sewer impact fees that would contribute towards the cost of future upgrades, when needed. As a result, the proposed project would not have adverse impacts to wastewater treatment capacity.

Wastewater Infrastructure

The 2017 Sewer Master Plan notes a number of existing and future deficient pipes within the sewer collection system requiring the respective parallel pipes or replacement pipes to adequately convey wastewater flows. The wastewater generated by the project would be collected by an internal sewer system, which would connect the existing sewer conveyance line at Lone Oak Road. The existing sewer conveyance line adjacent to the project site is located in the P07 Tributary Area of the 2017 Sewer Master Plan. This tributary area of the Sewer Master Plan does not contain any existing deficient pipes and buildout of the General Plan would not result in future deficient pipes in this tributary area. Therefore, the proposed project would not have adverse impacts to the wastewater infrastructure.

Conclusion

Because the project applicant would pay City sewer impact fees, and adequate long-term wastewater treatment capacity is available to serve full build-out of the project, a **less than significant impact** would occur related to requiring or resulting in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Response b): Less than Significant. The following discussion addresses available water supply infrastructure to serve the project site.

Water Supply System

The City of Brentwood has prepared a 2020 Urban Water Management Plan (UWMP) that predicts the water supply available to the City of Brentwood in normal, single-dry, and multiple-dry years out to 2040. The total supply available in 2040 during all scenarios (normal, single-dry, and multiple-dry) well exceeds the projected demand. The future demand projections included in the UWMP are based upon General Plan land uses. As described above, the proposed project

results in a density of 3.54 units per gross acre, which would be above the defined General Plan R-VLD density of 1.1 to 3.0 units per gross acre. However, in accordance with the Government Code Section 65915, the Project is entitled to a density bonus if sufficient affordable housing units are included in the proposed Project. The water supply system remains adequate to serve the project, despite a slightly higher density than the allowed general plan land use density, as total supply available in the UWMP during all scenarios (normal, single-dry, and multiple-dry) well exceeds the projected total demand, ensuring sufficient water availability and distribution. As a result, with respect to the availability of sufficient water supplies to serve the project, the impact from the proposed project would be **less than significant**.

Water Supply Infrastructure

The project would involve the construction of the necessary water infrastructure to serve the proposed neighborhoods. The project site is located within Zone 1 of the City of Brentwood Water Distribution Network¹³. The 2020 City of Brentwood Urban Water Management Plan includes a list of existing and future capital improvement projects necessary to support the buildout of the General Plan. The project includes installation of 8-inch water lines within the internal street rights of way that would connect to the existing mains on Adams Lane and Gracie Lane. The existing 12-inch water lines on Adams Lane and Gracie Lane were not identified in the 2017 City of Brentwood Water Master Plan as needing system upgrades to support the development of the General Plan. As mentioned above, while the proposed land use remains consistent with the identified General Plan designation of R-VLD for the project site, the permitted density of the project site slightly exceeds previous density allowances. However, in accordance with the Government Code Section 65915, the Project is entitled to a density bonus if sufficient affordable housing units are included in the proposed project. The water supply system remains adequate to serve the project. Consequently, the proposed project is not expected to have an adverse impact on the water supply infrastructure.

Conclusion

Because adequate long-term water supply is available to serve full buildout of the proposed project and the project includes the extension of adjacent water line infrastructure that has sufficient off-site conveyance capacity, the project's impact to water supply and infrastructure would be **less than significant**.

Responses d) and e): Less than Significant. The City's Solid Waste Division, a division of the Public Works Department, provides municipal solid waste collection and transfer services for residential and commercial use within the City of Brentwood. The solid waste from Brentwood is disposed of at Keller Canyon County landfill. Keller Canyon Landfill covers 2,600 acres of land; 244 acres are permitted for disposal. The site currently handles 2,500 tons of waste per day, although the permit allows up to 3,500 tons of waste per day to be managed at the facility. As of 2019, the remaining capacity of the landfill's disposal area is estimated at 63,408,410 cubic yards,

¹³ Ennis Consulting. 2017. *City of Brentwood Water Master Plan*. June 1, 2017.

and the estimated closing date for the landfill is 2050¹⁴. As described above, the proposed project results in a density of 3.54 units per gross acre, which would be above the defined General Plan R-VLD density of 1.1 to 3.0 units per gross acre. Despite a slight increase in density beyond the defined General Plan land use density of the project site, the project remains consistent the General Plan Land Use designation for the project site due to adherence to state density bonus allowances. Moreover, the proposed development falls well within cumulative buildout projections of the City of Brentwood and the rate of growth anticipated in the buildout of the General Plan since the adoption of the General Plan Environmental Impact Report. Because the 2014 Brentwood General Plan Update EIR determined that solid waste capacity is adequate to serve the demand resulting from General Plan build-out and the proposed project's use is consistent with the General Plan designation for the project site; the project's impact to solid waste would be less than significant. This is a **less than significant** impact.

¹⁴ City of Brentwood. *2014 Brentwood General Plan Update EIR* [pg. 3.14-45]. July 22, 2014.

XX. WILDFIRE

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
d) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
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?			X	

EXISTING SETTING

There are no State Responsibility Areas (SRAs) within the vicinity of the Brentwood Planning Area. The City of Brentwood is not categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire. Only a few communities within Contra Costa County have portions categorized as a "Very High" FHSZ by CalFire. Although this CEQA topic only applies to areas within a SRA or Very High FHSZ, out of an abundance of caution, these checklist questions are analyzed below.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less Than Significant. The project site will connect to an existing network of City streets. The proposed circulation improvements would allow for greater emergency access relative to existing conditions. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts from project implementation would be considered *less than significant* relative to this topic.

Response b): Less Than Significant. The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The project site is located in an area that is predominately urban, which

is not considered at a significant risk of wildlife. Therefore, impacts from project implementation would be considered *less than significant* relative to this topic.

Response c): Less Than Significant. The project includes development of infrastructure (water, sewer, and storm drainage) required to support the proposed single-family use. The project site is surrounded by existing and future urban development. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Therefore, impacts from project implementation would be considered *less than significant* relative to this topic.

Response d): Less Than Significant. The proposed project would require the installation of storm drainage infrastructure to ensure that storm waters properly drain from the project site and do not result in downstream flooding or major drainage changes. Storm drainage would be conveyed to the on-site bioretention area, which will discharge to the City's storm drainage system. Various storm drainage supporting structures and inlets will be located throughout the project site directing the direction of flow into the bioretention area.

Runoff from the project site currently flows to the existing City storm drains located in Adams Lane. Upon development of the site, stormwater would flow to the on-site bioretention area and/or the existing storm drains in the adjacent roadways. Additionally, the project site is not located within a FEMA designated flood hazard zone. Furthermore, because the site is essentially flat and located in an existing urbanized area of the City, downstream landslides would not occur.

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The project site is relatively flat; therefore, the potential for a landslide in the project site is essentially non-existent.

Overall, impacts from project implementation would be considered *less than significant* relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE --

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?			X	
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. Although relatively unlikely, based upon the current land cover types found on-site, special- status wildlife species and/or federally- or state-protected birds not covered under the ECCCHCP could be occupying the site. In addition, although unlikely, the possibility exists for subsurface excavation of the site during grading and other construction activities to unearth deposits of cultural significance. However, this IS/MND includes mitigation measures that would reduce any potential impacts to less than significant levels. Therefore, the proposed project would have **less than significant** impacts related to degradation of the quality of the environment, reduction of habitat, threatened species, and/or California's history or prehistory.

Response b): Less than Significant. The proposed project in conjunction with other development within the City of Brentwood could incrementally contribute to cumulative impacts in the area. However, mitigation measures for all potentially significant project-level impacts identified for the proposed project in this IS/MND have been included that would reduce impacts to less than significant levels. As such, the project's incremental contribution towards cumulative impacts would not be considered significant. In addition, all future discretionary development projects in the area would be required to undergo the same environmental analysis and mitigate any potential impacts, as necessary. Therefore, the proposed project would not have any impacts that would be cumulatively considerable, and impacts would be **less than significant**.

Response c): Less than Significant. The proposed project site is located within areas of existing and planned development and is consistent with the land use designation for the site. Due to the

consistency of the proposed land use, substantial adverse effects on human beings are not anticipated with implementation of the proposed project. It should be noted that during construction activities, the project could result in potential impacts related to soil erosion and surface water quality impacts, and noise. However, this IS/MND includes mitigation measures that would reduce any potential impacts to a less-than-significant level. In addition, the proposed project would be designed in accordance with all applicable building standards and codes to ensure adequate safety is provided for the future residents of the proposed project. Therefore, impacts related to environmental effects that could cause adverse effects on human beings would be **less than significant**.

REFERENCES

- 2005 Ozone Strategy (BAAQMD 2006). January 2006.
- 2014 Brentwood General Plan Update EIR (City of Brentwood, 2014). July 2014.
- 2014 Brentwood General Plan Update (City of Brentwood, 2014). July 2014.
- 2023. City of Brentwood Development Impact Fee Report (City of Brentwood, 2023). June 30, 2023.
- 1801 Lone Oak Road, City of Brentwood, Contra Costa County, California: Biology Due-Diligence Review (Moore Biological Consultants, 2019). December 9th, 2019.
- Archaeological Assessment Report – 1801 Lone Oak Road, City of Brentwood, Contra Costa County (Basin Research Associates, 2019). December 16, 2019.
- CEQA Guidelines (BAAQMD, 2017). May 2017.
- City of Brentwood 2020 Urban Water Management Plan (Brown and Caldwell, 2021). June 2021.
- East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (East Contra Costa Habitat Conservation Plan Association, 2006). October 2006.
- Environmental Noise Study, 1901 Lone Oak Road Property (Salter Incorporated). November 3, 2023.
- Geotechnical Investigation, McCoy Property (ENGEO, 2023). June 5, 2023.
- Phase I Environmental Site Assessment, McCoy Property (ENGEO, 2023). June 5, 2023.
- Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard (BAAQMD, 1999). June 1999.
- School Facility Needs Analysis for Brentwood Union School District (Cooperative Strategies, 2019) May 9, 2019
- U.S. Fish and Wildlife Service San Joaquin Kit Fox Survey Protocol for the Northern Range (Sacramento Fish and Wildlife Office, 2011). June 1999.
- VMT Analysis for the Orchard Grove II Residential Development. (TJKM, 2023). October 20, 2023.

This page left intentionally blank

Appendix A

Planning Survey report

Application Form and Planning Survey Report

To Comply With and Receive Permit Coverage Under The East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan

RECEIVED
Sept. 18, 2023
CITY OF BRENTWOOD
COMMUNITY DEVELOPMENT DEPT

Please complete this application to apply for take authorization under the state and federal East Contra Costa County HCP/NCCP incidental take permits. The East Contra Costa County Habitat Conservancy ("Conservancy") or local jurisdiction (City of Brentwood, City of Clayton, City of Oakley, City of Pittsburg, and Contra Costa County) may request more information in order to deem the application complete.

I. PROJECT OVERVIEW

PROJECT INFORMATION	
PROJECT NAME: Orchard Grove II	
PROJECT TYPE: <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Transportation <input type="checkbox"/> Utility <input type="checkbox"/> Other	
PROJECT DESCRIPTION (BRIEF): Residential subdivision with 30 detached homes and 2 duplex units (34 total). A bioretention basin in the northeast part of the site will treat water from the subdivision and convey it into an existing storm drain that drains to Marsh Creek. A detailed project description is included in Attachment A.	
PROJECT ADDRESS/LOCATION: The site is east of Adams Lane and west of Lone Oak Road in the City of Brentwood, Contra Costa County, California. The Address is 1901 Lone Oak Road, Brentwood, CA 94513	
PARCEL/PROJECT SIZE (ACRES): 10.04+/- acres total (includes the 9.66+/- acre project site, 0.03+/- acres of off-site improvements, and a 0.35+/- acre parcel with the existing home, which will be retained by the owner.	
PROJECT APN(S): 016-040-004	
APPLICATION SUBMITTAL DATE: August 2023	FINAL PSR DATE: (City/County/Conservancy use)
LEAD PLANNER: Eric Nolthenius	
JURISDICTION: <input checked="" type="checkbox"/> City of Brentwood <input type="checkbox"/> City of Clayton <input type="checkbox"/> City of Oakley <input type="checkbox"/> City of Pittsburg <input type="checkbox"/> Contra Costa County <input type="checkbox"/> Participating Special Entity*	
<small>*Participating Special Entities are organizations not subject to the authority of a local jurisdiction. Such organizations may include school districts, irrigation districts, transportation agencies, local park districts, geological hazard abatement districts, or other utilities or special districts that own land or provide public services.</small>	
DEVELOPMENT FEE ZONE: <input checked="" type="checkbox"/> Zone I <input type="checkbox"/> Zone II <input type="checkbox"/> Zone III <input type="checkbox"/> Zone IV	
<small>See figure 9-1 of the HCP/NCCP at www.cocohcp.org for a generalized development fee zone map. Detailed development fee zone maps by jurisdiction are available from the jurisdiction.</small>	

PROJECT APPLICANT INFORMATION	
APPLICANT'S NAME: Shea Homes, Northern California	
AUTHORIZED AGENT'S NAME AND TITLE: David Best, Community Development Manager	
PHONE NO.: Office: (925) 245-3631; Mobile (925) 525-0162	APPLICANT'S E-MAIL: david.best@sheahomes.com
MAILING ADDRESS: 2630 Shea Center Drive, Livermore CA 94551	

BIOLOGIST INFORMATION ¹	
BIOLOGICAL/ENVIRONMENTAL FIRM: Moore Biological Consultants	
CONTACT NAME AND TITLE: Diane S. Moore, M.S.	
PHONE NO.: Office: (209) 745-1159; Mobile (209) 986-5862	CONTACT'S E-MAIL: moorebio@softcom.net
MAILING ADDRESS: Moore Biological Consultants, 10330 Twin Cities Rd., Ste. 30, Galt, California	

¹ A USFWS/CDFW-approved biologist (project-specific) is required to conduct the surveys. Please submit biologist(s) approval request to the Conservancy.

II. PROJECT DETAILS

Please complete and/or provide the following attachments:

1) Project Description

Attach as **Attachment A: Project Description**. Provide a detailed written description that concisely and completely describes the project and location. Include the following information:

- All activities proposed for the site or project, including roads utilized, construction staging areas, and the installation of underground facilities, to ensure the entire project is covered by the HCP/NCCP permit
- Proposed construction dates, including details on construction phases, if applicable
- Reference a City/County application number for the project, if applicable
- General Best Management Practices, if applicable
- If the project will have temporary impacts, please provide a restoration plan describing how the site will be restored to pre-project conditions, including revegetation seed mixes or plantings and timing

2) Project Vicinity Map

Provide a project vicinity map. Attach as **Figure 1 in Attachment B: Figures**.

3) Project Site Plans

Provide any project site plans for the project. Attach as **Figure 2 in Attachment B: Figures**.

4) CEQA Document

Indicate the status of CEQA documents prepared for the project. Provide additional comments below table if necessary.

Type of Document	Status	Date Completed
<input checked="" type="checkbox"/> Initial Study	Not yet initiated	
<input type="checkbox"/> Notice of Preparation		
<input type="checkbox"/> Draft EIR		
<input type="checkbox"/> Final EIR		
<input type="checkbox"/> Notice of Categorical Exemption		
<input type="checkbox"/> Notice of Statutory Exemption		
<input type="checkbox"/> Other (describe)		

III. EXISTING CONDITIONS AND IMPACTS

Please complete and/or provide the following attachments:

1) Field-Verified Land Cover Map²

Attach a field-verified land cover map in **Attachment B: Figures** and label as **Figure 3**. The map should contain all land cover types present on-site overlaid on aerial/satellite imagery. Map colors for the land cover types should conform to the HCP/NCCP (see *Figure 3-3: Landcover in the Inventory Area* for land cover type legend).

2) Photographs of the Project Site

Attach representative photos of the project site in **Attachment B: Figures** and label as **Figure 4**. Please provide captions for each photo.

² For PSEs and city or county public works projects, please also identify permanent and temporary impact areas by overlaying crosshatching (permanent impacts) and hatching (temporary impacts) on the land cover map.

3) Land Cover Types and Impacts and Supplemental Tables

- For all terrestrial land cover types please provide calculations to the nearest **hundredth of an acre (0.01)**. For aquatic land cover types please provide calculations to the nearest **thousandth of an acre (0.001)**.
- **Permanent Impacts** are broadly defined in the ECCC HCP/NCCP to include all areas removed from an undeveloped or habitat-providing state and includes land in the same parcel or project that is not developed, graded, physically altered, or directly affected in any way but is isolated from natural areas by the covered activity. Unless such undeveloped land is dedicated to the Preserve System or is a deed-restricted creek setback, the development mitigation fee will apply (if proposed, would require Conservancy approval).
- **Temporary Impacts** are broadly defined in the ECCC HCP/NCCP as any impact on vegetation or habitat that does not result in permanent habitat removal (i.e. vegetation can eventually recover).
- If **wetland (riparian woodland/scrub, wetland, or aquatic)** land cover types are present on the parcel but will not be impacted please discuss in the following section 4) Jurisdictional Wetlands and Waters. Wetland impact fees will only be charged if wetland features are impacted. However, development fees will apply to the entire parcel.
- **Stream** land cover type is considered a linear feature where impacts are calculated based on length impacted. The acreage within a stream, below Top of Bank (TOB), must be assigned to the adjacent land cover type(s). Insert area of impact to stream below TOB in parentheses after the Land Cover acreage number (e.g., Riparian Woodland/Scrub: 10 (0.036) – where 10 is the total impacted acreage including 0.036 acre, which is the acreage within stream TOB). Complete following supplemental **Stream Feature Detail** table to provide information for linear feet.
- **Total Impacts** acreage should be the total parcel acreage (development project) or project footprint acreage (rural infrastructure or utility project).

Table 1: Land Cover Types and Impacts

*Proposed for HCP/NCCP
Dedication on the Parcel
(Requires Conservancy Approval)*

Land Cover Type	Permanent Impacts	Temporary Impacts	Stream Setback	Preserve System Dedication
<i>Grassland</i>				
Annual Grassland				
Alkali Grassland				
Ruderal	9.41			
<i>Shrubland</i>				
Chaparral and Scrub				
<i>Woodland</i>				
Oak Savannah				
Oak Woodland				
<i>Riparian</i>				
Riparian Woodland/Scrub				
<i>Wetland</i>				
Permanent Wetland				
Seasonal Wetland				
Alkali Wetland				
<i>Aquatic</i>				
Aquatic (Reservoir/Open Water)				
Slough/Channel				
Pond				
Stream (in linear feet)				
<i>Irrigated Agriculture</i>				
Pasture				
Cropland				
Orchard				
Vineyard				
<i>Other</i>				
Nonnative woodland				
Wind turbines				
<i>Developed (not counted toward Fees)</i>				
Urban	0.63			
Aqueduct				
Turf				
Landfill				
TOTAL IMPACTS	10.04			

Identify any uncommon vegetation and uncommon landscape features³:

Supplemental to Table 1A: Uncommon Vegetation and Landscape Features

	Permanent Impacts	Temporary Impacts
<i>Uncommon Grassland Alliances</i>		
Purple Needlegrass Grassland		
Blue Wildrye Grassland		
Creeping Ryegrass Grassland		
Wildflower Fields		
Squirreltail Grassland		
One-sided Bluegrass Grassland		
Serpentine Bunchgrass Grassland		
Saltgrass Grassland		
Alkali Sacaton Bunchgrass Grassland		
<input type="checkbox"/> Other		
<i>Uncommon Landscape Features</i>		
Rock Outcrops		
Caves		
Springs and seeps		
Scalds		
Sand Deposits		
<input type="checkbox"/> Mines ⁴		
<input type="checkbox"/> Buildings (bat roosts) ³		
<input type="checkbox"/> Potential nest sites (trees or cliffs) ³	None	

Please provide details of impacts to stream features:

Stream Name: None – there are no streams in the site.

Watershed:

Supplemental to Table 1: Stream Feature Detail⁵

Stream Width	Stream Type ⁶	Permanent Impacts (linear feet) ⁷	Temporary Impacts (linear feet) ⁷
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3rd or higher order <input type="checkbox"/> Ephemeral, 1st or 2nd order		
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3rd or higher order <input type="checkbox"/> Ephemeral, 1st or 2nd order		
<input type="checkbox"/> ≤ 25 feet wide <input type="checkbox"/> > 25 feet wide	<input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral, 3rd or higher order <input type="checkbox"/> Ephemeral, 1st or 2nd order		

³ These acreages are for Conservancy tracking purposes. Impacts to these uncommon vegetation and landscape features should be accounted for within the land cover types in Table 1 (e.g., x acres of purple needlegrass in this supplemental table should be accounted for within annual grassland in Table 1).

⁴ Insert amount/number, not acreage. Provide additional information on these features in Attachment A: Project Description.

⁵ Use more than 1 row as necessary to describe impacts to streams on site.

⁶ See glossary (Appendix A) for definition of stream type and order.

⁷ Stream length is measured along stream centerline, based on length of impact to any part of the stream channel, TOB to TOB.

4) Summary of Land Cover Types

Please provide a written summary of descriptions for land cover types found on site including characteristic vegetation.

Several field surveys were conducted on April 12, 21, and 28, and May 5, 2023. The 10.04+/- acre site primarily consists of an open grassland field vegetated in common grasses and weeds. There is an existing residence in the southeast part of the site with an associated barn and livestock area to the west; the home site will remain, but the barn and livestock barn will be removed as part of the project (Figure 3). Thin off-site slivers of ruderal grassland and urban/developed land along Adams Lane and Lone Oak Road will likely be subject to off-site road and/or shoulder improvements as part of the project.

Ruderal Grassland: The site contains 9.41+/- acres of grassland vegetation that best fits in to the “Ruderal Grassland” land cover type (Figures 3 and 4a – 4d). The grassland field in the site was extremely weedy during the 2023 field surveys, but is periodically mowed and/or disked for fire suppression. The grassland species in the site are dominantly nonnative upland species that are typical of highly disturbed grasslands. Oats (*Avena* sp.), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), and perennial ryegrass (*Festuca perennis*) are the most common grasses. Other grassland species such as wild radish (*Raphanus sativa*), annual fireweed (*Epilobium brachycarpum*), wild mustard (*Sinapis arvensis*), morning glory (*Convolvulus arvensis*), and prickly lettuce (*Lactuca serriola*) are intermixed with the grasses.

Urban/Developed: The site contains 0.63+/- acres of the “Urban/Developed” land cover type, which includes part of Lone Oak Road and the existing home, livestock corrals, and barn in the southeast corner of the site (Figure 3, 4b and 4f-4g). The home fronts Lone Oak Road and is surrounded by planted grass, low landscape shrubs, and has a paved driveway. The existing barn and livestock area will be demolished as part of the project; there will be no improvements to the 0.35+/- acre home site.

There are no trees in the site. There is a notable row of large eucalyptus trees just north of the northern fence line (Figure 4e) and a few other large trees in parcels in close proximity to the site.

5) Jurisdictional Wetlands and Waters

If wetlands and waters are present on the project site, project proponents must conduct a delineation of jurisdictional wetlands and waters. Jurisdictional wetlands and waters are defined on pages 1-18 and 1-19 of the ECCC HCP/NCCP as the following land cover types: permanent wetland, seasonal wetland, alkali wetland, aquatic, pond, slough/channel, and stream. It should be noted that these features differ for federal and state jurisdictions. If you have identified any of these land cover types in Table 1, complete the section below.

- a) Attach the wetland delineation report as **Attachment E: Wetland Delineation**. If a wetland delineation has not been completed, please explain below in section 4c.
- b) **Please check the following permits the project may require. Please submit copies of these permits to the Conservancy prior to the start of construction:**
- | | |
|--|--|
| <input type="checkbox"/> CWA Section 404 Permit ⁸ | <input type="checkbox"/> CWA Section 401 Water Quality Certification |
| <input type="checkbox"/> Waste Discharge Requirements | <input type="checkbox"/> Lake and Streambed Alteration Agreement |
- c) **Provide any additional information on impacts to jurisdictional wetland and waters below, including status of the permit(s):**

An assessment of potentially jurisdictional Waters of the U.S. was undertaken on May 5, 2023. The site primarily consists of upland ruderal grassland; on-site soils appear to be well-draining. There are no potentially jurisdictional Waters of the U.S. in the site. There are also no potential Waters of the State in the site. Finally, there are no streams or lakes in the site that would be subject to Section 1600 to 1616 of Fish and Game Code of California.

⁸ The USACE Sacramento District issued a Regional General Permit 1 (RGP) related to ECCC HCP/NCCP covered activities. The RGP is designed to streamline wetland permitting in the entire ECCC HCP/NCCP Plan Area by coordinating the avoidance, minimization, and mitigation measures in the Plan with the Corps’ wetland permitting requirement. Applicants seeking authorization under this RGP shall notify the Corps in accordance with RGP general condition number 18 (Notification).

6) Species-Specific Planning Survey Requirements

Based on the land cover types found on-site and identified in Table 1, check the applicable boxes in Table 2a.

Table 2a. Species –Specific Planning Survey Requirements

Land Cover Type in Project Area	Required Survey Species	Habitat Element in Project Area	Planning Survey Requirement ⁹	Info in HCP
<input checked="" type="checkbox"/> Grasslands, oak savannah, agriculture, or ruderal	<input type="checkbox"/> San Joaquin kit fox	Assumed if within modeled range of species	If within modeled range of species, identify and map potential breeding or denning habitat within the project site and a 250-ft radius around the project footprint.	pp. 6-37 to 6-38
	<input checked="" type="checkbox"/> Western burrowing owl	Assumed	Identify and map potential breeding habitat within the project site and a 500-ft radius around the project footprint. Please note the HCP requires buffers for occupied burrows. Surveys may need to encompass an area larger than the project footprint.	pp. 6-39 to 6-41
<input type="checkbox"/> Aquatic (ponds, wetlands, streams, sloughs, channels, and marshes)	<input type="checkbox"/> Giant garter snake	Aquatic habitat accessible from the San Joaquin River	Identify and map potential habitat.	pp. 6-43 to 6-45
	<input type="checkbox"/> California tiger salamander	Ponds and wetlands Vernal pools Reservoirs Small lakes	Identify and map potential breeding habitat. Document habitat quality and features. Provide the Conservancy with photo-documentation and report.	pp. 6-45
	<input type="checkbox"/> California red-legged frog	Slow-moving streams, ponds and wetlands	Identify and map potential breeding habitat. Document habitat quality and features. Provide the Conservancy with photo-documentation and report.	p. 6-46
	<input type="checkbox"/> Covered shrimp	Seasonal wetlands Vernal pools Sandstone rock outcrops Sandstone depressions	Identify and map potential habitat. Please note the HCP requires a 50 foot non-disturbance buffer from seasonal wetlands that may be occupied by covered shrimp. Surveys may need to encompass an area larger than the project footprint.	pp. 6-46 to 6-48
<input checked="" type="checkbox"/> Any	<input type="checkbox"/> Townsend's big-eared bat	Rock formations with caves Mines Abandoned buildings outside urban area	Map and document potential breeding or roosting habitat.	pp. 6-36 to 6-37
	<input checked="" type="checkbox"/> Swainson's hawk	Potential nest sites within 1,000 feet of project	Inspect large trees for presence of nest sites. Document and map.	pp. 6-41 to 6-43
	<input checked="" type="checkbox"/> Golden Eagle	Potential nest sites with ½ mile of project	Inspect large trees for presence of nest sites. Document and map.	pp. 6-38 to 6-39

Surveys for all covered species must be conducted by a qualified biologist (USFWS/CDFW project-specific approved). Please submit biologist approval request to the East Contra Costa County Habitat Conservancy.

Surveys for all covered species must be conducted according to the respective USFWS or CDFW survey protocols, as identified in Chapter 6.4.3 in the HCP/NCCP.

7) Planning Survey Species Habitat Maps

Provide Planning Survey Species Habitat Maps as required in Table 2a, attach as **Figure 5 in Attachment B: Figures**.

8) Results of Species Specific Surveys

Provide a written summary describing the results of the planning surveys. Please discuss the location, quantity, and quality of suitable habitat for specified covered wildlife species on the project site.

⁹ The planning survey requirements in this table are not comprehensive. Please refer to Chapter 6.4.3 in the ECCC HCP/NCCP for more detail.

General Setting: The 10.04+/- acre project site is in Brentwood, in Contra Costa County, California. The site is within an Unnumbered Section, within Township 1 North, Range 2 East of the USGS 7.5-minute Brentwood topographic quadrangle (Figure 1). The project site has been leveled and is at an elevation of approximately 70 feet above mean sea level. The project site is an open grassland field that has been fallow for decades and appears to be periodically mowed and/or disked, presumably for fire suppression. There is a home site in the southeast part of the site that will remain (see photographs in Figures 4a-4g).

Surrounding land uses are primarily residential with a mixture of subdivisions and larger ranchette-style properties surrounding the project site (Figure 3). The west edge of the site is bordered by Adams Lane and the east edge of the site is bordered by Lone Oak Road. There is a church, a fallow field, and a home site north of the site and a fallow field to the south of the site. A new residential subdivision is now under construction in the formerly-fallow field to the south of the site.

Western Burrowing Owl: The body of the site is ruderal grassland (Figure 5a) that is within the range of western burrowing owl (*Athene cunicularia*). California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB, 2023) contains numerous records of nesting burrowing owl within 0.5 miles of the project site (Figure 5b). The project site was inspected for burrowing owls and ground squirrel burrows with evidence of burrowing owl occupancy (i.e., white wash, pellets, feathers). Comprehensive inspection of potential burrowing owl habitat was accomplished by walking meandering transects throughout the site. No western burrowing owls or burrows with evidence of burrowing owl occupancy were observed.

Swainson's Hawk: The site primarily consists of ruderal grassland (Figure 5a) and is along the western edge of the nesting range of Swainson's hawks (*Buteo swainsoni*). CDFW's CNDDDB (2023) contains a record of a nesting Swainson's hawk in the row of eucalyptus trees along the northern fence line in the site (Figure 5b).

The grassland in the site provides suitable Swainson's hawk foraging habitat. The row of large eucalyptus trees along the north fence line contains a large raptor stick nest and Swainson's hawks have nested in these trees in the past. The row of trees and the nest were inspected numerous times in 2023 during the Swainson's hawk nesting season and this nest was not utilized this year by any raptor species. No other raptor stick nests were observed in any of the trees visible from the site. Due to the suitable raptor nest in a tree adjacent to the north edge of the site and the presence of suitable nest trees in parcels near the site, it is likely Swainson's hawks or other raptors will nest somewhere near the site in the future.

Golden Eagle: The site is ruderal grassland that is within the range of golden eagles (*Aquila chrysaetos*). CDFW's CNDDDB (2023) contains no occurrences of golden eagle within 0.5 miles of the site (Figure 5b). There are a few potential nest trees in close proximity to the site. Aside from the nest observed in the row of eucalyptus trees along the north fence line, no raptor stick nests were observed in trees in or visible from the site. No golden eagles were observed during the recent survey and this species nests more often on cliffs in remote natural areas than in trees near urban areas.

9) Covered and No-Take Plants

Please check the applicable boxes in Table 2b based on the land cover types found in the project area. If suitable land cover types are present on site, surveys must be conducted using approved CDFW/USFWS methods during the appropriate season for identification of covered and no-take species (see page 6-9 of the ECCC HCP/NCCP). Reference populations of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant species is visible and detectable at the time surveys are conducted. In order to complete all the necessary covered and no-take plant surveys, spring, summer, and fall surveys may be required.

Table 2b. Covered and No-Take Plant Species

Plant Species	Covered (C) or No-Take (N)	Associated Land Cover Type	Typical Habitat or Physical Conditions, if Known	Typical Blooming Period	Suitable Land Cover Type Present
Adobe navarretia (<i>Navarretia nigelliformis</i> ssp. <i>radians</i>) ^a	C	Annual Grassland	Generally found on clay barrens in Annual Grassland ^b	Apr–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Alkali milkvetch (<i>Astragalus tener</i> ssp. <i>tener</i>)	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernal moist habitat in soils with a slight to strongly elevated pH	Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Big tarplant (<i>Blepharizonia plumosa</i>)	C	Annual grassland	Elevation below 1500 feet ^d most often on Altamont Series or Complex soils	Jul–Oct	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Brewer’s dwarf flax (<i>Hesperolinon breweri</i>)	C	Annual grassland Chaparral and scrub Oak savanna Oak woodland	Generally, restricted to grassland areas within a 500+ buffer from oak woodland and/or chaparral/scrub ^d	May–Jul	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Brittlescale (<i>Atriplex depressa</i>)	C	Alkali grassland Alkali wetland	Restricted to soils of the Pescadero or Solano soil series; generally found in southeastern region of plan area ^d	May–Oct	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Caper-fruited tropidocarpum (<i>Tropidocarpum capparideum</i>)	N	Alkali grassland		Mar–Apr	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Contra Costa goldfields (<i>Lasthenia conjugens</i>)	N	Alkali grassland Alkali wetland Annual grassland Seasonal wetland	Generally found in vernal pools	Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Diablo Helianthella (<i>Helianthella castanea</i>)	C	Chaparral and scrub Oak savanna Oak woodland	Elevations generally above 650 feet ^d	Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Diamond-petaled poppy (<i>Eschscholzia rhombipetala</i>)	N	Annual grassland		Mar–Apr	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Large-flowered fiddleneck (<i>Amsinckia grandiflora</i>)	N	Annual grassland	Generally on clay soil	Apr–May	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Mount Diablo buckwheat (<i>Eriogonum truncatum</i>)	N	Annual grassland Chaparral and scrub	Ecotone of grassland and chaparral/scrub	Apr–Sep	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Mount Diablo fairy-lantern (<i>Calochortus pulchellus</i>)	C	Annual grassland Chaparral and scrub Oak savanna Oak woodland	Elevations generally between 650 and 2,600 ^d	Apr–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Mount Diablo Manzanita (<i>Arctostaphylos auriculata</i>)	C	Chaparral and scrub	Elevations generally between 700 and 1,860 feet; restricted to the eastern and northern flanks of Mt. Diablo ^d and the vicinity of Black Diamond Mines	Jan–Mar	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Recurved larkspur (<i>Delphinium recurvatum</i>)	C	Alkali grassland Alkali wetland		Mar–Jun	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Round-leaved filaree (<i>California macrophylla</i>) ^c	C	Annual grassland		Mar–May	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
San Joaquin spearscale (<i>Extriplex joaquiniana</i>) ^e	C	Alkali grassland Alkali wetland		Apr–Oct	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Showy madia (<i>Madia radiata</i>)	C	Annual grassland Oak savanna Oak woodland	Primarily occupies open grassland or grassland on edge of oak woodland	Mar–May	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

^a The species *Navarretia nigelliformis* subsp. *nigelliformis* is no longer considered to occur within Contra Costa County based on specimen annotations at the UC and Jepson Herbaria at the University of California Berkeley as well as the opinions of experts in the genus. This taxon is now recognized as *Navarretia nigelliformis* subsp. *radians*. Any subspecies of *Navarretia nigelliformis* encountered as a part of botanical surveys in support of a PSR should be considered as covered under this HCP/NCCP.

^b Habitat for the *Navarretia nigelliformis* subspecies that occurs within the inventory are inaccurately described in the HCP/NCCP as vernal pools. The entity within the Inventory generally occupies clay barrens within Annual Grassland habitat, which is an upland habitat type.

^c From California Native Plant Society. 2007. *Inventory of Rare and Endangered Plants* (online edition, v7-07d). Sacramento, CA. Species may be identifiable outside of the typical blooming period; a professional botanist shall determine if a covered or no take plant occurs on the project site. Reference population of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant is visible and detectable at the time surveys are conducted.

^d See Species Profiles in Appendix D of the Final HCP/NCCP. Reference populations of covered and no-take plants should be visited, where possible, prior to conducting surveys to confirm that the plant species is visible and detectable at the time surveys are conducted.

^e In the recent update to the Jepson eflora (JFP 2013) *Atriplex joaquiniana* has been circumscribed and segregated into a new genus called *Extriplex* based on the work of Elizabeth Zacharias and Bruce Baldwin (2010). The etymology of the genus *Extriplex* means, “beyond or outside *Atriplex*”.

10) Results of Covered and No-Take Plant Species

Provide a written summary describing the results of the planning surveys conducted as required in Table 2b. Describe the methods used to survey the site for all covered and no-take plants, including the dates and times of all surveys conducted (see Tables 3-8 and 6-5 of the ECCC HCP/NCCP for covered and no-take plants), including reference populations visited prior to conducting surveys.

If any covered or no-take plant species were found, include the following information in the results summary:

- Description and number of occurrences and their rough population size.
- Description of the “health” of each occurrence, as defined on pages 5-49 and 5-50 of the HCP/NCCP.
- A map of all the occurrences.
- Justification of surveying time window, if outside of the plant’s blooming period.
- The CNDDDB form(s) submitted to CDFW (if this is a new occurrence).
- A description of the anticipated impacts that the covered activity will have on the occurrence and how the project will avoid impacts to all covered and no-take plant species. If impacts to covered plant species cannot be avoided and plants will be removed by covered activity, the Conservancy must be notified and has the option to salvage the covered plants. All projects must demonstrate avoidance of all six no-take plants (see table 6-5 of the HCP/NCCP).

Survey Methods

Surveys to assess potentially suitable habitat for special-status plants were undertaken on April 28 and May 5, 2023. The site was systematically searched by walking throughout the grassland field in the site.

Survey Results and Discussion

As described above, the site is primarily ruderal grassland that is periodically mowed and/or disked.

Due to an absence of potentially suitable habitat for special-status plants, focused surveys during the blooming period of each species in Table 2b were not warranted.

IV. SPECIES-SPECIFIC AVOIDANCE AND MINIMIZATION REQUIREMENTS _____

Please complete and/or provide the following attachments:

1) Species-Specific Avoidance and Minimization for Selected Covered Wildlife

Complete the following table and check the applicable box for covered species determined by the planning surveys.

Table 3. Summary of Applicable Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring Requirements¹⁰

Species	Preconstruction Survey Requirements	Avoidance and Minimization Requirements	Construction Monitoring Required	Info in HCP
<input type="checkbox"/> San Joaquin kit fox	<ul style="list-style-type: none"> • On project footprint and 250-ft radius, map all dens (>5 in. diameter) and determine status • Provide written survey results to USFWS within 5 working days after surveying 	<ul style="list-style-type: none"> • Monitor dens • Destroy unoccupied dens • Discourage use of occupied (non-natal) dens 	<ul style="list-style-type: none"> • Establish exclusion zones (>50 ft for potential dens, and >100 ft for known dens) • Notify USFWS of occupied natal dens 	pp. 6-37 to 6-38
<input checked="" type="checkbox"/> Western burrowing owl	<ul style="list-style-type: none"> • On project footprint and 500-ft radius, identify and map all owls and burrows, and determine status • Document use of habitat (e.g. breeding, foraging) 	<ul style="list-style-type: none"> • Avoid occupied nests during breeding season (Feb-Sep) • Avoid occupied burrows during nonbreeding season (Sep – Feb) • Install one-way doors in occupied burrow (if avoidance not possible) • Monitor burrows with doors installed 	<ul style="list-style-type: none"> • Establish buffer zones (250 ft around nests) • Establish buffer zones (160 ft around burrows) 	pp. 6-39 to 6-41

¹⁰ The requirements in this table are not comprehensive; they are detailed in the next section on the following page.

<input type="checkbox"/>	Giant garter snake	<ul style="list-style-type: none"> Delineate aquatic habitat up to 200 ft from water's edge on each side Document any occurrences 	<ul style="list-style-type: none"> Limit construction to Oct-May Dewater habitat April 15 – Sep 30 prior to construction Minimize clearing for construction 	<ul style="list-style-type: none"> Delineate 200 ft buffer around potential habitat near construction Provide field report on monitoring efforts Stop construction activities if snake is encountered; allow snake to passively relocate Remove temporary fill or debris from construction site Mandatory training for construction personnel 	pp. 6-43 to 6-45
<input type="checkbox"/>	California tiger salamander	<ul style="list-style-type: none"> Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site 	<ul style="list-style-type: none"> Allow agency staff to translocate species, if requested 	<ul style="list-style-type: none"> None 	p. 6-45
<input type="checkbox"/>	California red-legged frog	<ul style="list-style-type: none"> Provide written notification to USFWS and CDFW regarding timing of construction and likelihood of occurrence on site 	<ul style="list-style-type: none"> Allow agency staff to translocate species, if requested 	<ul style="list-style-type: none"> None 	p. 6-46
<input type="checkbox"/>	Covered shrimp	<ul style="list-style-type: none"> Establish presence/absence Document and evaluate use of all habitat features (e.g. vernal pools, rock outcrops) 	<ul style="list-style-type: none"> Establish buffer near construction activities Prohibit incompatible activities 	<ul style="list-style-type: none"> Establish buffer around outer edge of all hydric vegetation associated with habitat (50 ft or immediate watershed, whichever is larger) Mandatory training for construction personnel 	pp. 6-46 to 6-48
<input type="checkbox"/>	Townsend's big-eared bat	<ul style="list-style-type: none"> Establish presence/absence Determine if potential sites were recently occupied (guano) 	<ul style="list-style-type: none"> Seal hibernacula before Nov Seal nursery sites before April Delay construction near occupied sites until hibernation or nursery seasons are over 	<ul style="list-style-type: none"> None 	pp. 6-36 to 6-37
<input checked="" type="checkbox"/>	Swainson's hawk	<ul style="list-style-type: none"> Determine whether potential nests are occupied 	<ul style="list-style-type: none"> No construction within 1,000 ft of occupied nests within breeding season (March 15 - Sep 15) If necessary, remove active nest tree after nesting season to prevent occupancy in second year. 	<ul style="list-style-type: none"> Establish 1,000 ft buffer around active nest and monitor compliance (no activity within established buffer) 	pp. 6-41 to 6-43
<input checked="" type="checkbox"/>	Golden Eagle	<ul style="list-style-type: none"> Establish presence/absence of nesting eagles 	<ul style="list-style-type: none"> No construction within ½ mile near active nests (most activity late Jan – Aug) 	<ul style="list-style-type: none"> Establish ½ mile buffer around active nest and monitor compliance with buffer 	pp. 6-38 to 6-39

2) Required Preconstruction Surveys, Avoidance and Minimization, and Construction Monitoring

All preconstruction surveys shall be conducted in accordance with the requirements set forth in Section 6.4.3, Species-Level Measures, and Table 6-1 of the ECCC HCP/NCCP. Detailed descriptions of preconstruction surveys, avoidance and minimization, and construction monitoring applicable to each of the wildlife species in Table 3 are located below. Please remove the species-specific measures that do not apply to your project (highlight entire section and delete).

WESTERN BURROWING OWL

Preconstruction Surveys

Prior to any ground disturbance related to covered activities, a USFWS/CDFW- approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995).

On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls will be identified and mapped. Surveys will take place no more than 30 days prior to construction. During the breeding season (February 1– August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any

disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted.

Avoidance and Minimization and Construction Monitoring

This measure incorporates avoidance and minimization guidelines from CDFW's *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 1995).

If burrowing owls are found during the breeding season (February 1 – August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 – January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone (described below).

During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur will be established around each occupied burrow (nest site). Buffer zones of 160 feet will be established around each burrow being used during the nonbreeding season. The buffers will be delineated by highly visible, temporary construction fencing.

If occupied burrows for burrowing owls are not avoided, passive relocation will be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

SWAINSON'S HAWK

Preconstruction Survey

Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15–September 15), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether Swainson's hawk nests within 1,000 feet of the project site are occupied. If potentially occupied nests within 1,000 feet are off the project site, then their occupancy will be determined by observation from public roads or by observations of Swainson's hawk activity (e.g., foraging) near the project site. If nests are occupied, minimization measures and construction monitoring are required (see below).

Avoidance and Minimization and Construction Monitoring

During the nesting season (March 15–September 15), covered activities within 1,000 feet of occupied nests or nests under construction will be prohibited to prevent nest abandonment. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be used, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size.

If young fledge prior to September 15, covered activities can proceed normally. If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the Implementing Entity for a waiver of this avoidance measure. Any waiver must also be approved by USFWS and CDFW. While the nest is occupied, activities outside the buffer can take place.

All active nest trees will be preserved on site, if feasible. Nest trees, including non-native trees, lost to covered activities will be mitigated by the project proponent according to the requirements below.

Mitigation for Loss of Nest Trees

The loss of non-riparian Swainson's hawk nest trees will be mitigated by the project proponent by:

- If feasible on-site, planting 15 saplings for every tree lost with the objective of having at least 5 mature trees established for every tree lost according to the requirements listed below.

AND either

- 1) Pay the Implementing Entity an additional fee to purchase, plant, maintain, and monitor 15 saplings on the HCP/NCCP Preserve System for every tree lost according to the requirements listed below, OR
- 2) The project proponent will plant, maintain, and monitor 15 saplings for every tree lost at a site to be approved by the Implementing Entity (e.g., within an HCP/NCCP Preserve or existing open space linked to HCP/NCCP preserves), according to the requirements listed below.

The following requirements will be met for all planting options:

- Tree survival shall be monitored at least annually for 5 years, then every other year until year 12. All trees lost during the first 5 years will be replaced. Success will be reached at the end of 12 years if at least 5 trees per tree lost survive without supplemental irrigation or protection from herbivory. Trees must also survive for at least three years without irrigation.
- Irrigation and fencing to protect from deer and other herbivores may be needed for the first several years to ensure maximum tree survival.
- Native trees suitable for this site should be planted. When site conditions permit, a variety of native trees will be planted for each tree lost to provide trees with different growth rates, maturation, and life span, and to provide a variety of tree canopy structures for Swainson's hawk. This variety will help to ensure that nest trees will be available in the short term (5-10 years for cottonwoods and willows) and in the long term (e.g., Valley oak, sycamore). This will also minimize the temporal loss of nest trees.
- Riparian woodland restoration conducted as a result of covered activities (i.e., loss of riparian woodland) can be used to offset the nest tree planting requirement above, if the nest trees are riparian species.
- Whenever feasible and when site conditions permit, trees should be planted in clumps together or with existing trees to provide larger areas of suitable nesting habitat and to create a natural buffer between nest trees and adjacent development (if plantings occur on the development site).
- Whenever feasible, plantings on the site should occur closest to suitable foraging habitat outside the UDA.
- Trees planted in the HCP/NCCP preserves or other approved offsite location will occur within the known range of Swainson's hawk in the inventory area and as close as possible to high-quality foraging habitat.

GOLDEN EAGLE

Preconstruction Survey

Prior to implementation of covered activities, a qualified biologist will conduct a preconstruction survey to establish whether nests of golden eagles are occupied (see Section 6.3.1, *Planning Surveys*). If nests are occupied, minimization requirements and construction monitoring will be required.

Avoidance and Minimization

Covered activities will be prohibited within 0.5 mile of active nests. Nests can be built and active at almost any time of the year, although mating and egg incubation occurs late January through August, with peak activity in March through July. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size.

Construction Monitoring

Construction monitoring will focus on ensuring that no covered activities occur within the buffer zone established around an active nest. Although no known golden eagle nest sites occur within or near the ULL, covered activities inside and outside of the Preserve System have the potential to disturb golden eagle nest sites. Construction monitoring will ensure that direct effects to golden eagles are minimized.

3) Construction Monitoring Plan

Before implementing a covered activity, the applicant will develop and submit a construction monitoring plan to the planning department of the local land use jurisdiction and the East Contra Costa County Habitat Conservancy for review and approval. Elements of a brief construction monitoring plan will include the following:

- Results of planning and preconstruction surveys.¹¹
- Description of avoidance and minimization measures to be implemented, including a description of project-specific refinements to the measures or additional measures not included in the HCP/NCCP.
- Description of monitoring activities, including monitoring frequency and duration, and specific activities to be monitored.
- Description of the onsite authority of the construction monitor to modify implementation of the activity.

Check box to acknowledge this requirement.

V. SPECIFIC CONDITIONS ON COVERED ACTIVITIES

1) Check off the HCP conservation measures that apply to the project.

APPLIES TO ALL PROJECTS

Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Migratory Birds. This conservation measure applies to all projects. All projects will avoid all impacts on extremely rare plants and fully protected species listed in Table 6-5 of the ECCC HCP/NCCP. See HCP pp. 6-23 to 6-25, and Table 6-5.

APPLIES TO PROJECTS THAT IMPACT COVERED PLANT SPECIES

Conservation Measure 3.10. Plant Salvage when Impacts are Unavoidable. This condition applies to projects that cannot avoid impacts on covered plants and help protect covered plants by prescribing salvage whenever avoidance of impacts is not feasible. Project proponents wishing to remove populations of covered plants must notify the Conservancy of their construction schedule to allow the Conservancy the option of salvaging the populations. See HCP pp. 6-48 to 6-50.

APPLIES TO PROJECTS THAT INCLUDE ARE ADJACENT TO STREAMS, PONDS, OR WETLANDS

Conservation Measure 2.12. Wetland, Pond, and Stream Avoidance and Minimization. All projects will implement measures described in the HCP to avoid and minimize impacts on wetlands, ponds, streams, and riparian woodland/scrub. See HCP pp. 6-33 to 6-35.

APPLIES TO NEW DEVELOPMENT PROJECTS

Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion. All new development must avoid or minimize direct and indirect impacts on local hydrological conditions and erosion by incorporating the applicable Provision C.3 Amendments of the Contra Costa County Clean Water Program's (CCCCWP's) amended NPDES Permit (order no. R2-2003-0022; permit no. CAS002912). The overall goal of this measure is to ensure that new development covered under the HCP has no or minimal adverse effects on downstream fisheries to avoid take of fish listed under ESA or CESA. See HCP pp. 6-21 to 6-22.

APPLIES TO NEW DEVELOPMENT PROJECTS THAT INCLUDE OR ARE ADJACENT TO STREAMS, PONDS, OR WETLANDS

Conservation Measure 1.7. Establish Stream Setbacks. A stream setback will be applied to all development projects covered by the HCP according to the stream types listed in Table 6-2 of the HCP. See HCP pp. 6-15 to 6-18 and Table 6-2.

APPLIES TO NEW DEVELOPMENT PROJECTS ADJACENT TO EXISTING PUBLIC OPEN SPACE, HCP PRESERVES, OR LIKELY HCP ACQUISITION SITES

Conservation Measure 1.6. Minimize Development Footprint Adjacent to Open Space. Project applicants are encouraged to minimize their development footprint and set aside portions of their land to contribute to the HCP Preserve System. Land set aside that contributes to the HCP biological goals and objectives may be credited against development fees. See HCP pages 6-14 to 6-15.

Conservation Measure 1.8. Establish Fuel Management Buffer to Protect Preserves and Property. Buffer zones will provide a buffer between development and wildlands that allows adequate fuel management to minimize the risk of wildlife damage to property or to the preserve. The minimum buffer zone for new development is 100 feet. See HCP pages 6-18 to 6-19.

Conservation Measure 1.9. Incorporate Urban-Wildlife Interface Design Elements. These projects will incorporate design elements at the urban-wildlife interface to minimize the indirect impacts of development on the adjacent preserve. See HCP pp. 6-20 to 6-21.

¹¹ If the preconstruction surveys do not trigger construction monitoring, results of preconstruction surveys should still be submitted to the local jurisdiction and the East Contra Costa County Habitat Conservancy.

APPLIES TO ROAD MAINTENANCE PROJECTS OUTSIDE THE UDA

Conservation Measure 1.12. Implement Best Management Practices for Rural Road Maintenance. Road maintenance activities have the potential to affect covered species by introducing sediment and other pollutants into downstream waterways, spreading invasive weeds, and disturbing breeding wildlife. In order to avoid and minimize these impacts, BMPs described in the HCP will be used where appropriate and feasible. See HCP pp. 6-25 to 6-26.

APPLIES TO NEW ROADS OR ROAD IMPROVEMENTS OUTSIDE THE UDA

Conservation Measure 1.14. Design Requirements for Covered Roads Outside the Urban Development Area (UDA). New roads or road improvements outside the UDA have impacts on many covered species far beyond the direct impacts of their project footprints. To minimize the impacts of new, expanded, and improved roads in agricultural and natural areas of the inventory area, road and bridge construction projects will adopt siting, design, and construction requirements described in the HCP and listed in Table 6-6. See HCP pp. 6-27 to 6-33 and Table 6-6.

APPLIES TO FLOOD CONTROL MAINTENANCE ACTIVITIES

Conservation Measure 1.13. Implement Best Management Practices for Flood Control Facility Maintenance. Flood control maintenance activities have the potential to affect covered species by introducing sediment and other pollutants into downstream waterways and disturbing breeding wildlife. In order to avoid and minimize these impacts, BMPs described in the HCP will be used where appropriate and feasible. See HCP pp. 6-26 to 6-27.

- 2) **For all checked conservation measures, describe how the project will comply with each measure. Attach as Attachment C: Project Compliance to HCP Conditions.**

VI. MITIGATION MEASURES _____

- 1) **Mitigation Fee Calculator(s)**

Complete and attach the fee calculator (use permanent and/or temporary impact fee calculator as appropriate), and attach as **Attachment D: Fee Calculator(s)**.

- 2) **Briefly describe the amount of fees to be paid and when applicant plans to submit payment.**

The project site encompasses 10.04+/- acres and falls within Fee Zone 1. The site consists of 9.41+/- acres of ruderal grassland and 0.63+/- acres of Urban/Developed areas. Fees will be paid on the areas of ruderal grassland in the site.

Under the current (March 2023) fee schedule, the total fees are: Permanent impacts to 9.4+/- acres of ruderal grassland at a cost of \$19,611.52 per acre = **\$184,544.40**

Construction is expected to commence in the Summer of 2024. Fees will be paid pursuant to the fee schedule that is in place at the time construction commences.

ATTACHMENT A: PROJECT DESCRIPTION

Orchard Grove II
(Subdivision 9649)
Brentwood, California

Project Description
August 2023

The 10.04+/- acre project site is located just east of Adams Lane and West of Lone Oak Road in Brentwood, Contra Costa County, California. The site is within an Unnumbered Section, in Township 1 North, Range 2 East of the USGS 7.5-minute Brentwood topographic quadrangle (Figure 1).

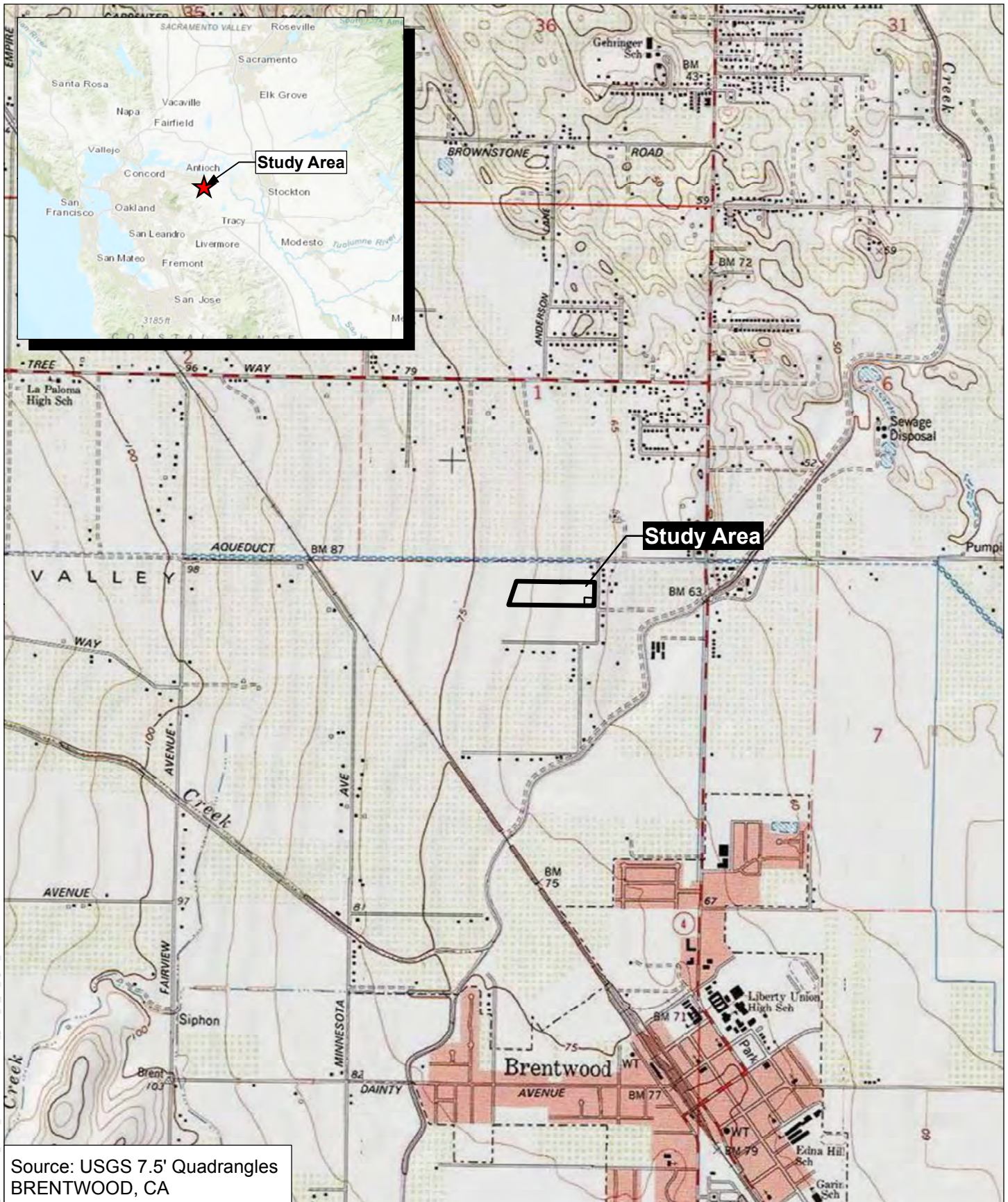
Shea Homes plans to construct single-family homes on 34 new lots, consisting of 30 detached homes and two duplex units (Figures 2a – 2d). Vehicle access to the site will be from Adams Lane and a looping road will provide access to all of the homes. Thin off-site slivers of land along Adams Lane and Lone Oak Road will likely be subject to off-site road and/or shoulder improvements as part of the project. The existing home site in the southeast part of the site will remain as a separate new parcel.

Storm water from the subdivision will be detained in a water quality treatment basin in the northeast part of the site prior to its discharge in to an existing storm drain system, eventually conveying water in to the Marsh Creek channel to the east of the site. The proposed project will connect to existing City infrastructure to provide sewer and water to the site.

Standard construction best management practices (BMPs) will be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs will include use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydrolmulch.

Construction is expected to begin Summer 2024.

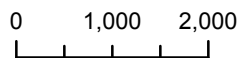
ATTACHMENT B: FIGURES



Source: USGS 7.5' Quadrangles
BRENTWOOD, CA

Figure 1

**Moore Biological
Consultants**



Map Date: 08/08/2023

Site Map/USGS

Orchard Grove II

Brentwood, Contra Costa County, CA



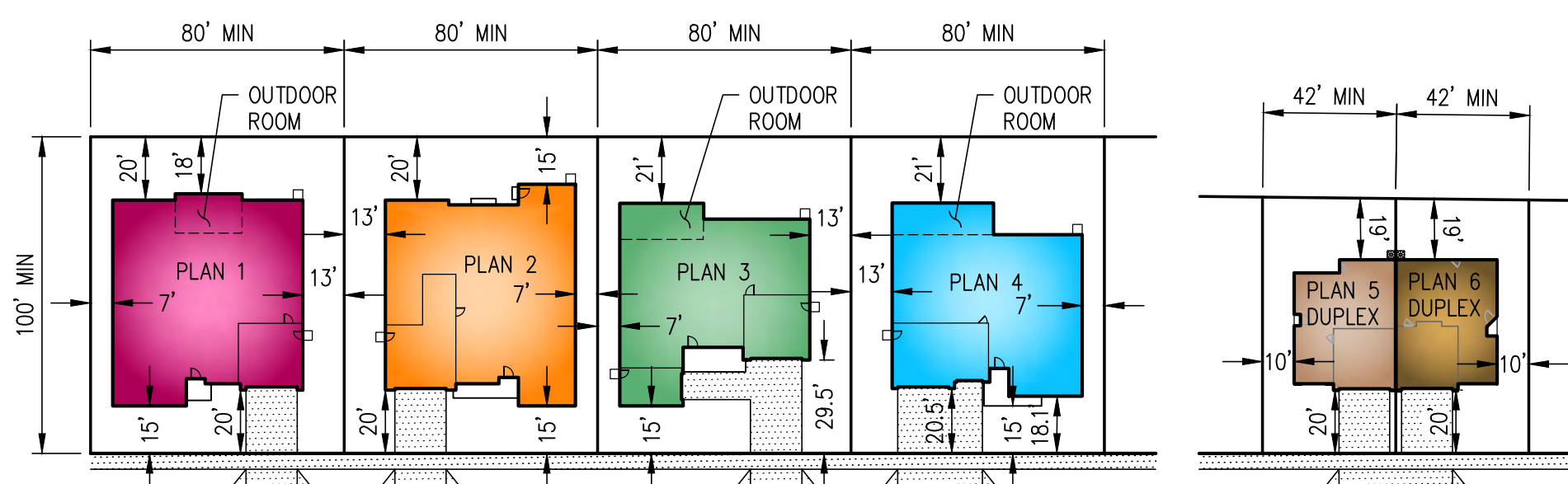
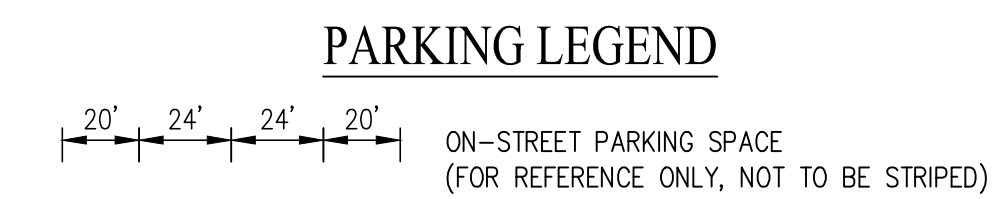
PLAN MIX		
PLAN	TOTAL	%
PLAN 1 (1 STORY)	8	23.5%
PLAN 2 (1 STORY)	8	23.5%
PLAN 3 (2 STORY)	7	20.6%
PLAN 4 (2 STORY)	7	20.6%
PLAN 5 DUPLEX (2 STORY)	2	5.9%
PLAN 6 DUPLEX (2 STORY)	2	5.9%
TOTAL	34	100.0%

ELEVATION QUANTITY				
PLAN	A	B	C	TOTAL
1	3	2	3	8
2	3	3	2	8
3	2	3	2	7
4	2	2	3	7
5 DUPLEX	1	0	1	2
6 DUPLEX	1	0	1	2
TOTAL	12	10	12	34

NOTE:
1. THE LETTER "R" DESIGNATES A REVERSE PLAN TYPE.

PARKING REQUIREMENTS			
	REQUIRED PARKING		PROVIDED PARKING
OFF-STREET (GARAGE)	2 SPACES/DU	68	90 (SEE NOTE 1)
OFF-STREET (DRIVEWAY)	NA	0	75 (SEE NOTE 2)
ON-STREET (PARALLEL PARKING AVAILABILITY)	NA	0	63
TOTAL		68	228 OR 6.7 SPACES/DU

NOTES:
1. PLANS 2, 3 & 4 INCLUDE 3-CAR GARAGES. ALL OTHER PLAN TYPES INCLUDE 2-CAR GARAGES.
2. PLAN 4 ALLOWS FOR 3 CARS PARKED ON THE DRIVEWAY. ALL OTHER PLAN TYPES ALLOW FOR 2 CARS PARKED ON THE DRIVEWAY.

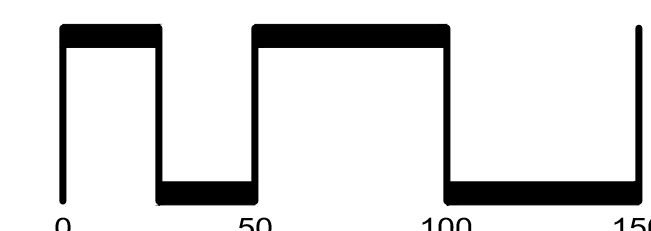
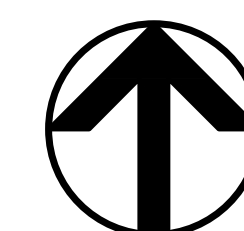


TYPICAL LOT SETBACKS
SCALE: 1" = 50'

SUBDIVISION 9649 DEVELOPMENT PLAN ORCHARD GROVE NORTH

CITY OF BRENTWOOD CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1" = 50' DATE: MAY 25, 2023

DRAFT



SAN RAMON • (925) 866-0322
SACRAMENTO • (916) 375-1877
WWW.CBANDG.COM
CIVIL ENGINEERS • SURVEYORS • PLANNERS

Figure 2a: Development Plan



GENERAL NOTES:

- OWNER: GLORIA McCOY
1901 LONE OAK ROAD
BRENTWOOD, CA 94513
- APPLICANT: SHEA HOMES, NORTHERN CALIFORNIA
2630 SHEA CENTER DRIVE
LIVERMORE, CA 94551
(925) 460-8910
DAVE BEST
- CIVIL ENGINEER: CARLSON, BARBEE & GIBSON, INC.
2633 CAMINO RAMON, SUITE 350
SAN RAMON, CA 94583
(925) 866-0322
JASON D. VOGAN, RCE 59299
- SOILS ENGINEER: ENGO, INC.
17278 GOLDEN VALLEY PARKWAY
LATHROP, CA 95330
(925) 835-0610
STEVE HARRIS, RCE 2804
- TOPOGRAPHIC SOURCE: GEOMAPS INC.
3362 MATHER FIELD ROAD
RANCHO CORDOVA, CA 95670
(916) 361-9133
- CONTOUR INTERVAL: 1 - FOOT BASED ON NAVD88 (EXISTING & PROPOSED)
- BENCHMARK: CITY OF BRENTWOOD BENCHMARK NO. 2052R
EAST BAY MUNICIPAL UTILITY DISTRICT DISK 2954+83.58 RESET
BENCHMARK 2011 IN CONCRETE VAULT, GRANT STREET AT LONE
OAK ROAD AT EDEN PLAINS ROAD, SOUTHWEST ROADWAY
INTERSECTION.
ELEVATION = 69.98 FEET (NAVD 88) ADJUSTED MAY 2013
- BASIS OF BEARINGS: THE BASIS OF BEARINGS FOR THIS SURVEY IS THE BEARING BEING
N89°22'45"W BETWEEN STATION NO. 2130 AND STATION NO. 2112
PER RECORD OF SURVEY NO. 2496 (118 LSM 40). THE BEARINGS
SHOWN ARE ON THE CALIFORNIA COORDINATE SYSTEM ZONE III.
MULTIPLE DISTANCES AS SHOWN BY 0.99993544 TO OBTAIN GRID
DISTANCES.

GENERAL NOTES (CONTINUED):

- EXISTING TOPOGRAPHY: AERIAL TOPOGRAPHY IS BASED ON PHOTOGRAPHY TAKEN ON
MARCH 11, 2020 AND PREPARED BY GEOMAPS. THE FLIGHT WAS
SURVEY GROUND CONTROLLED BY CARLSON, BARBEE & GIBSON, INC.
- FLOOD ZONE: ZONE X
REFER TO FLOOD INSURANCE RATE MAP
PANEL 06013C 0354 G (MARCH 21, 2017)
- ADDRESS: 1901 LONE OAK ROAD, BRENTWOOD, CA 94513
- ASSESSORS PARCEL NO: 016-040-004
- PROPOSED SITE AREA: 10.00± AC
- GENERAL PLAN: RESIDENTIAL-VERY LOW DENSITY (R-VLD)
- ZONING: EXISTING & PROPOSED: R-1-E
- PROPOSED LOT SIZES: 80' X 100' - 8,000 SF MIN (MARKET RATE SFR)
42' X 78' - 3,276 SF MIN (AFFORDABLE DUET)
- AVERAGE LOT SIZE: 86.5' X 100' (8,650 SF)
- MAXIMUM LOT SIZE: 90' X 139'
- PROPOSED DENSITY: 34 DU / 10.00± AC = 3.4 DU/AC
- EXISTING STRUCTURES: ALL EXISTING BUILDINGS WITHIN THE PROJECT BOUNDARY TO BE
REMOVED UNLESS OTHERWISE NOTED.
- EXISTING UTILITIES: ALL EXISTING UTILITIES WITHIN THE PROJECT BOUNDARY TO BE
REMOVED UNLESS OTHERWISE NOTED.
- EXISTING TREES: EXISTING TREES WITHIN THE PROJECT BOUNDARY TO BE REMOVED
UNLESS OTHERWISE NOTED.
- WALLS AND FENCING: ALL WALLS AND FENCING WILL BE PRIVATELY OWNED AND PRIVATELY
MAINTAINED EXCEPT THE LANDSCAPE PRIVACY WALLS ALONG ADAMS
LANE, LONE OAK ROAD OR ADJACENT TO PARCEL A, WHICH WILL BE
IN THE CITY RIGHT OF WAY OR PARCELS OWNED BY THE CITY.
- PUBLIC UTILITIES: ALL UTILITIES WITHIN THE PUBLIC RIGHT OF WAY OR WITHIN A
PUBLIC UTILITY EASEMENT WILL BE PUBLIC AND WILL BE PUBLICLY
OWNED AND MAINTAINED.

GENERAL NOTES (CONTINUED):

- UTILITY PROVIDER: WATER/SEWER/STORM DRAIN: CITY OF BRENTWOOD
GAS & ELECTRIC: PACIFIC GAS & ELECTRIC
TELEPHONE: AT&T
CABLE TV: COMCAST
- STREETS: ALL STREETS WILL BE PER CITY STANDARD AND DEDICATED TO THE
CITY OF BRENTWOOD AS A PUBLICLY OWNED AND MAINTAINED STREETS.
- STREET LIGHTS: ALL STREET LIGHTS WILL BE DECORATIVE PER DETAIL SL-4.
- GRADING: PROPOSED GRADING IS PRELIMINARY. FINAL GRADING IS SUBJECT TO FINAL DESIGN.
- BOUNDARY: THE BOUNDARY IS BASED ON A FIELD RESOLVED SURVEY BOUNDARY AND EASEMENTS SHOWN HEREON ARE
BASED UPON RECORD TITLE INFORMATION AS LISTED AND DESCRIBED IN THE PRELIMINARY TITLE REPORT
PREPARED BY CHICAGO TITLE COMPANY, DATED APRIL 4, 2023, ORDER NUMBER 36303481-363-LB-KD.
NO ADDITIONAL TITLE RESEARCH HAS BEEN PERFORMED TO COMPLETE THIS PACKAGE.
- PHASING: PROJECT MAY BE CONSTRUCTED IN PHASES.
- FINAL MAP: MULTIPLE FINAL MAPS MAY BE FILED UPON APPROVAL OF THE VESTING TENTATIVE SUBDIVISION MAP.
- DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL MAP.

LAND AREA SUMMARY		
PARCEL / LOT	LAND USE	AREA
LOTS 1-34	RESIDENTIAL	6.77 AC ±
ADAMS LANE	RIGHT OF WAY DEDICATION	0.23 AC ±
LONE OAK ROAD	RIGHT OF WAY DEDICATION	0.23 AC ±
IN-TRACT STREETS	PUBLIC RIGHT OF WAY	1.72 AC ±
DESIGNATED REMAINDER	EXISTING RESIDENTIAL	0.33 AC ±
PARCEL A	LANDSCAPE OPEN SPACE / WATER QUALITY BIORETENTION	0.72 AC±
TOTAL:		10.00 AC±

LEGEND

- | | | | |
|--|------------------|--|--------------|
| | EXISTING | | PROPOSED |
| | PROJECT BOUNDARY | | RIGHT OF WAY |
| | LOT LINE | | FACE OF CURB |
| | EASEMENT | | AC PAVEMENT |
| | SIDEWALK | | BIORETENTION |

Sheet List Table	
Sheet Number	Sheet Title
1	GENERAL NOTES, DIMENSIONED SITE PLAN & SHEET INDEX
2	PRELIMINARY GRADING PLAN
3	PRELIMINARY UTILITY PLAN
4	PRELIMINARY STORMWATER CONTROL PLAN

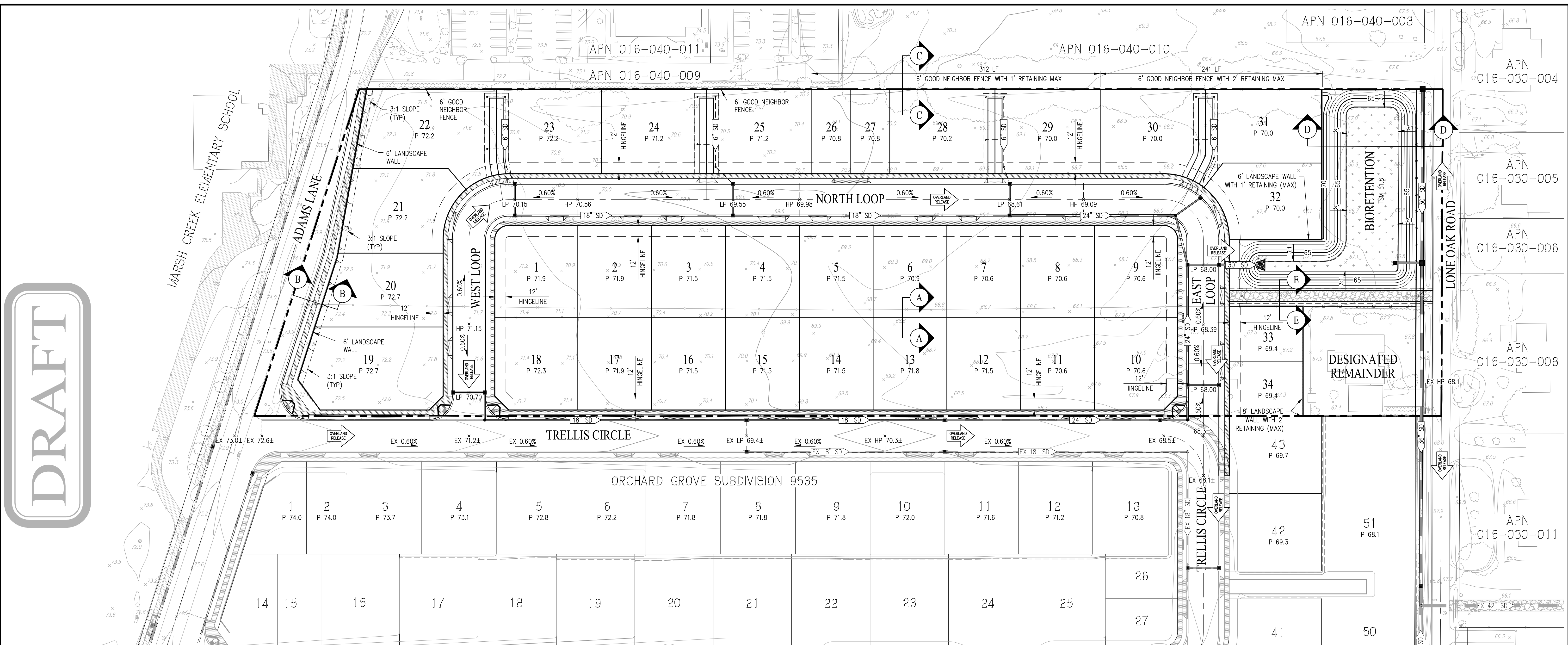
**GENERAL NOTES,
DIMENSIONED SITE PLAN & SHEET INDEX
VESTING TENTATIVE MAP
ORCHARD GROVE NORTH - SUBDIVISION 9649**

CITY OF BRENTWOOD CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: JULY 11, 2023 JOB NO.: 3170-010

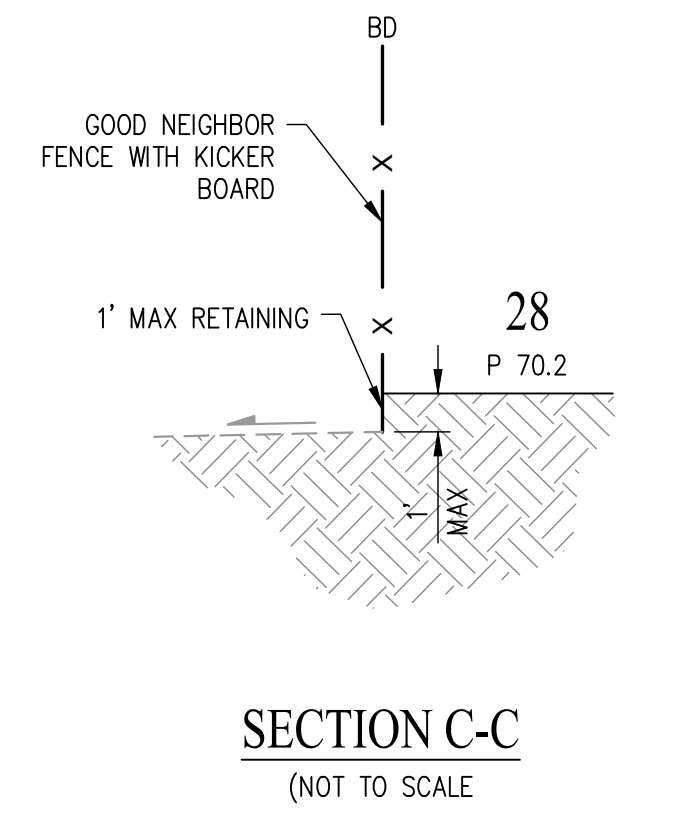
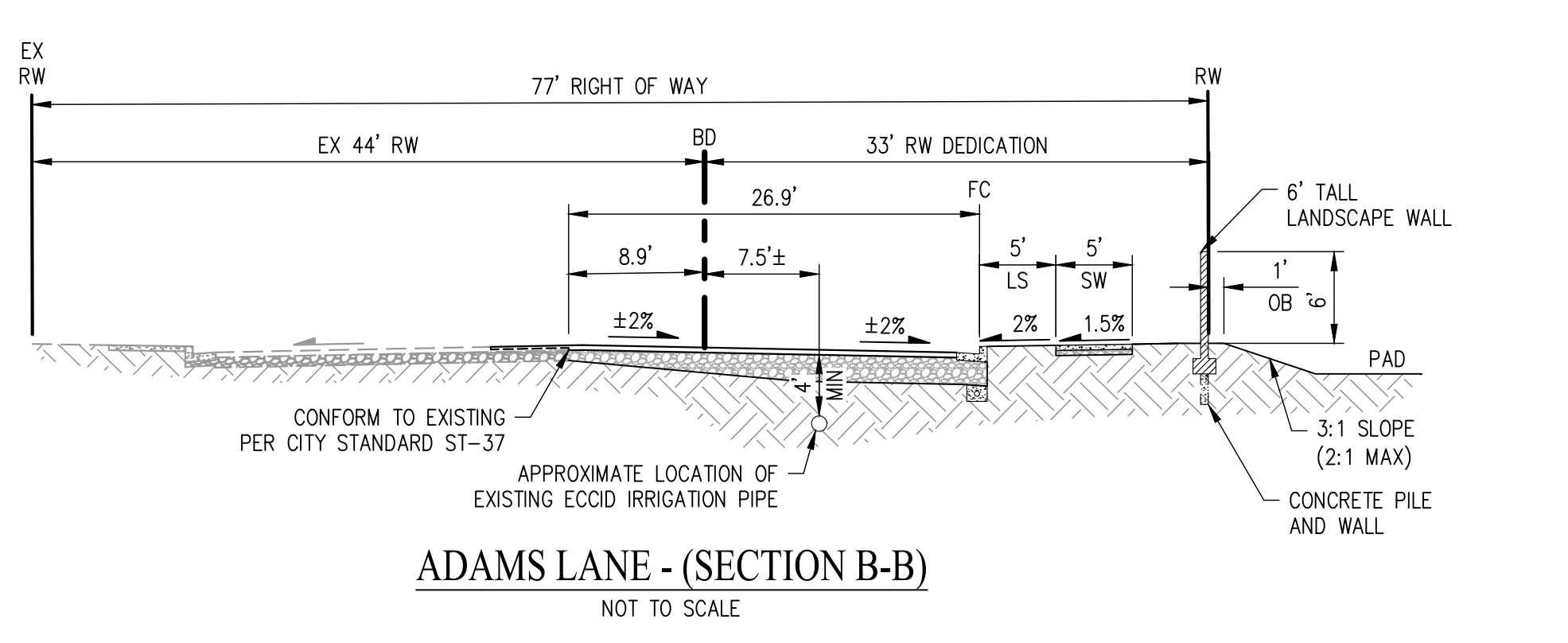
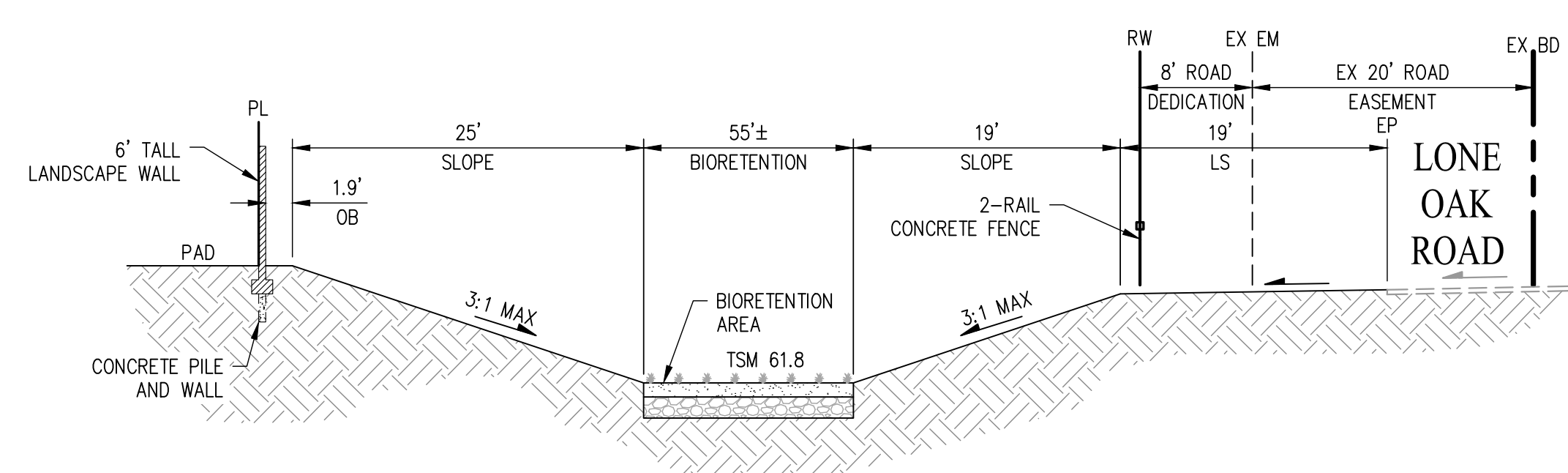
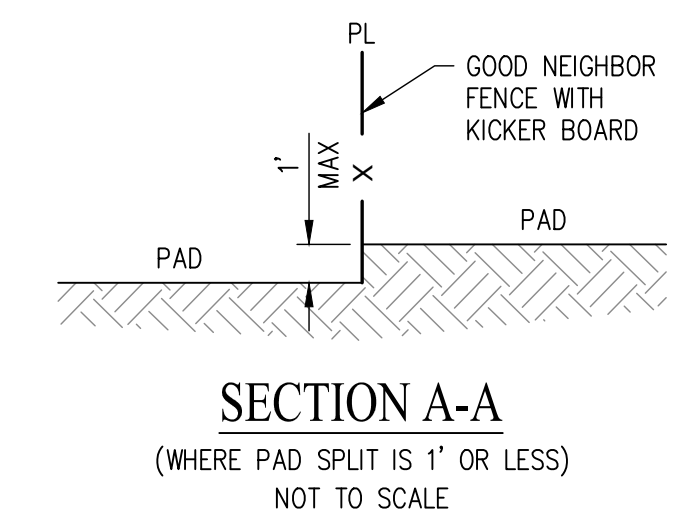
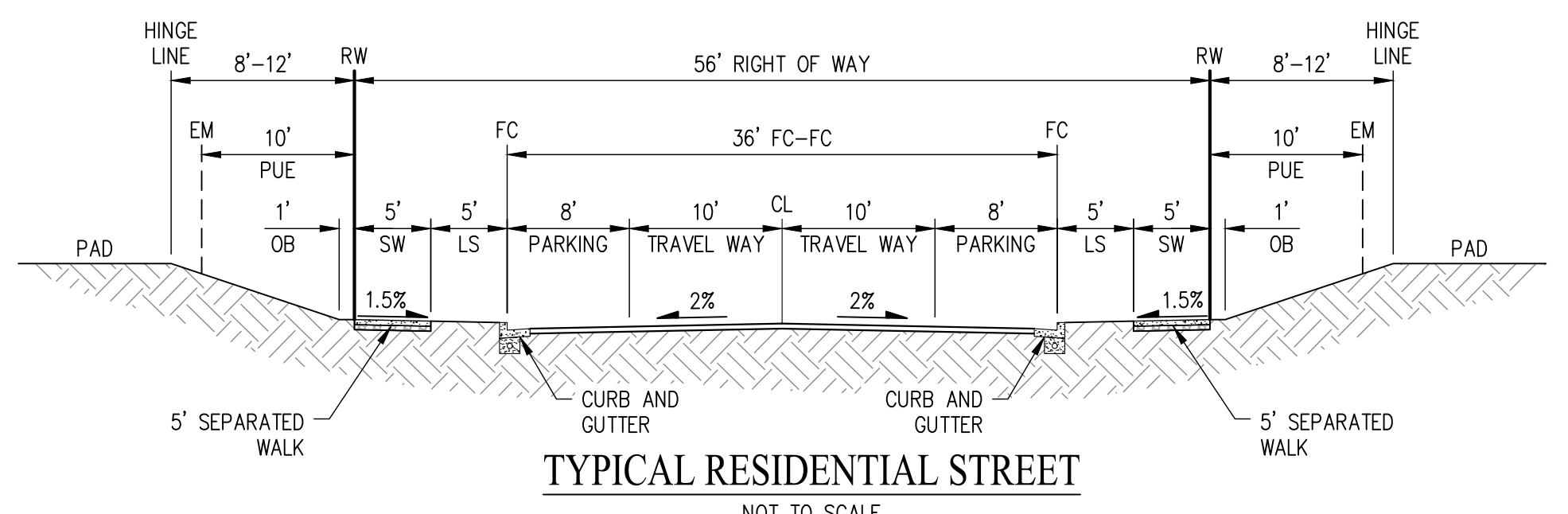
			SAN RAMON • (925) 866-0322 ROSEVILLE • (916) 788-4456 WWW.CBANDG.COM	SHEET NO. 1 OF 4 SHEETS
--	--	--	--	--------------------------------------

Figure 2b: Vesting Tentative Map - Site Plan

F:\3170-010\ACAD\TENTATIVE.DWG



DRAFT



LEGEND		ABBREVIATIONS	
EXISTING	PROPOSED	BD	BOUNDARY
---	---	CL	CENTERLINE
---	---	EM	EASEMENT
---	---	EP	EDGE OF PAVEMENT
---	---	FC	FACE OF CURB
---	---	LS	LANDSCAPE
---	---	LME	LANDSCAPE MAINTENANCE EASEMENT
---	---	OB	OVER BUILD
---	---	P	PAD
---	---	PL	PROPERTY LINE
---	---	PUE	PUBLIC UTILITY EASEMENT
---	---	RW	RIGHT OF WAY
---	---	SW	SIDEWALK
---	---	PROJECT BOUNDARY	
---	---	RIGHT OF WAY	
---	---	LOT LINE	
---	---	FACE OF CURB	
---	---	EASEMENT	
---	---	AC PAVEMENT	
---	---	SIDEWALK	
---	---	BIORETENTION	

PRELIMINARY GRADING PLAN

VESTING TENTATIVE MAP

ORCHARD GROVE NORTH - SUBDIVISION 9649

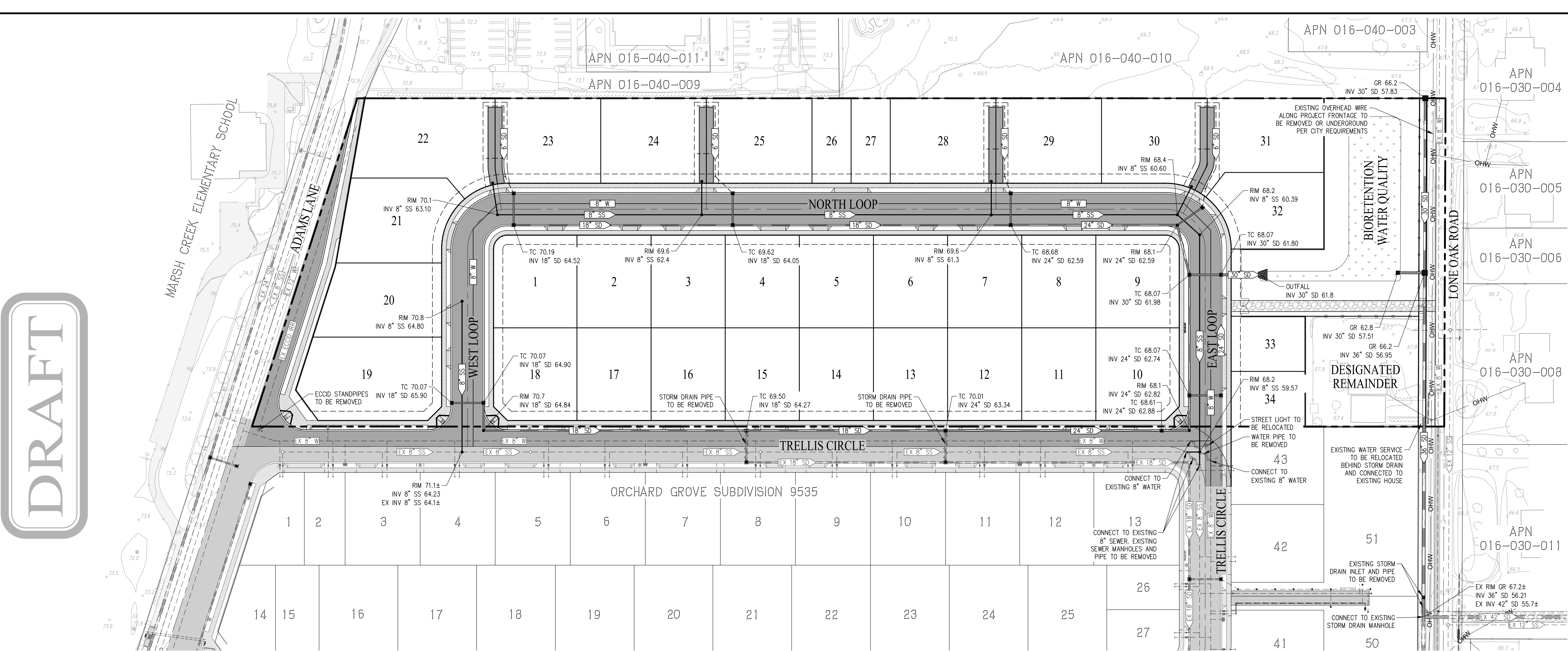
CITY OF BRENTWOOD CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: JULY 11, 2023 JOB NO.: 3170-010

SAN RAMON • (925) 866-0322
ROSEVILLE • (916) 788-4456
WWW.CBANDG.COM

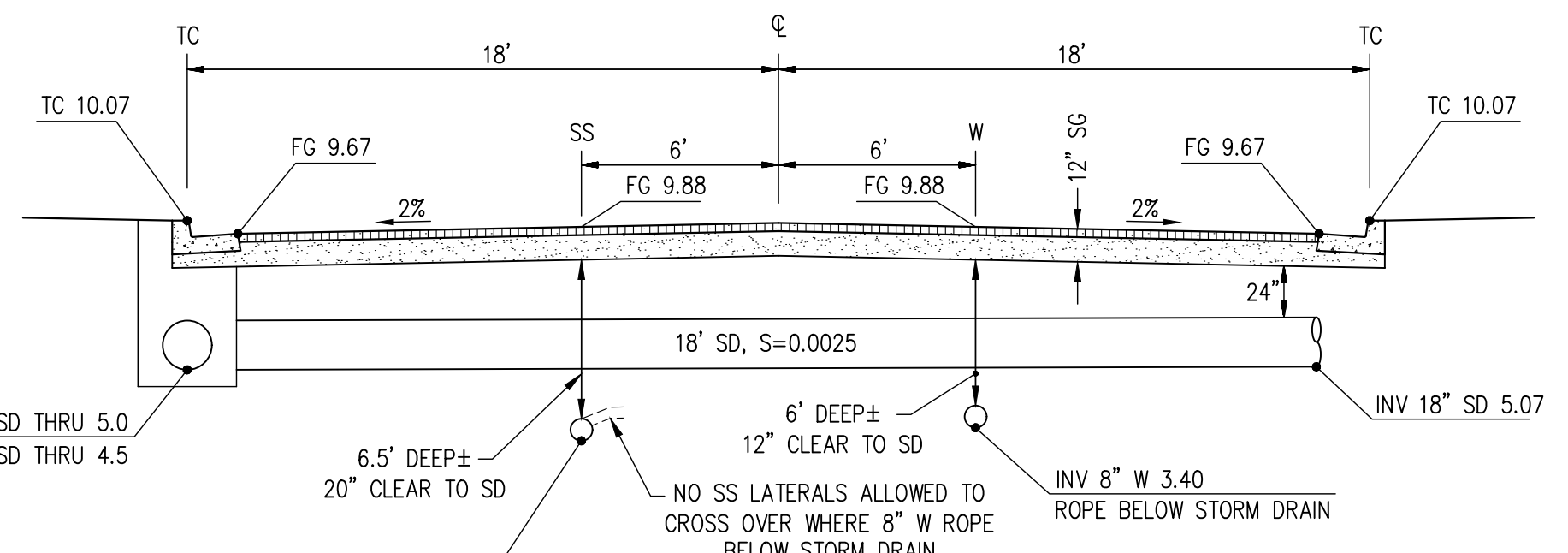
SHEET NO.
2
OF 4 SHEETS

Figure 2c: Preliminary Grading Plan

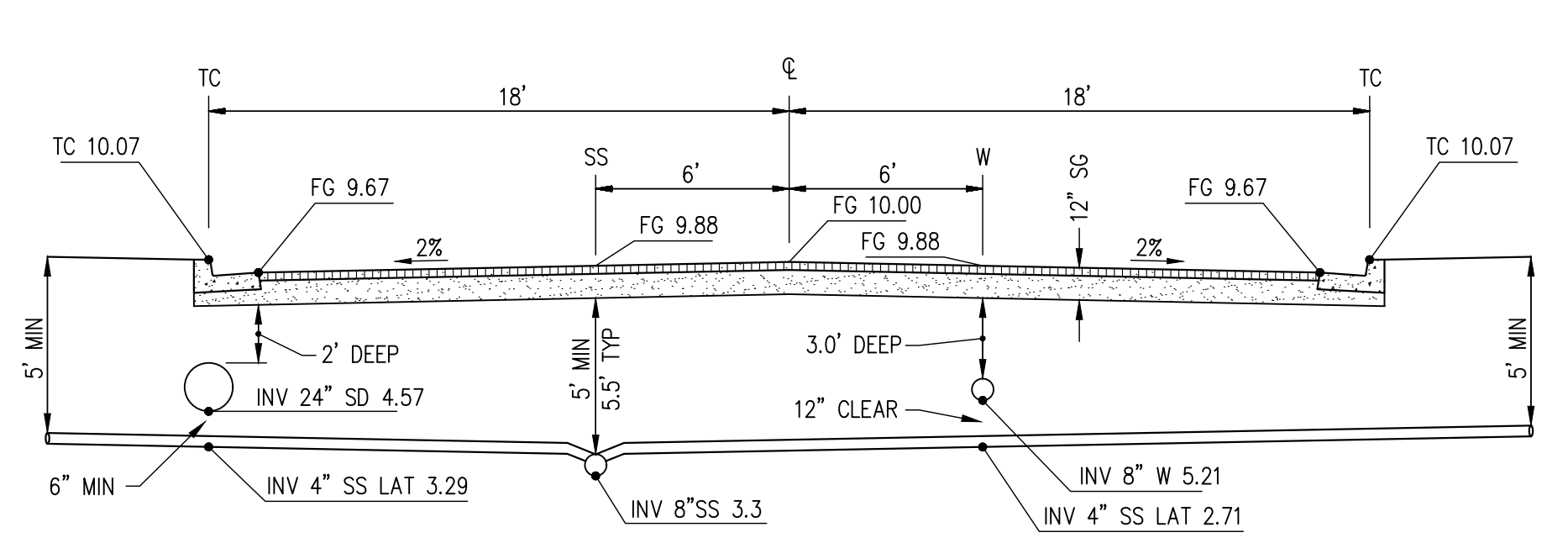
F:\3170-010\ACAD\TMTM02.DWG



DRAFT



MINIMUM UTILITY DEPTHS AT STORM DRAIN CROSSINGS
NOT TO SCALE



MINIMUM UTILITY DEPTHS
NOT TO SCALE

- MINIMUM DEPTH PROJECT PARAMETERS:**
- STORM DRAIN MINIMUM COVER IS 2' BELOW SUBGRADE.
 - WATER PIPE MINIMUM COVER IS 3.0' BELOW SUBGRADE (STANDARD PVC & NO CONCRETE CAP).
 - SANITARY SEWER MINIMUM COVER IS 5' BELOW SUBGRADE.

- UTILITY DESIGN NOTES:**
1. ALL STORM DRAINS ARE DESIGNED AT WITH MINIMUM SLOPE OF S=0.0020 AND MATCH CROWNS.
 2. ALL SANITARY SEWER HAVE A MINIMUM SLOPE OF S=0.0035 AND 0.1' DROPS AT MANHOLES WHERE ANGLES ARE GREATER THAN 20-DEGREE.
 3. ALL WATER LINES ARE DESIGNED AT A DEPTH OF 3.0' BELOW SUBGRADE, UNLESS ROPED BENEATH UTILITY CROSSINGS TO OBTAIN NECESSARY CLEARANCES.

LEGEND		ABBREVIATIONS
	EXISTING	CL CENTERLINE
	PROPOSED	EM EASEMENT
		FC FACE OF CURB
		LS LANDSCAPE
		LME LANDSCAPE MAINTENANCE EASEMENT
		PUE PUBLIC UTILITY EASEMENT
		R RADIUS
		RW RIGHT OF WAY
		SF SQUARE FEET
		SW SIDEWALK

PRELIMINARY UTILITY PLAN

VESTING TENTATIVE MAP

ORCHARD GROVE NORTH - SUBDIVISION 9649

CITY OF BRENTWOOD CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: JULY 11, 2023 JOB NO.: 3170-010

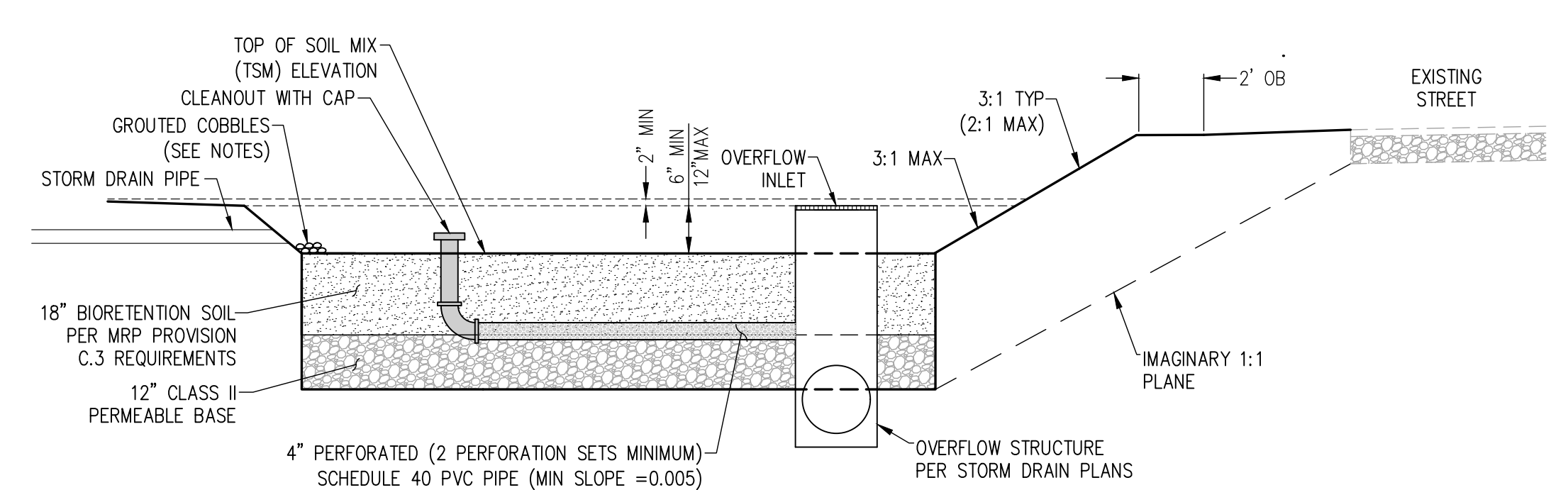
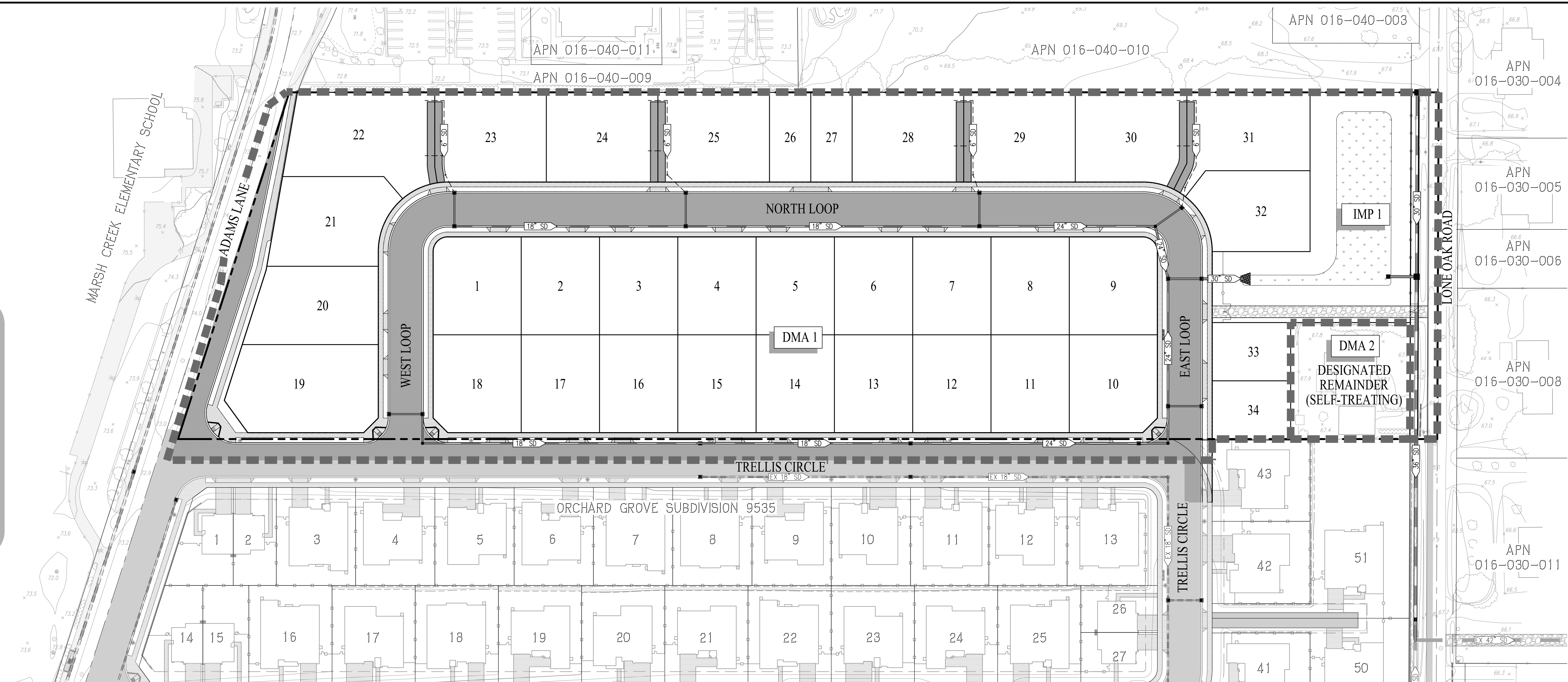
SAN RAMON • (925) 866-0322
ROSEVILLE • (916) 788-4456
WWW.CBANDG.COM

SHEET NO.
3
OF 4 SHEETS

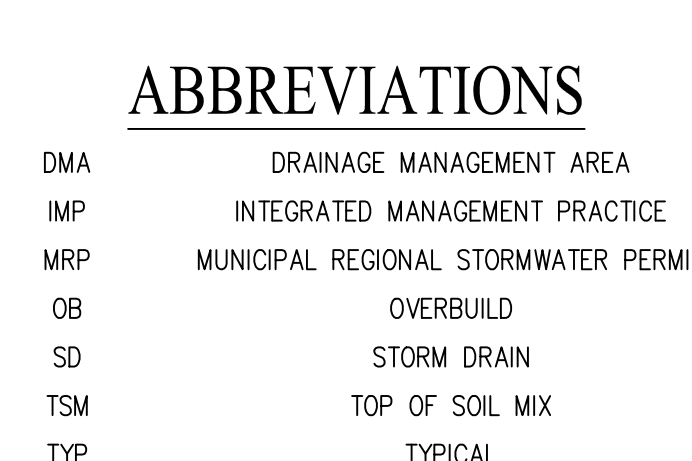
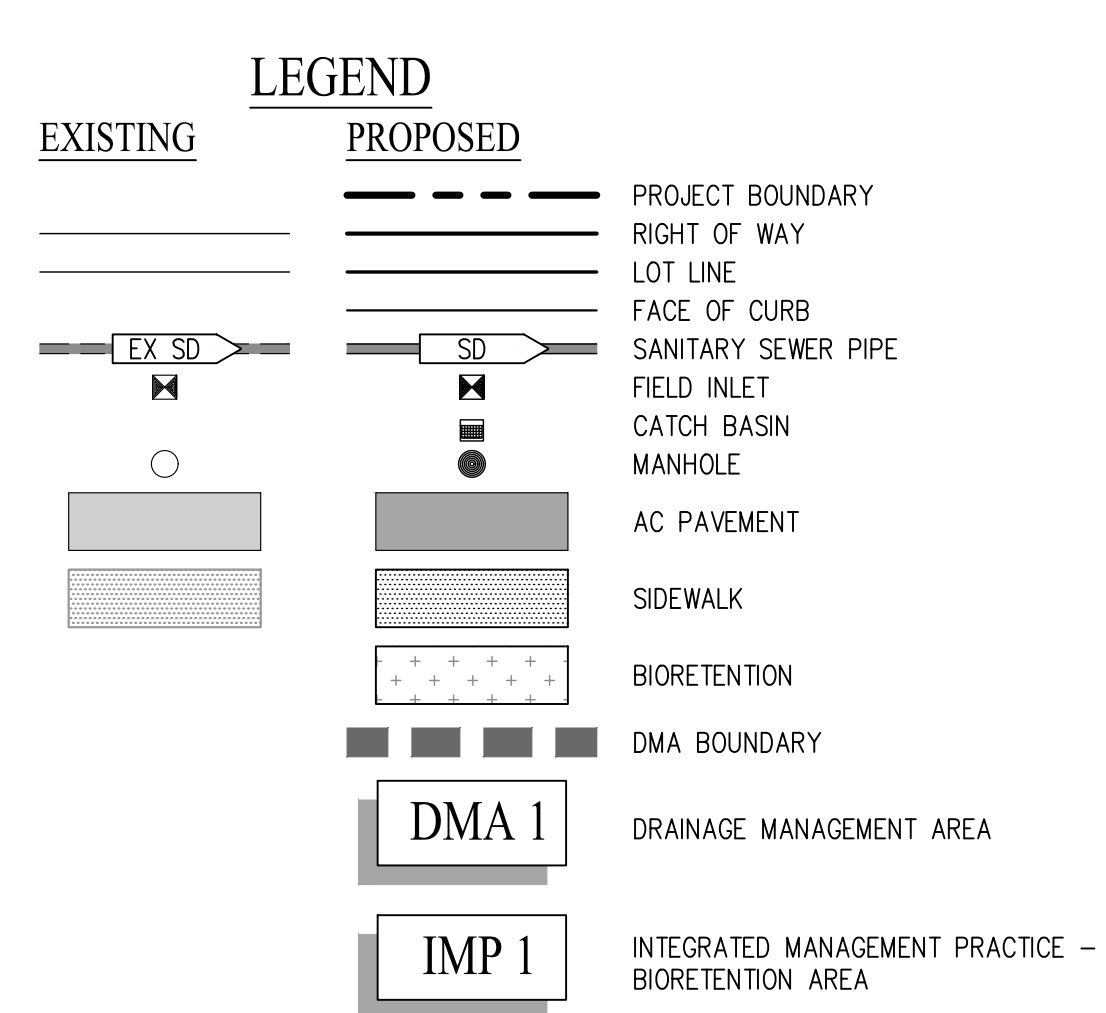
Figure 2d: Preliminary Utility Plan

F:\3170-010\ACAD\T\TM03.DWG

DRAFT



- BIORETENTION AREA NOTES:**
1. INSTALL A 6" DEEP 3"x3" GROUTED COBBLE OUTFALL AT ALL DRAIN OUTLETS AND SWALE CONNECTION LOCATIONS TO BIORETENTION.
 2. ALL COBBLES SHALL BE 3"-6" IN DIAMETER.
 3. MINIMUM SLOPE OF ALL PERFORATED PIPE TO BE 0.005.
 4. ALL PERFORATED DRAIN PIPES TO HAVE 8" MINIMUM OF DRAIN ROCK ABOVE THE PIPE.
 5. CONTRACTOR TO PROVIDE AT LEAST 3 INCHES OF COMPOSTED NON-FLOATING MULCH ON ANY EXPOSED EARTH WITHIN THE BIORETENTION AREA.



DRAINAGE MANAGEMENT AREA SUMMARY

AREA ID	PROPOSED IMPROVEMENTS		EFFECTIVE IMPERVIOUS AREA	TREATMENT AREA	
	ROOF AND CONCRETE (SF)	LANDSCAPING (SF)	CALCULATED (SF)	REQUIRED (SF)	PROVIDED (SF)
DMA 1	238,079	199,157	258,042	10,320	11,019
DMA 2	DESIGNATED REMAINDER (SELF-TREATING AREA) = 14,519 SF				

- NOTES:**
1. VALUES IN THE TABLE ABOVE ARE ESTIMATED BASED ON THE AVAILABLE INFORMATION AT THE TIME OF THIS TENTATIVE MAP.
 2. REQUIRED AREAS CALCULATED USING THE 4% RULE WITH A FACTOR OF 1.0 FOR IMPERVIOUS AREAS AND 0.1 FOR PERVIOUS AREAS (CONTRA COSTA COUNTY IMP SIZING TOOL)
 3. SITE IS EXEMPT FROM HYDROMODIFICATION REQUIREMENTS

**PRELIMINARY STORMWATER CONTROL PLAN
VESTING TENTATIVE MAP
ORCHARD GROVE NORTH - SUBDIVISION 9649**

CITY OF BRENTWOOD CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: JULY 11, 2023 JOB NO.: 3170-010

SAN RAMON • (925) 866-0322
ROSEVILLE • (916) 788-4456
WWW.CBANDG.COM

CIVIL ENGINEERS • SURVEYORS • PLANNERS

SHEET NO.
4
OF 4 SHEETS

Figure 2e: Preliminary Stormwater Control Plan

F:\3170-010\ACAD\TMTM04.DWG



Figure 3

Moore Biological Consultants

Map Date: 08/08/2023
Aerial Source: Google Earth (04/2022)

Project Site (9.66 ac.)
 Off-Site Improvements (0.03 ac.)
 No Improvements (0.35 ac.)

0 75 150

Field Verified Landcover Map

Orchard Grove II

Brentwood, Contra Costa County, CA

C:\FIC_IN\Projects\Moore Biological\Orchard Grove II\Map\PSR\Orchard Grove II map figure 3.mxd



Ruderal grassland in the body of the site, looking south from the north edge of the site;
04/28/23.



Ruderal grassland in the body of the site, looking north from the south edge of the site;
04/28/23.

FIGURE 4a



Ruderal grassland in the west part of the site, looking east from the west edge of the site; 04/28/23.



Barn just west of the home in the southeast part of the site, looking southwest; 04/28/23. This barn and livestock area will be demolished as part of the project.

FIGURE 4b



West edge of the site, looking northeast from the southeast corner of the site; 04/28/23.



North edge of the site, looking east from the northwest corner of the site; 04/28/23.

FIGURE 4c



North edge of the site, looking west from the northeast corner of the site; 04/28/23.



South edge of the site, looking west from just west of the barn in the southeast part of the site; 04/28/23.

FIGURE 4d



Row of large eucalyptus trees adjacent to the north edge of the site, looking northwest from the northeast part of the site; 04/28/23.



Remnant raptor stick nest (circled) in one of the eucalyptus trees just north of the site; 04/28/23. This nest was empty at the time of the survey.

FIGURE 4e



Shoulder of Lone Oak Road adjacent to the east edge of the site, looking south; 04/28/23. This area will be subject to off-site road and/or shoulder improvements as part of the project.



Shoulder of Adams Lane adjacent to the west edge of the site, looking southwest; 04/28/23. This area will be subject to off-site road and/or shoulder improvements as part of the project.

FIGURE 4f



Home site in the southeast corner of the site, looking southwest from Lone Oak Road; 04/28/23. The home will remain in a separate parcel.

FIGURE 4g



Figure 5a

Moore Biological
Consultants

Map Date: 08/08/2023
Aerial Source: Google Earth (04/2022)

-  Project Site (9.66 ac.)
-  Off-Site Improvements (0.03 ac.)
-  No Improvements (0.35 ac.)

0 75 150

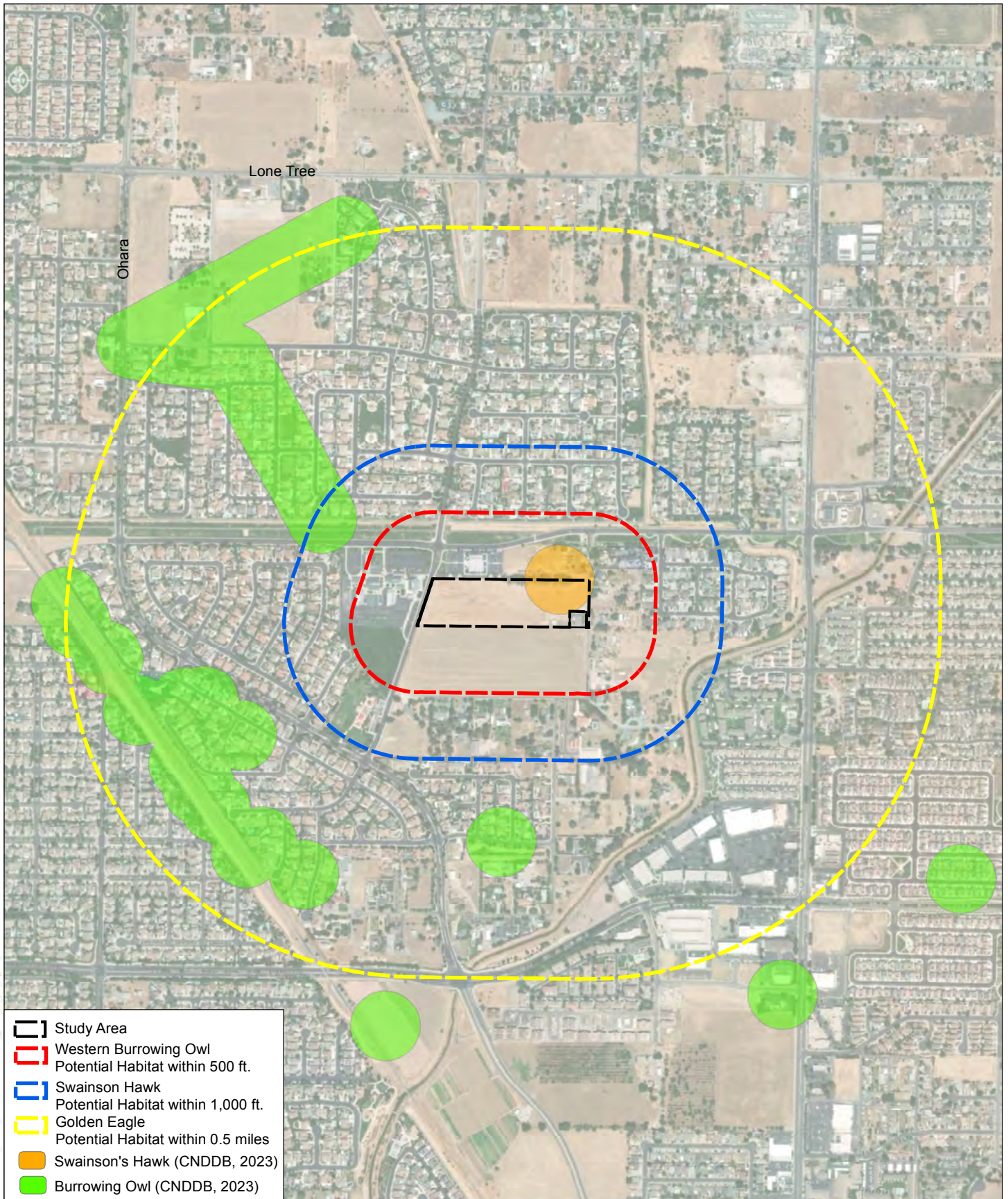


Planning Survey Species Habitat Map

Orchard Grove II

Brentwood, Contra Costa County, CA

C:\FIC\INC\Projects\Moore Biological\Orchard Grove II\Map\PSR\Orchard Grove II map frame 5a.mxd










-  Study Area
-  Western Burrowing Owl Potential Habitat within 500 ft.
-  Swainson Hawk Potential Habitat within 1,000 ft.
-  Golden Eagle Potential Habitat within 0.5 miles
-  Swainson's Hawk (CNDDb, 2023)
-  Burrowing Owl (CNDDb, 2023)

Figure 5b

**Moore Biological
Consultants**

0 500 1,000




Map Date: 08/08/2023
Aerial Source: Maxar (07/2022)

Regional Species Habitat Map

Orchard Grove II

Brentwood, Contra Costa County, CA

ATTACHMENT C: PROJECT COMPLIANCE TO HCP CONDITIONS

Orchard Grove II
(Subdivision 9649)
Brentwood, California

Project Compliance to HCP Conditions
August 2023

HCP/NCCP Conservation Measure 1.11. Avoid Direct Impacts on Extremely Rare Plants, Fully Protected Wildlife Species, or Covered Migratory Birds:

The potential for special-status plants to occur within the site is considered extremely remote, as described in Section III (10).

Species-specific pre-construction surveys, and if needed, monitoring and avoidance requirements for burrowing owl, Swainson's hawk, and golden eagle will be conducted as described in Section IV (2). There is no suitable habitat in the site for ringtail (*Bassariscus astutus*), a "fully protected species," per California Fish and Game Code Section 4700. Similarly, there is no suitable nesting habitat in the site for peregrine falcon (*Falco peregrinus*), a "fully protected species," per California Fish and Game Code Section 3511.

White-tailed kite (*Elanus caeruleus*), another "fully protected species," per California Fish and Game Code Section 3511 could potentially nest in trees in or near the site. Prior to any ground disturbance related to covered activities that occur during the nesting season (March 15-August 31), a qualified biologist will conduct a preconstruction survey no more than 1 month prior to construction to establish whether white-tailed kite is nesting in trees within or visible from the site. In the event active nests are found, an initial 300-foot buffer shall be established around the nest tree. Ground disturbance related to covered activities within the buffer shall either be delayed until a qualified biologist determines nesting is complete, or until the applicant and consults with the Implementing Entity (i.e., City of Pittsburg) and CDFW and implements CDFW-approved measures to minimize potential disturbance.

On-site grasslands and vegetation could be used by a variety of nesting birds protected by the Migratory Bird Treaty Act and Fish and Game Code of California. If possible, vegetation removal will occur outside of the general bird nesting season (February 1 through August 31). Alternately, a qualified biologist will conduct a preconstruction survey no more than 2 weeks prior to vegetation removal. In the event

active nests are found, the applicant shall notify the Implementing Entity and consult with CDFW for further guidance.

HCP/NCCP Conservation Measure 1.10. Maintain Hydrologic Conditions and Minimize Erosion:

The project has been designed to maintain hydrologic conditions and minimize erosion. Standard construction best management practices (BMPs) will be employed during construction to minimize the potential for erosion and off-site transport of fines. BMPs will include use of water trucks, appropriate compaction of soil, and installation of straw wattles, silt fences or other technologies along the perimeter of the site during construction, and stabilization of bare soils as appropriate with seeding, straw, and/or hydromulch.

ATTACHMENT D: FEE CALCULATOR

ECCC HCP/NCCP 2023 Fee Calculator Worksheet

Permanent Impacts

PROJECT APPLICANT: Shea Homes, Northern California

PROJECT NAME: Orchard Grove II

APN(s): 016-040-004

JURISDICTION: Brentwood

DATE: August 2023

<u>DEVELOPMENT FEE</u>	<u>PERMANENT IMPACTS (ACRES)</u>	<u>2023 FEE/ACRE</u> <i>subject to change¹</i>		
See appropriate ordinance or HCP/NCCP Figure 9-1 to determine Fee Zone	Fee Zone 1	9.41	x	\$19,611.52 = \$184,544.40
	Fee Zone 2		x	\$39,223.04 = \$0.00
	Fee Zone 3		x	\$9,805.76 = \$0.00
	Fee Zone 4 ²		x	\$29,417.28 = \$0.00
	Development Fee Total			=	$184,544.40

<u>WETLAND MITIGATION FEE</u>	<u>PERMANENT IMPACTS (ACRES)</u>	<u>2023 FEE/ACRE</u> <i>subject to change¹</i>		
Impacts to riparian/scrub, wetlands, ponds, aquatic, and slough/channel are charged both a wetland mitigation fee and a development fee. Please also include these impact acres to development fee above. ³	Riparian woodland / scrub		x	\$110,667.08 = \$0.00
	Perennial Wetland		x	\$167,718.29 = \$0.00
	Seasonal Wetland		x	\$392,489.03 = \$0.00
	Alkali Wetland		x	\$396,778.59 = \$0.00
	Ponds		x	\$215,976.51 = \$0.00
	Aquatic (open water)		x	\$107,988.87 = \$0.00
	Slough / Channel		x	\$154,206.78 = \$0.00

<u>STREAMS</u>	<u>PERMANENT IMPACTS (LINEAR FEET)</u>	<u>2023 FEE/LINEAR FT</u> <i>subject to change¹</i>		
Streams 25 feet wide or less			x	\$569.07 = \$0.00
Streams greater than 25 feet wide			x	\$854.23 = \$0.00
Wetland Mitigation Fee Total			=	\$0.00

<u>FEE REDUCTION⁴</u>		
	Development Fee reduction for land in lieu of fee	=
	Development Fee reduction (up to 33%) for permanent assessments	=
	Wetland Mitigation Fee reduction for wetland restoration/creation performed by applicant	=
	Reduction Total	= \$0.00

<u>FINAL FEE CALCULATION⁶</u>		
	Development Fee Total	\$184,544.40
	Wetland Mitigation Fee Total	+ \$0.00
	Mitigation Fee Subtotal	= \$184,544.40
	Contribution to Recovery⁵	+ _____
	TOTAL AMOUNT TO BE PAID	= \$184,544.40

¹ Development fees are adjusted annually (no later than March 15 of each year) according to a formula that includes both a Home Price Index (HPI) and a Consumer Price Index (CPI). The Wetland Mitigation Fees are adjusted according to a CPI.

² Fee Zone 4 is not shown on Figure 9-1 of the HCP/NCCP but refers to the fee applicable to those few covered activities located in northeastern Antioch (p. 9-21).

³ Per Chapter 9.3.1 of the HCP/NCCP, for every acre of impact on wetlands, streams, ponds, and riparian woodland/scrub, applicants will pay the appropriate development fee (according to fee zone) towards land acquisition and the conservation program as a whole, as well as a wetland mitigation fee to cover the costs of successful restoration or creation.

⁴ Fee reductions must be reviewed and approved by the Conservancy.

⁵ Participating Special Entities (PSEs) are required to pay fees over and above permanent and temporary impact mitigation fees to cover indirect costs of extending permit coverage, including a portion of the costs of the initial preparation of the Plan, and a portion of the costs of conservation actions designed to contribute to species recovery. This amount will be determined in accordance with the Contribution to Recovery Implementation Policy adopted by the Conservancy Governing Board on December 8, 2014.

⁶ The Conservancy conducted the periodic fee audit required by the HCP/NCCP in 2023. Action by the County and participating cities is pending, which could result in adjustments to some or all fees in 2023.

Appendix B

Archaeological Assessment Report



December 16, 2019



Mr. Brad Slinkard
Land Acquisition Manager
Shea Homes Limited Partnership
2630 Shea Center Drive
PO Box 5064
Livermore, CA 94551-5064

RE: *Archaeological Assessment Report* – 1801 Lone Oak Road, City of Brentwood,
Contra Costa County (APN 016-040-005-7)

Dear Mr. Slinkard,

Please let this letter stand as a Basin Research Associates' (BASIN) *Archaeological Resources Assessment Report (ARAR)* for a Shea Homes feasibility study in the City of Brentwood. The parcel, located at 1801 Lone Oak Road, is currently vacant and was formerly used for agriculture. Shea Homes is reviewing the property for future residential housing.

The intent of the ARAR is to determine if archaeological resources are present or potentially present within the project site and to present recommendations for future development. The information may be used to develop appropriate mitigation measures in accordance with the California Environmental Quality Act (CEQA) and any requirements of the City of Brentwood if the property is developed by Shea Homes.

The ARAR provides the results of a records search conducted by the California Historical Resources Information System, Northwest Information Center (CHRIS/NWIC); a limited literature review; a summary prehistoric, ethnographic and historic context; consultation with the Native American Heritage Commission (NAHC) and individuals/groups recommended by the NAHC; and, a discussion of potential impacts and proposed mitigation measures.

PROJECT LOCATION AND DESCRIPTION

The approximately 17-acre project site is bordered by farmland to the north, Lone Oak Road to the west, Gracie Lane to the south and Adams Lane to the east with an address listed as 1801 Lone Oak Road, City of Brentwood. Shea Homes is reviewing the vacant parcel for a residential subdivision (USGS Brentwood, Calif. 1978; Township 1 North, Range 2 East [T 1N R 2E], Mount Diablo Baseline and Meridian [MDB&M], unsectioned) [see Figs. 1-3].

REGULATORY CONTEXT

Cultural resources include prehistoric and historic archaeological sites, districts, and objects; standing historic structures, buildings, districts, and objects, and locations of important historic events or sites of traditional and/or cultural importance to various groups. The analysis of cultural resources can provide valuable information on the cultural heritage of both local and regional populations.

Cultural resources may be determined significant or potentially significant in terms of national, state, or local criteria either individually or in combination. Resource evaluation criteria are determined by the compliance requirements of a specific project.

The future project will be subject to the requirements of CEQA and the City of Brentwood if the property is developed by Shea Homes. CEQA requires the identification and evaluation of cultural resources that could be affected by the project. Public agencies under CEQA must consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to California Public Resources Code (PRC) Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” PRC 21083.2 requires agencies to determine whether a proposed project would have an effect on “unique” archaeological resources.

RESEARCH SOURCES CONSULTED

A prehistoric and historic site records and literature search was completed by the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park (CHRIS/NWIC File 19-0815 dated 12/04/2019 by Hagel). Reference material from the Bancroft Library, University of California at Berkeley and Basin Research Associates, San Leandro was also consulted including:

Historic Properties Directory for Contra Costa County (CAL/OHP 2012a);

National Register of Historic Places listings for Contra Costa County, California (USNPS 2015, 2017, 2019);

Listed California Historical Resources (CAL/OHP 2019) with the most recent updates of the National Register of Historic Places; California Historical Landmarks; and, California Points of Historical Interest as well as other evaluations of properties reviewed by the State of California Office of Historic Preservation;

California History Plan (CAL/OHP 1973);

California Inventory of Historic Resources (CAL/OHP 1976);

Five Views: An Ethnic Sites Survey for California (CAL/OHP 1988);

Archaeological Determinations of Eligibility (CAL/OHP 2012b); and, other lists and maps (see References Cited and Consulted).

The Native American Heritage Commission (NAHC) was contacted for a search of the Sacred Lands File (SLF) (Busby 2019a). The results were negative (Gonzalez-Lopez 2019). Letters

soliciting additional information were sent to the six Native American individuals/groups recommended by the NAHC (Busby 2019b-g).

No local historical societies, planning departments, etc. were contacted regarding landmarks, potential historic sites or structures in or adjacent to the project.

A systematic archaeological field survey of the project area was conducted by Mr. Christopher Canzonieri (MA, RPA).

NATIVE AMERICAN RESOURCES

PREHISTORIC

The project site is located approximately 1500 feet west of Marsh Creek and 0.9 miles north of the confluence of Marsh and Sand creeks and about three to four miles south of a former marshy area adjacent to the San Joaquin River. As a consequence, the general study area would have provided a favorable environment during the prehistoric period with riverine, riparian and inland resources readily available.

Native American occupation and use of the general area appears to extend over 5000-7000 years and may be longer. Archaeological information suggests an increase in the prehistoric population over time with an increasing focus on permanent settlements with large populations in later periods. This change from hunter-collectors to an increased sedentary lifestyle is due to more efficient resource procurement but with a focus on staple food exploitation, the increased ability to store food at village locations, and the development of increasing complex social and political systems including long-distance trade networks.

General overviews and perspectives on the regional prehistory can be found in Elsasser (1978), King (1978), Moratto (1984), and Jones and Klar (2007).

ETHNOGRAPHIC

The proposed project may have been within the *Julpun* tribelet area of the Bay Miwok whose territory appears to have extended to lower Marsh Creek. The *Julpun* are known to have traded with other Miwok and Ohlone tribal groups prior to Hispanic colonization of California. The Bay Miwok were the first of the Eastern Miwok to be missionized and the largest group of *Julpun* went to Mission San Jose in present-day Fremont.

Milliken (1995:244) places the *Jalalon*, a small group of Northern Valley Yokuts speakers in the project vicinity. They appear to have occupied the area between the *Tamcan* and the *Julpun* in the vicinity of Indian Slough east of present-day Brentwood. Subsequent research maps the Oakley/*Julpun* northeast of the Marsh Creek/*Volvon* (Milliken 2006:27, Fig. 5). The latter, the *Volvon*, Bay Miwok speakers “. . . held the peak of Mount Diablo and the rugged lands to the east of the peak” with villages along the Marsh Creek drainage (Milliken 1995:259).

In 1837, Dr. John Marsh, the namesake of Marsh Creek and the first American citizen to settle permanently in East Contra Costa, found a few Native Americans when he settled on his *Rancho Los Meganos*. The Native Americans appeared to have returned to the area at the end of 1836

after the secularization¹ of Mission San Jose. Marsh was noted for his good relations with local Native Americans, whom he referred to as the *Pulpunes*. They built his adobe dwelling on the bank opposite their village (Hoover et al. 1966; Bennyhoff 1977; Milliken 1994, 1995).

Extensive ethnographic data for the San Francisco Bay Region are lacking, and the aboriginal lifeway apparently disappeared by approximately 1810 due to introduced EuroAmerican diseases, a declining birthrate, the cataclysmic impact of the mission system and the later secularization of the missions by the Mexican government (Levy 1978:400-401).

No Native American villages or known trails are located within or near the project area (Duran 1824; Kroeber 1925; Bennyhoff 1977; Elsasser 1986; Levy 1978; Wallace 1978). For additional information on the Native Americans in the project area see Kroeber (1925), Bennyhoff (1977), Levy (1978), and Milliken (1995).

HISTORIC ERA RESOURCES

The history of the study area can be divided into the Hispanic Period (Spanish Period 1769-1821 and the Mexican Period 1822-1848) and, the American Period (1848-onward). During the Hispanic Period, Spanish government policy in northwestern New Spain was directed at the founding of presidios (forts), missions, and pueblos (secular towns) with the land held by the Crown whereas later Mexican policy (1822-1846) stressed individual ownership of the land with grants of vast tracts of land to individual citizens (Hart 1987). The American Period focused on development and growth - a pattern that continues into the 21st Century.

HISPANIC PERIOD

Between 1769 and 1776 a number of Spanish expeditions passed through the San Francisco Bay region including those led by Portolá with Crespi (1769), Fages (1770), Fages and Crespi (1772), Anza and Font (1776), Rivera y Moncada and Palou (1774), and Moraga (1808, 1810, 1812-1814). Even though the routes of the early explorers cannot be determined with total accuracy, none are known to have traveled near the project area (see Cook 1957; Beck and Haase 1974; Milliken 1995; USNPS 1995).

The Spanish philosophy of government in northwestern New Spain was directed at the founding of presidios, missions, and secular towns with the land held by the Crown (1769-1821). The later Mexican government policy (1822-1848) stressed individual ownership of the land. After the secularization of the missions was declared by Mexico in 1833, vast tracts of the mission lands were granted to individual citizens (Hart 1987).

The project was located in the far northern part of *Rancho Meganos*. Governor Jose Castro granted the rancho to Jose Noriega in October 1835. He sold it to John Marsh in 1837. Marsh moved to the rancho in April 1838 and was murdered in 1856 by three Mexican Vaqueros. His daughter patented the rancho in August 1867.

1. The program involved the release of Indian neophytes from Mission jurisdiction and the conversion of Mission property to private ownership in the mid-1830s under the direction of the Mexican government (Hart 1987).

No known Hispanic Era features, dwellings, roads, corrals, etc. have been identified in or adjacent to the project. The area was probably used for grazing during the Hispanic and the early American Periods (Dyer 1861; Hendry and Bowman 1940; Hoover et al. 1966; Collier 1983).

AMERICAN PERIOD

California became a United States territory in 1848 through the Treaty of Guadalupe Hidalgo that ended the Mexican War of 1846-1847. The territory was not formally admitted as a state until 1850. In the mid-19th century, the majority of the rancho and pueblo lands and some of the ungranted land in California were subdivided as the result of population growth, the American takeover, and the confirmation of Mexican Period property titles. Growth can be attributed to the Gold Rush (1848), followed by the completion of the transcontinental railroad (1869) and local railroads. Still later, the development of the refrigerator railroad car (ca. 1880s) used for the transport of agricultural produce to distant markets, had a major impact on population growth. In recent decades this agrarian land-use pattern has been gradually displaced by industrial and commercial centers, residential housing, and the development of public and private research parks.

Contra Costa County is one of the 27 initial counties of the State of California and until March 1853 included Alameda County. Martinez on the coast has always been the Contra Costa County seat. Growth in the general study area has been linked with agriculture, a coal mining boom from the 1850s-1880s, and the development of transportation networks to service both industry and agriculture with market links (Hoover et al. 1966).

The proposed project is located about approximately 0.5 miles west of Brentwood Boulevard is about 0.5 miles east of the present-day Union Pacific Company railroad tracks. The railroad, formerly the San Pablo & Tulare Railroad (SP&T) Company, ran between Martinez and Tracy from 1878 until it was consolidated with the Southern Pacific Company (SP) in May 1888.² The SP route west of the project site was known as the "Mococco Line" and is still used for freight.

The City of Brentwood was laid out in 1878 in anticipation of the arrival of the railroad and has merited a post office since September 1878. By 1890, the Brentwood area was the largest producer and shipper of wheat and barley between New Orleans and San Francisco. In 1900 the former *Rancho Meganos* was purchased by group of Scottish investors, Balfour, Guthries and Company, who built pumping stations, canals and ditches. By 1917, they had thousands of acres of irrigated land under 10 different identities/units. The project site was within Brentwood Irrigated Farms Subdivision No. 5 (Smith and Elliott 1879; Slocum 1882; Contra Costa County Board of Supervisors (CCCo/BoS) 1938 [map]; Hoover et al. 1966; Emanuels 1986; Patera 1991; Fickewirth 1992; Walker 1997; Gudde 1998; Robertson 1998).

Brentwood incorporated on February 19, 1958 and has transitioned from an agricultural focused community to a suburban community with a population of over 55,000. The area is experiencing rapid growth with many of the old farms and orchards being replaced by suburban developments

2. SP was absorbed into the Union Pacific Railroad in 1996 and is now part of the Union Pacific Corporation (Walker 1997:Map CA-13).

since 1990. While agriculture remains important to the local economy it has declined in relative importance as the city has become more suburban. No heavy industry is present with only small light industries located in the northeastern section of the city. Economic growth is continuing in residential and commercial/retail construction and transportation improvements and strong links to the overall Bay Area economy are driving the rapid transition from agriculture to a residential and commercial base.

Summary Historic Map Review

Goddard's 1857 *Map of the State of California* shows "Mount Diablo" and "Marsh" and what appears to be Marsh Creek in the general project area.

None of the numerous roads dating to at least the early 1860s illustrated on Dyer's 1861 *Rancho Los Meganos* plat cross or are adjacent to the project site formerly located within Lot No. 37 of the *Rancho Los Meganos* (Township 1 North, Range 2 East) However, the plat does show the "Road from Deer Valley to Iron House Landing" somewhat further west than the proposed project to the "Arroyo de los Poblanos or Marsh's Creek", the most notable feature shown on the plat.

The 1873 *Topographical Map of Central California* also shows various roads and the San Pablo & Tulare Railroad (SP&T) through [Rancho] *Los Meganos* as well as Marsh's Creek. Various features - "Marsh Landing," structures with owner's names, etc. are also shown on this map, but none were located in or adjacent to the project. The roads shown through the northern boundary of the rancho appears to conform to the roads shown on the 1861 Dyer *Rancho Los Meganos* plat.

Smith & Elliott's 1879 *Map of Contra Costa and Part of Alameda County* is limited to major features including rancho boundaries, cities and towns. The SP&T Railroad is shown passing through boundaries of *Rancho Los Meganos* with Brentwood in the northern part of the rancho and the unlabeled Marsh Creek crossing the rancho and railroad tracks.

The 1914 and 1916 USGS Byron topographic quadrangles show Marsh Creek, the Southern Pacific Railroad tracks, streets within Brentwood and Brentwood Boulevard/Walnut Avenue (unlabeled) north and south into Brentwood. No buildings, roads or other features are shown in or adjacent to the proposed project.

A 1938 *Map of Contra Costa County, California* shows the project within Brentwood Irrigated Farms Subdivision No. 5 (CCCo/BoS 1938).

By the early 1940s, the project vicinity - but not the area south of Sunset Road including the project site - was occupied by an orchard as was the vicinity of the project (US War Dept 1943). The 1978 USGS Brentwood topographic map shows that Lone Oak Road had been constructed and that shows orchards in the general project vicinity had expanded, but not to include the project. Both Gracie Lane on the south side of the project and Adams Lane on the east side of the project are shown on the 2009 Thomas Bros. Maps (Sheet 596). Moreover, the notable expansion of the City of Brentwood is evident with subdivisions to the east, west and south of the project site.

FIELD INVENTORY [Figs. 3-7]

Mr. Christopher Canzonieri (MA, RPA) completed a field inventory for the proposed project on November 21, 2019 in accordance with generally accepted archaeological survey protocols. The approximately 17-acre agricultural field had recently been plowed. Field transects were oriented east to west and spaced approximately 15 meters apart. Surface visibility within the project was excellent with 75-100%. Vegetation within the parcel consisted of plowed grasses and morning glory. Observed sediments were a dark yellowish brown clayey silt with rounded to subrounded gravels and pebbles. The property boundary was easily defined due to the presence of an earth drainage ditch along the east side separating the parcel from the various roads with a modern barbed wire fence on the north.

Historic structures associated with former agricultural use included: (1) an electrical panel [Homart] on top of a steel post with a wood plank with insulators and feed wires present near the northeast corner; and, (2) four irrigation related concrete risers just beyond the northwest corner of the parcel (two 18-inch diameter, one 24-inch diameter, and one 36 inch diameter riser both with T-bars for subsurface valves). None were in use.

No evidence of prehistoric or significant historic cultural materials was observed during the survey conducted for the project.

INDIVIDUALS, GROUP AND AGENCY PARTICIPATION

The Native American Heritage Commission (NAHC) was contacted for a review of the Sacred Lands Files (Busby 2019a). The NAHC search was negative for Native American resources in or adjacent to the project locations (Gonzalez-Lopez 2019). Letters soliciting additional information were sent to the seven Native American individuals/groups recommended by the NAHC (Busby 2019b-g).

Irenne Zwierlein, Chairperson, Amah/Mutsun Tribal Band of Mission San Juan Bautista;
Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan;
Charlene Nijmeh, Chairperson, Muwekma Ohlone Tribe of the SF Bay Area;
Katherine Erolinda Perez, Chairperson, North Valley Yokuts Tribe;
Corrina Gould, Chairperson, The Confederated Villages of Lisjan; and,
Andrew Galvan, The Ohlone Indian Tribe.

None is a listed Indian Entity Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs (USDI/BIA 2019).

No Native American responses were received. No other local historical societies, or planning departments were contacted regarding landmarks, potential historic sites or structures in or adjacent to the project.

FINDINGS

The intent of the ARAR is to determine if archaeological resources are present or potentially present within the project site and to provide recommendations for future development. The information may be used to develop appropriate mitigation measures in accordance with the California Environmental Quality Act (CEQA) and any requirements of the City of Brentwood if

the property is developed by Shea Homes.

RECORDS SEARCH

No prehistoric or historic era archaeological sites have been recorded, reported, or identified in or adjacent to the proposed project.

Compliance Reports

Seven reports are on file at the CHRIS/NWIC for the project and surrounding areas. One report includes a small portion of the project (Busby 2002/S-27997) and six reports cover the area within 1000-feet of the project. All reports were negative for archaeological resources.

ARCHAEOLOGICAL SENSITIVITY

The *Contra Costa County General Plan* assigns a “medium” archaeological sensitivity rating to the City of Brentwood area and near vicinity. The area surrounding the east side of the city has been assigned "Medium Sensitivity" (Contra Costa County Community Development Department (CCC/CDD) CCC/CDD 2010/2014:9-9 – 9-12, Fig. 9.2).

FIELD INVENTORY RESULTS

No prehistoric, combined prehistoric/historic and historic era archaeological materials or significant architectural resources were observed during the field survey conducted for the project.

RESOURCES IDENTIFIED

No prehistoric, ethnographic settlements, traditional Native American use areas and Hispanic or American Period archaeological resources have been recorded or identified in or immediately adjacent to the project site.

LISTED HISTORICAL PROPERTIES

No local, state or federal historically or architecturally significant structures, landmarks, or points of interest have been recorded or identified in the project.

MANAGEMENT RECOMMENDATIONS

It is the considered opinion of Basin Research Associates, based on a review of pertinent records, maps and other documents, and a field inventory that the proposed development project can proceed as planned in regard to prehistoric and historic archaeological resources.

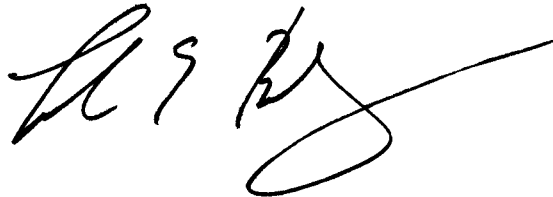
No subsurface testing for buried archaeological resources appears necessary at this time. Archaeological monitoring is also not recommended as the immediate project area does not appear to be sensitive for either buried prehistoric or historic cultural resources. Potential project

conditions may require that if any significant cultural materials³ are exposed or discovered during either site clearing or during subsurface construction, operations should stop within 25 feet of the find and a qualified professional archaeologist contacted for further review and recommendations. Potential treatment recommendations could include evaluation, collection, recordation, analysis, and reporting of any significant cultural materials. In the event that Native American human remains are discovered, the provisions of the California Health and Safety Code shall be followed (Section 7050.5(b)).

CLOSING REMARKS

If I can provide any additional information or be of further service please don't hesitate to contact me.

Sincerely,
BASIN RESEARCH ASSOCIATES, INC.



Colin I. Busby, Ph.D., RPA
Principal

CIB/j
Enclosures

3. Significant prehistoric cultural resources can include:
- a. Human bone - either isolated or intact burials.
 - b. Habitation (occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
 - c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
 - d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
 - e. Isolated artifacts

Historic cultural materials may include finds from the late 19th through early 20th centuries. Objects and features associated with the Historic Period can include.

- a. Structural remains or portions of foundations (bricks, cobbles/boulders, stacked field stone, postholes, etc.).
- b. Trash pits, privies, wells and associated artifacts.
- c. Isolated artifacts or isolated clusters of manufactured artifacts (e.g., glass bottles, metal cans, manufactured wood items, etc.).
- d. Human remains.

In addition, cultural materials including both artifacts and structures that can be attributed to Hispanic, Asian and other ethnic or racial groups are potentially significant. Such features or clusters of artifacts and samples include remains of structures, trash pits, and privies.

REFERENCES CITED AND CONSULTED

Anonymous/Source Unknown

- n.d. Concordance in Progress: Preliminary Historic Resources Inventory Contra Costa County, California 1976 to USGS base maps. On file, Basin Research Associates, San Leandro.
- 1976? Maps to Accompany Preliminary Historic Resources Inventory Contra Costa County, California (1976) by the Contra Costa County Planning Department, n.p. Copy provided by the CHRIS/NWIC, Sonoma State University, Rohnert Park 8/97.

Beck, W.A. and Y.D. Haase

- 1974 Historical Atlas of California (Third printing). University of Oklahoma Press, Norman.

Bennyhoff, J.A.

- 1977 Ethnogeography of the Plains Miwok. Center for Archaeological Research at Davis Publication 5.

Brentwood, City of

- 1993 General Plan, 2001-20021. Adopted June 8, 1993.
- 2006 City of Brentwood General Plan. Updated to reflect Amendments through January, 2006. Chapter II Land use Element Updated November 2001 and Chapter IV Conservation/Open Space Element.
<http://www.ci.brentwood.ca.us/departmetn/cd/index.cfm> printed 1/16/2007.

Busby, Colin I. (Basin Research Associates)

- 2002 Letter Report to Mr. Don Reber, Braddock & Logan Services, Inc., Danville, CA. Regarding: *Archaeological Resources Assessment - S & S Farms Property, City of Brentwood, Contra Costa County, California APNs 16-05-50; 16-06-60; and 16-07-70*. Dated June 12, 2002. MS on file, S-27997, CHRIS/NWIC, Sonoma State University, Rohnert Park.
- 2019a Native American Heritage Commission Sacred Lands File & Native American Contacts List Request: 1801 Lone Oak Road, Brentwood, Contra Costa County. Via email nahc@nahc.ca.gov on 11/19/2019.
- 2019b-g Letters and emails to: (1) Irenne Zwierlein, Chairperson, Amah/Mutsun Tribal Band of Mission San Juan Bautista, Woodside; (2) Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan, Hollister; (3) Charlene Nijmeh, Chairperson, Muwekma Ohlone Tribe of the SF Bay Area, Castro Valley; (4) Katherine Erolinda Perez, Chairperson, North Valley Yokuts Tribe, Linden; (5) Corrina Gould, Chairperson, The Confederated Villages of Lisjan, Oakland, and (6) Andrew Galvan, The Ohlone Indian Tribe, Fremont. Request for Information - 1801 Lone Oak Road, City of Brentwood, Contra Costa County. Dated 11/26/2019.

California (State of), Department of Parks and Recreation, Office of Historic Preservation
(CAL/OHP)

- 1973 The California History Plan. Volume One - Comprehensive Preservation Program, Volume Two - Inventory of Historic Features.
- 1976 California Inventory of Historic Resources.
- 1988 Five Views: An Ethnic Sites Survey for California.
- 1990 California Historical Landmarks.
- 1992 California Points of Historical Interest. May 1, 1992.
- 2012a [*Historic Properties Directory*] Directory of Properties in the Historic Property Data file for City of Brentwood and vicinity, Contra Costa County (includes *National Register of Historic Places* status codes, *California Historical Landmarks* and *California Points of Historical Interest* listings, etc.). Dated 4/05/2012 [most recent as of 12/04/2019.]
- 2012b Archeological Determinations of Eligibility for Contra Costa County. Dated [most recent as of 12/04/2019 viewed by CHRIS/NWIC staff.]
- 2019 Listed California Historical Resources – Contra Costa County [including National Register, State Landmark, California Register, and Point of Interest]. <<http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=7>> accessed 11/13/2019.

California] State Geological Survey of California

- 1873 Topographical Map of Central California together with part of Nevada. Julius Bien Publisher, n.p. Rumsey Collection download.

Collier, George C.

- 1983 A Narrative History of Contra Costa County. Super Print, El Cerrito.

Contra Costa County Assessor's Office

- 2007? Contra Costa County, Calif. Parcel Map, Book 10 Page 16.

Contra Costa County Board of Supervisors **(CCCo/BoS)**

- 1938 [Detail] Map of Contra Costa County, California. By order of the Board of Supervisors. Dated November 21, 1938. In Emanuels 1986.

Contra Costa County Community Development Department **(CCC/CDD)**

- 1996/2014 Contra Costa County General Plan 2005-2020. Contra Costa County Community Development Department, Martinez. July with over-size maps revised/amendments through 2014. Web accessed 5/09/2018.
- 2019 Draft Historic Resources Inventory [Contra Costa County, California]. October (5th Draft Update). On file, Contra Costa County Planning Department. Web accessed 8/02/2019.

Contra Costa County Historical Society (CCC_oHS)

1994 Contra Costa County Map of Historical Points of Interest: giving precise locations of 195 sites of historical interest. Scale [ca. 1:96,000] (W 122016'--W 121032'/N 38007'--N 37013'). The Society, [Martinez, Calif.].

Cook, S.F.

1957 The Aboriginal Population of Alameda and Contra Costa Counties, California. University of California Anthropological Records 16(4).

De Novo Planning Group

2014 Public Draft Environmental Impact Report [EIR] for the 2014 Brentwood General Plan Update. April. Prepared for City of Brentwood Community Development Department.

Duran, Fray Narciso

1824 *Plano de la Mision de San Jose, 1824*. Map on file, Bancroft Library, University of California, Berkeley. [Illustrated in Bennyhoff 1977:Map 4a and 4b.]

Dyer, E.H.

1861 Plat of the *Rancho Los Meganos* finally confirmed to Alice Marsh. Surveyed under instructions from the U.S. Surveyor General by E. H. Dyer, Dep.[uty] Sur.[veyor] December 1861. Containing 13316.0 Acres. On file, #110, United States California State Office, Department of Land Management, Sacramento.

Elsasser, Albert B.

1978 Development of Regional Prehistoric Cultures. In *California*, edited by R. F. Heizer, Volume 8. Handbook of North American Indians, W.G. Sturtevant, general editor, pp. 37-57. Smithsonian Institution, Washington, D. C.

1986 Review of the Prehistory of the Santa Clara Valley Region, California. Coyote Press Archives of California Prehistory 7, Part I. Coyote Press, Salinas.

Emanuel, George

1986 California's Contra Costa County: An Illustrated History. Panorama West Books, Fresno.

Fickewirth, Alvin A.

1992 California Railroads: An Encyclopedia of Cable Car, Common Carrier, Horsecar, Industrial Interurban, Logging, Monorail, Motor Road, Short Lines, Streetcar, Switching and Terminal Railroad in California (1851-1992). Golden West Books, San Marino.

Goddard, George

1857 Britton & Rey's Map of the State of California. Britton and Rey, San Francisco. Reprinted by The Friends of the Bancroft, University of California, Berkeley.

- Gonzalez-Lopez, Nancy (Native American Heritage Commission)
 2019 Response to Request for Review of Sacred Lands Search File, 1801 Lone Oak Road, Brentwood Project, Contra Costa County. Dated 11/25/2019.
- Gudde, Erwin G.
 1998 California Place Names: The Origin and Etymology of Current Geographical Names. Fourth Edition, revised and enlarged by William Bright. University of California Press, Berkeley.
- Hagel, Lisa C. (CHRIS/NWIC Staff)
 2019 Records Search Results. Regarding: [1801] Lone Oak[Road, Brentwood Contra Costa County]. CHRIS/NWIC File No. 19-0815. Dated 12/04/2019.
- Hart, James D.
 1987 A Companion to California (revised and expanded). Oxford University Press, New York.
- Hendry, G.W. and J.N. Bowman
 1940 The Spanish and Mexican Adobe and Other Buildings in the Nine San Francisco Bay Counties, 1776 to about 1850. MS on file, Bancroft Library, University of California, Berkeley.
- Hoover, Mildred, Hero Rensch, Ethel Rensch, William Abeloe
 1966 Historic Spots of California (third edition). Stanford University Press, Stanford.
- Jones, Terry L. and Kathryn A. Klar (editors)
 2007 California Prehistory: Colonization, Culture, and Complexity. Altamira Press, a division of Rowman & Littlefield Publishers, Inc., New York.
- King, C.
 1978 Historic Indian Settlements in the Vicinity of the Holiday Inn Site. In Archeological Investigations at CA-SCI-128, The Holiday Inn Site, edited by J.C. Winter, pp.436-469. MS on file, S-5281, CHRIS/NWIC, Sonoma State University, Rohnert Park.
- Kroeber, A.L.
 1925 Handbook of the Indians of California. Bureau of American Ethnology, Bulletin 78. Government Printing Office, Washington D.C.
- Levy, R.
 1978 Eastern Miwok. In *California*, edited by R.F. Heizer, Volume 8, Handbook of North American Indians, W.G. Sturtevant, general editor, pp. 398-413. Smithsonian Institution, Washington D.C.
- Marsh, John
 1890 Letter to Lewis Cass, February, 1846. Overland Monthly 2nd series 15:213-216 (as cited by Bennyhoff 1977).

Milliken, Randall Theodore

- 1994 The Costanoan-Yokuts Language Boundary in the Contact Period. In *The Ohlone Past and Present: Native Americans of the San Francisco Bay Region*, pp. 165-181, compiled and edited by Lowell John Bean. Ballena Press Anthropological Papers 42, Menlo Park.
- 1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*. Ballena Press Anthropological Papers No. 43.
- 2006 *The Central California Ethnographic Community Distribution Model, Version 2.0, with Special Attention to the San Francisco Bay Area*. Cultural Resources Inventory of Caltrans District 4 Rural Conventional Highways. MS on file, S-32596, CHRIS/NWIC, Sonoma State University, Rohnert Park.

Moratto, Michael J.

- 1984 *California Archaeology*. Academic Press, New York.

Patera, E.L. (editor)

- 1991 H.E. Salley *History of California Post Offices 1849-1990* (Second edition). The Depot, n.p. (Salley, H.E. and E.L. Patera, researchers).

Robertson, Donald B.

- 1998 *Encyclopedia of Western Railroad History*. Volume IV California. The Caxton Printers, Ltd, Caldwell, Idaho.

Slocum, J.P. & Co.

- 1882 *History of Contra Costa County California*. W.A. Slocum and Company, San Francisco (reprinted 1974 by Brooks-Sterling Company, Oakland) (Note: alternatively cited as Munro-Fraser 1882 by some authors).

Smith and Elliott

- 1879 *Illustrations of Contra Costa Co. California with Historical Sketch* (Facsimile, 1952 edition). Contra County Historical Society. The Sacramento Lithograph Co., Sacramento (including Map of Contra Costa and Part of Alameda County).

Thomas Bros. Maps

- 2009 *The Thomas Guide. Alameda & Contra Costa Counties Street Guide*. Thomas Bros. Rand McNally, Chicago.

United States Department of Interior Bureau of Indian Affairs (USDI/BIA)

- 2019 *Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs*. Federal Register 84(22) (Friday, February 1, 2019) Notices, Page 1200-1205.

United States Department of the Interior, National Register of Historical Places, National Park Service (**USNPS**)

- 1995 Map Supplement for the Comprehensive Management and Use Plan Juan Bautista de Anza National Historic Trail Arizona California. Pacific Great Basin Support Office, National Park Service. [San Francisco].
- 2015, 2017, 2019 National Register of Historic Places Spreadsheet listings.
<https://www.nps.gov/subjects/nationalregister/database-reserch.htm> Listed properties (current to 4/2019). National Historic Landmarks (NHLs; current to 12/2017). Multiple Property covers (current to 7/2015). Web accessed 11/13/2019.

United States Department of Interior, Geological Survey (**USGS**)

- 1914 Brentwood [Cal.] [Quadrangle]. Topographic map, 15-minute series (surveyed 1911). Detail provided by the CHRIS/NWIC, Sonoma State University, Rohnert Park.
- 1916 Byron, Cal. [Quadrangle]. Topographic map, 15-minute series (surveyed 1911, [culture revised 1912-1914??]; reprinted 1948). Detail provided by the CHRIS/NWIC, Sonoma State University, Rohnert Park.
- 1978 Brentwood, Calif. [Quadrangle]. Topographic map, 7.5-minute series.
- 1989 Stockton, California. Topographic map, :100,000-scale metric. United States Geological Survey, Menlo Park.

Wallace, William J.

- 1978 Northern Valley Yokuts. In *California*, edited by R.F. Heizer, Volume 8. Handbook of North American Indians, W.G. Sturtevant, general editor, pp. 462-470. Smithsonian Institution, Washington, D.C.

United States War Department, Corps of Engineers (**US War Dept**)

- 1943 Byron, Calif. [quadrangle]. Topographic map, 15' minute series, United States Geological Survey, Denver.

Walker, Mike

- 1997 Steam Powered Video's Comprehensive Railroad Atlas of North America. California and Nevada (1994, completely revised and updated 1997). Steam Powered Publishing, Faversham, Kent [England].

Abbreviations

n.d. no date v.d. various dates
 N.P. no publisher noted n.p. no place of publisher noted

CHRIS/NWIC, Sonoma State University, Rohnert Park is used for material on file at the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park.

ATTACHMENTS

FIGURES

- FIGURE 1 General Project Location (ESRI World Street Map)
- FIGURE 2 Project Location T1N R2E unsectioned (USGS Brentwood, Calif. 1978)
- FIGURE 3 Project Area (Google Earth)
- FIGURE 4 View east towards Lone Oak Drive
- FIGURE 5 View west towards Adams Lane
- FIGURE 6 Homart Electrical Box, northeast corner parcel
- FIGURE 7 Irrigation valves/concrete risers, northwest corner of the parcel (Adams Lane in background)

CORRESPONDENCE

- MEMO Request to Native American Heritage Commission, Sacred Lands File & Native American Contacts List Request
- LETTER Native American Heritage Commission Letter Response
- LETTERS Letter requests for further information to Native Americans listed on Native American Heritage Commission Contacts List.

CHRIS/NWIC SEARCH RESULTS

- SEARCH File No. 19-0815 dated 12/04/2019 [NO CONFIDENTIAL INFORMATION]

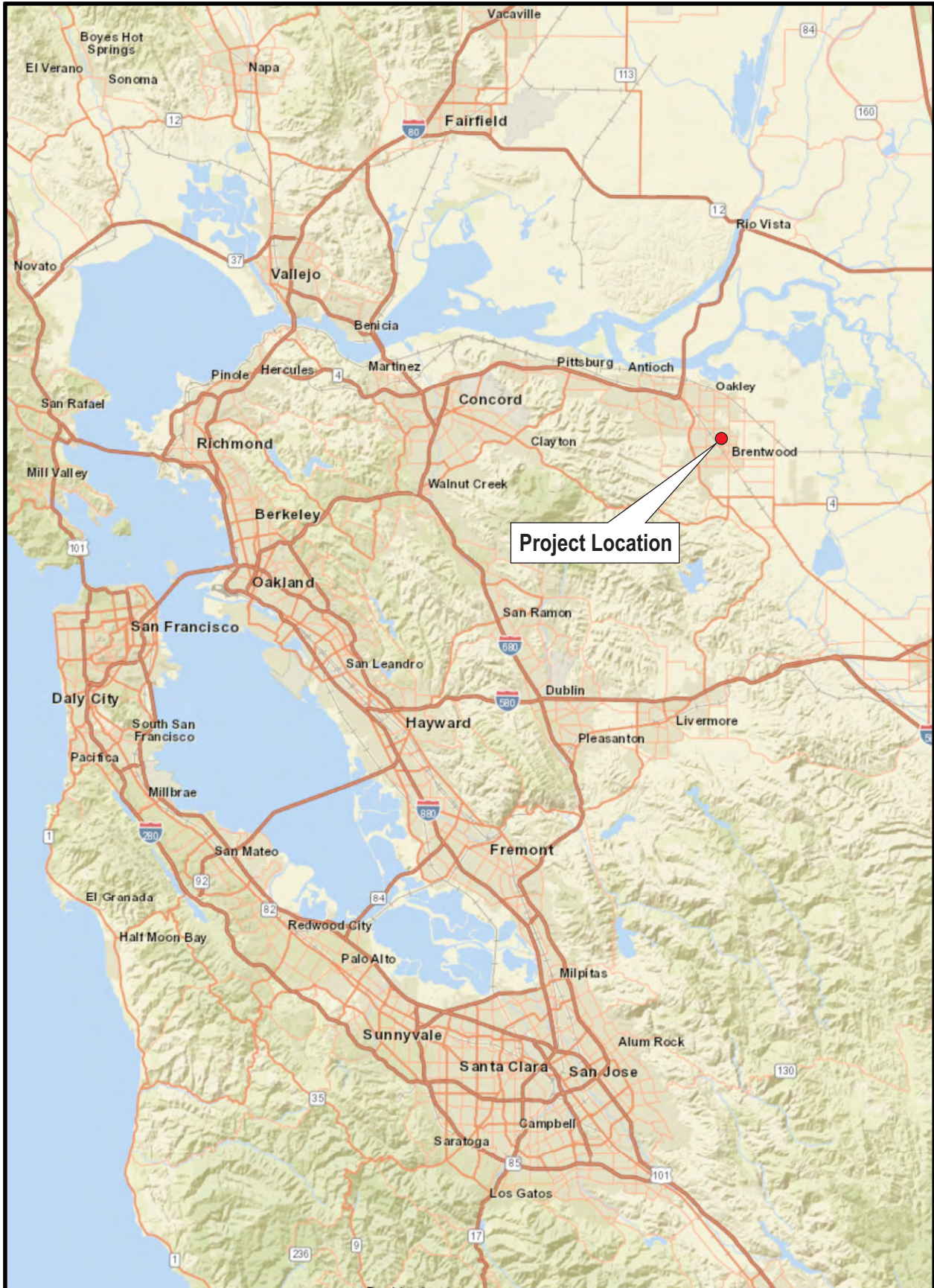


Figure 1: General Project Location (ESRI World Street Map)

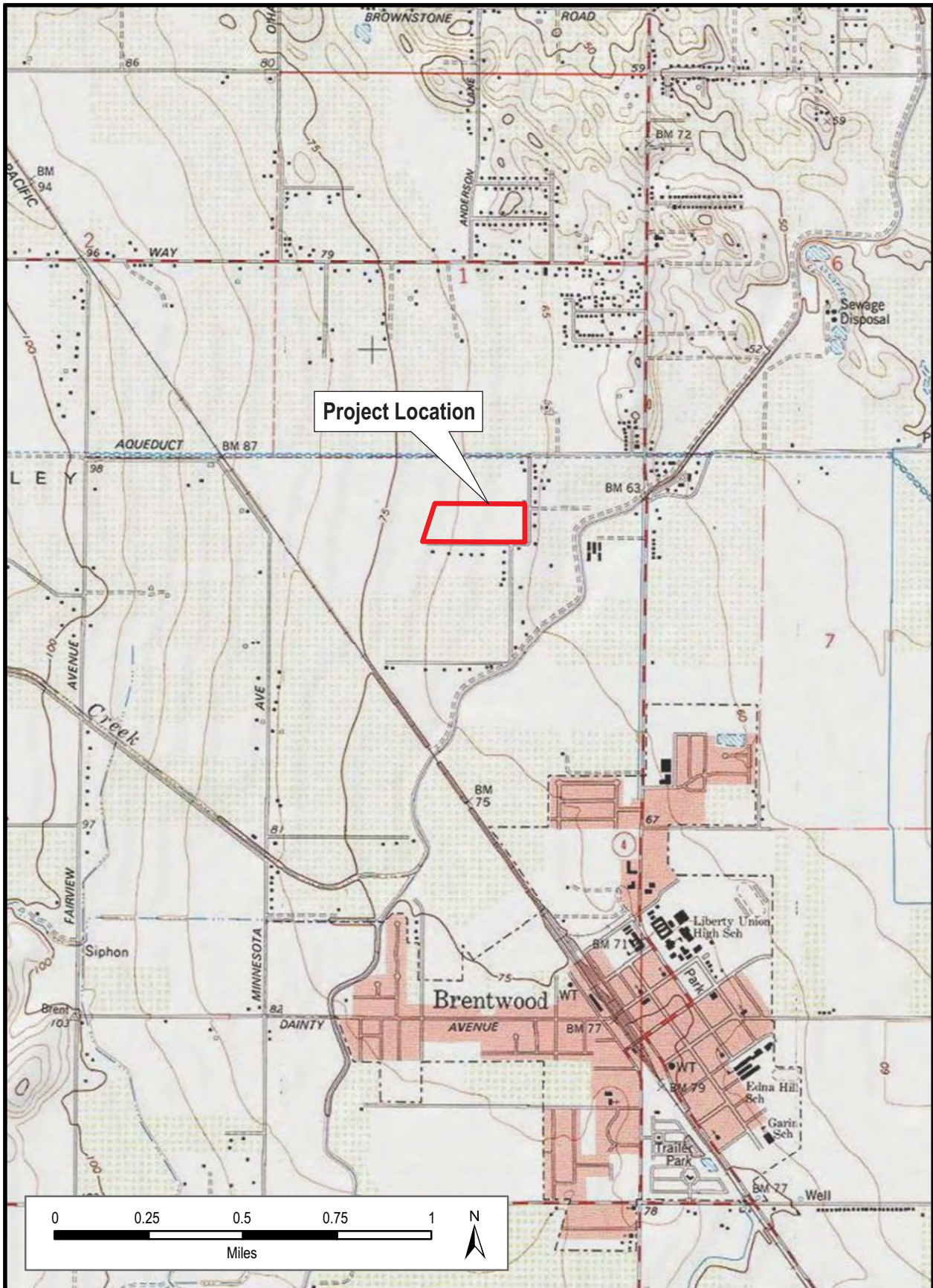


Figure 2: Project Location T1N R2E Unsectioned (USGS Brentwood, Calif. 1978)



Figure 3: Project Area



Figure 4: View east towards Lone Oak Drive



Figure 5: View west towards Adams Lane



Figure 6: Homart Electric Box, northeast corner of parcel



Figure 7: Irrigation valves/concrete risers, northwest corner of the parcel (Adams Lane in background)

Sacred Lands File & Native American Contacts List Request
NATIVE AMERICAN HERITAGE COMMISSION

1556 Harbor Boulevard, STE 100

West Sacramento, CA 95691

(916) 373-3710

(916) 373-5471 – Fax

nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: 1801 Lone Oak Road, Brentwood

County: Contra Costa County

USGS Quadrangle Name: USGS Brentwood, Calif. 1978

Address: 1801 Lone Oak Road, Brentwood

Township: 1 North, **Range:** 2 East, unsectioned

Company/Firm/Agency: Basin Research Associates

Contact Person: Colin I. Busby, PhD, RPA

Street Address: 1933 Davis Street, STE 210

City/Zip: San Leandro, CA 94577

Phone: (510) 430-8441 x101

Email: Please send response to basinres1@gmail.com

Project Description:

Project proponent is reviewing the currently vacant property covering approximately 17 acres for residential housing.

No recorded archaeological resources are in the general vicinity and the area appears to have a low sensitivity for buried resources.

The City of Brentwood may approve the project using a CEQA Initial Study/Mitigated Negative Declaration. Area is surrounded by and in vicinity of other residential subdivisions.

Date: 11/19/2019

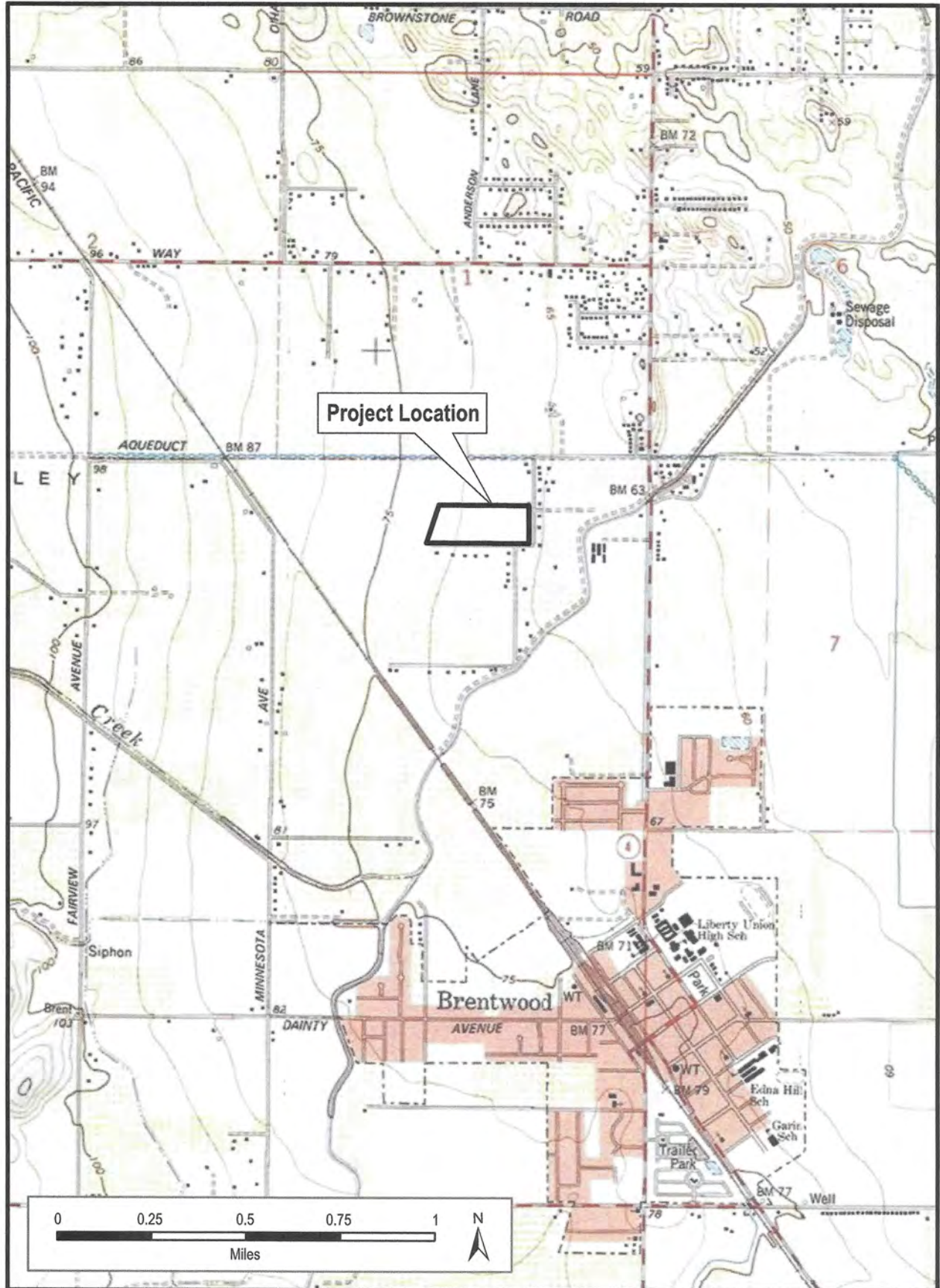


Figure 1: Project Location T1N R2E Unsectioned (USGS Brentwood, Calif. 1978)

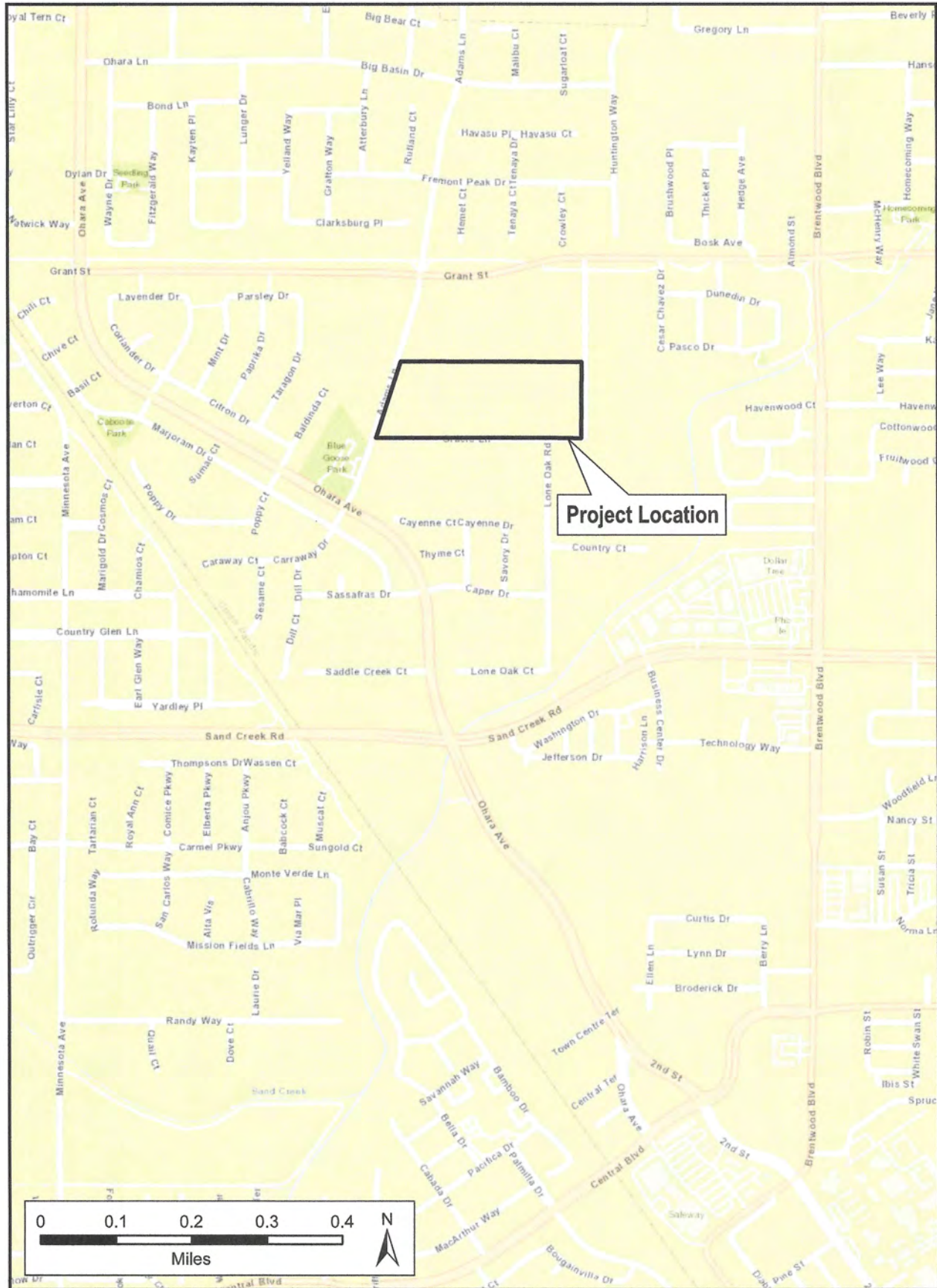


Figure 2: Project Location (ESRI World Street Map)

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



November 25, 2019

Colin I. Busby
Basin Research Associates

VIA Email to: basinres1@gmail.com

RE: 1801 Lone Oak Road, Brentwood Project, Contra Costa County

Dear Mr. Basin:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

A handwritten signature in cursive script that reads "Nancy Gonzalez-Lopez".

Nancy Gonzalez-Lopez
Staff Services Analyst

Attachment

**Native American Heritage Commission
Native American Contacts List
November 25, 2019**

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irene Zwieler, Chairperson
789 Canada Road
Woodside, CA 94062
amahmutsuntribal@gmail.com
(650) 851-7489 Cell
(650) 332-1526 Fax

Ohlone/Costanoan

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont, CA 94539
chochenyo@AOL.com
(510) 882-0527 Cell
(510) 687-9393 Fax

Ohlone
Bay Miwok
Plains Miwok
Patwin

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024
ams@indiancanyon.org
(831) 637-4238

Ohlone/Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
Charlene Nijmeh, Chairperson
20885 Redwood Road, Suite 232
Castro Valley, CA 94546
cnlnmeh@muwekma.org
(408) 464-2892
(408) 205-9714

Ohlone / Costanoan

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA 95236
canutes@verizon.net
(209) 887-3415
(209) 649-8972

Ohlone/Costanoan
Northern Valley Yokuts
Bay Miwok

The Confederated Villages of Lisjan
Corrina Gould, Chairperson
10926 Edes Avenue
Oakland, CA 94603
corrinagould@gmail.com
(510) 575-8408

Ohlone/Costanoan

This list 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.

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, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:
1801 Lone Oak Road, Brentwood Project, Contra Costa County.

RE: 1801 Lone Oak Road, Brentwood, Contra Costa County

Emails were sent to all Native Americans on the list provided by the NAHC on November 26, 2019 by Christopher Canzonieri.



November 26, 2019

BASIN
RESEARCH
ASSOCIATES

1933 DAVIS STREET
SUITE 215
SAN LEANDRO, CA 94577
VOICE (510) 430-8441
FAX (510) 430-8443

Amah Mutsun Tribal Band of Mission San Juan Bautista

Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA 94062

RE: Request for Information – 1801 Lone Oak Road, City of Brentwood, Contra Costa County

Dear Irenne,

The Native American Heritage Commission has provided your name as a person who may have further information on Native American resources in the City of Brentwood, Contra Costa County. The project proponent is reviewing the 17-acre vacant property for a potential subdivision for residential housing. No recorded archaeological resources are in the general vicinity and the area appears to have a low sensitivity for buried resources. The general area is surrounded by and in vicinity of other residential subdivisions. The City may approve the project using a CEQA Initial Study/Mitigated Negative Declaration.

Any information that you can provide will be used during the environmental review process.

We look forward to hearing from you. I can be reached at (510) 430-8441 x101 or via email at basinres1@gmail.com. Thanking you in advance for any assistance.

BASIN RESEARCH ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'C. I. Busby', with a long, sweeping underline.

Colin I. Busby, Ph.D., RPA



November 26, 2019

BASIN
RESEARCH
ASSOCIATES

1933 DAVIS STREET
SUITE 215
SAN LEANDRO, CA 94577
VOICE (510) 430-8441
FAX (510) 430-8443

Indian Canyon Mutsun Band of Costanoan

Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024

RE: Request for Information – 1801 Lone Oak Road, City of Brentwood, Contra Costa County

Dear Ann Marie,

The Native American Heritage Commission has provided your name as a person who may have further information on Native American resources in the City of Brentwood, Contra Costa County. The project proponent is reviewing the 17-acre vacant property for a potential subdivision for residential housing. No recorded archaeological resources are in the general vicinity and the area appears to have a low sensitivity for buried resources. The general area is surrounded by and in vicinity of other residential subdivisions. The City may approve the project using a CEQA Initial Study/Mitigated Negative Declaration.

Any information that you can provide will be used during the environmental review process.

We look forward to hearing from you. I can be reached at (510) 430-8441 x101 or via email at basinres1@gmail.com. Thanking you in advance for any assistance.

BASIN RESEARCH ASSOCIATES, INC.

Colin I. Busby, Ph.D., RPA



November 26, 2019

BASIN
RESEARCH
ASSOCIATES

1933 DAVIS STREET
SUITE 215
SAN LEANDRO, CA 94577
VOICE (510) 430-8441
FAX (510) 430-8443

Muwekma Ohlone Indian Tribe of the SF Bay Area

Charlene Nijmeh, Chairperson
20885 Redwood Road, Suite 232
Castro Valley, CA 94546

RE: Request for Information – 1801 Lone Oak Road, City of Brentwood, Contra Costa County

Dear Chairperson Nijmeh,

The Native American Heritage Commission has provided your name as a person who may have further information on Native American resources in the City of Brentwood, Contra Costa County. The project proponent is reviewing the 17-acre vacant property for a potential subdivision for residential housing. No recorded archaeological resources are in the general vicinity and the area appears to have a low sensitivity for buried resources. The general area is surrounded by and in vicinity of other residential subdivisions. The City may approve the project using a CEQA Initial Study/Mitigated Negative Declaration.

Any information that you can provide will be used during the environmental review process.

We look forward to hearing from you. I can be reached at (510) 430-8441 x101 or via email at basinres1@gmail.com. Thanking you in advance for any assistance.

BASIN RESEARCH ASSOCIATES, INC.

Colin I. Busby, Ph.D., RPA



November 26, 2019

BASIN
RESEARCH
ASSOCIATES

1933 DAVIS STREET
SUITE 215
SAN LEANDRO, CA 94577
VOICE (510) 430-8441
FAX (510) 430-8443

North Valley Yokuts Tribe
Katherine Perez, Chairperson
P.O. Box 717
Linden, CA 95236

RE: Request for Information – 1801 Lone Oak Road, City of Brentwood, Contra Costa County

Dear Kathy,

The Native American Heritage Commission has provided your name as a person who may have further information on Native American resources in the City of Brentwood, Contra Costa County. The project proponent is reviewing the 17-acre vacant property for a potential subdivision for residential housing. No recorded archaeological resources are in the general vicinity and the area appears to have a low sensitivity for buried resources. The general area is surrounded by and in vicinity of other residential subdivisions. The City may approve the project using a CEQA Initial Study/Mitigated Negative Declaration.

Any information that you can provide will be used during the environmental review process.

We look forward to hearing from you. I can be reached at (510) 430-8441 x101 or via email at basinres1@gmail.com. Thanking you in advance for any assistance.

BASIN RESEARCH ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'C. Busby', with a long, sweeping underline.

Colin I. Busby, Ph.D., RPA



November 26, 2019

BASIN
RESEARCH
ASSOCIATES

1935 DAVIS STREET
SUITE 215
SAN LEANDRO, CA 94577
VOICE (510) 430-8441
FAX (510) 430-8443

The Confederated Villages of Lisjan

Corina Gould, Chairperson
10926 Edes Avenue
Oakland, CA 94603

RE: Request for Information – 1801 Lone Oak Road, City of Brentwood, Contra Costa County

Dear Chairperson Gould,

The Native American Heritage Commission has provided your name as a person who may have further information on Native American resources in the City of Brentwood, Contra Costa County. The project proponent is reviewing the 17-acre vacant property for a potential subdivision for residential housing. No recorded archaeological resources are in the general vicinity and the area appears to have a low sensitivity for buried resources. The general area is surrounded by and in vicinity of other residential subdivisions. The City may approve the project using a CEQA Initial Study/Mitigated Negative Declaration.

Any information that you can provide will be used during the environmental review process.

We look forward to hearing from you. I can be reached at (510) 430-8441 x101 or via email at basinres1@gmail.com. Thanking you in advance for any assistance.

BASIN RESEARCH ASSOCIATES, INC.

Colin I. Busby, Ph.D., RPA



November 26, 2019

BASIN
RESEARCH
ASSOCIATES

1933 DAVIS STREET
SUITE 215
SAN LEANDRO, CA 94577
VOICE (510) 430-8441
FAX (510) 430-8443

The Ohlone Indian Tribe

Andrew Galvan,
P.O. Box 3388
Fremont, CA 94539

RE: Request for Information – 1801 Lone Oak Road, City of Brentwood, Contra Costa County

Dear Andy,

The Native American Heritage Commission has provided your name as a person who may have further information on Native American resources in the City of Brentwood, Contra Costa County. The project proponent is reviewing the 17-acre vacant property for a potential subdivision for residential housing. No recorded archaeological resources are in the general vicinity and the area appears to have a low sensitivity for buried resources. The general area is surrounded by and in vicinity of other residential subdivisions. The City may approve the project using a CEQA Initial Study/Mitigated Negative Declaration.

Any information that you can provide will be used during the environmental review process.

We look forward to hearing from you. I can be reached at (510) 430-8441 x101 or via email at basinres1@gmail.com. Thanking you in advance for any assistance.

BASIN RESEARCH ASSOCIATES, INC.

Colin I. Busby, Ph.D., RPA

Subject: Read: RE: 1801 Lone Oak Road, Brentwood Project
From: Charlene Nijmeh <cnijmeh@muwekma.org>
Date: 11/26/2019, 11:17 AM
To: Chris Canzonieri <canz@basinresearch.com>

Your message

To: Charlene Nijmeh
Subject: RE: 1801 Lone Oak Road, Brentwood Project
Sent: Tuesday, November 26, 2019 10:19:23 AM (UTC-08:00) Pacific Time (US & Canada)

was read on Tuesday, November 26, 2019 11:17:51 AM (UTC-08:00) Pacific Time (US & Canada).

Final-recipient: RFC822; cnijmeh@muwekma.org
Disposition: automatic-action/MDN-sent-automatically; displayed
X-MSEch-Correlation-Key: av8Pcd9FzE+urn24+vXaTQ==
Original-Message-ID: <754dbc14-8e87-f7bc-522c-6bf171c6e217@basinresearch.com>
X-Display-Name: Charlene Nijmeh

CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE

HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO

SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

12/4/2019

NWIC File No.: 19-0815

Donna M. Garaventa
Basin Research Associates
1933 Davis Street, Suite 210
San Leandro, CA 94577

re: Lone Oak

The Northwest Information Center received your record search request for the project area referenced above, located on the Brentwood USGS 7.5' quad. The following reflects the results of the records search for the project area and a 1000 foot radius:

Resources within project area:	None
Resources within 1000 foot radius:	None
Reports within project area:	S-27997.
Reports within 1000 foot radius:	S-30673, 6113, 29769, 11826, 45751, & 28017.

- 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

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: <http://www.dot.ca.gov/hq/structur/strmaint/historic.htm>

Soil Survey: <http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateld=CA>

Shipwreck Inventory: <http://www.slc.ca.gov/Info/Shipwrecks.html>

Let us know if you need any copies. The invoice will be kept open until 12/11/19.

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 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.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa C. Hagel
Researcher

Appendix C

Greenhouse Gas, Air Quality, Energy Monitoring Report

Brentwood - Orchard Grove North Detailed Report

Table of Contents

1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
3. Construction Emissions Details
 - 3.1. Demolition (2024) - Unmitigated
 - 3.3. Site Preparation (2024) - Unmitigated
 - 3.5. Grading (2024) - Unmitigated
 - 3.7. Building Construction (2024) - Unmitigated

3.9. Building Construction (2025) - Unmitigated

3.11. Paving (2025) - Unmitigated

3.13. Architectural Coating (2025) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Brentwood - Orchard Grove North
Construction Start Date	9/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	20.6
Location	37.95279415577755, -121.70504561607204
County	Contra Costa
City	Brentwood
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1363
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

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
------------------	------	------	-------------	-----------------------	------------------------	--------------------------------	------------	-------------

Single Family Housing	34.0	Dwelling Unit	9.60	66,300	398,237	0.00	98.0	—
-----------------------	------	---------------	------	--------	---------	------	------	---

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.	4.41	3.71	36.0	33.7	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	5,453	5,453	0.22	0.06	0.93	5,474
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.41	46.8	36.0	33.6	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	5,440	5,440	0.22	0.05	0.02	5,460
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.81	3.24	6.15	7.90	0.01	0.25	0.97	1.17	0.23	0.47	0.65	—	1,490	1,490	0.06	0.02	0.17	1,498
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	0.59	1.12	1.44	< 0.005	0.05	0.18	0.21	0.04	0.09	0.12	—	247	247	0.01	< 0.005	0.03	248

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.41	3.71	36.0	33.7	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	5,453	5,453	0.22	0.06	0.93	5,474
2025	1.40	1.17	10.6	13.6	0.02	0.43	0.13	0.56	0.40	0.03	0.43	—	2,604	2,604	0.10	0.04	0.69	2,618
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.41	3.71	36.0	33.6	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	5,440	5,440	0.22	0.05	0.02	5,460
2025	1.40	46.8	10.6	13.5	0.02	0.43	0.13	0.56	0.40	0.03	0.43	—	2,594	2,594	0.11	0.04	0.02	2,608
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.57	0.47	4.46	4.52	0.01	0.20	0.97	1.17	0.18	0.47	0.65	—	771	771	0.03	0.01	0.07	775
2025	0.81	3.24	6.15	7.90	0.01	0.25	0.07	0.33	0.23	0.02	0.25	—	1,490	1,490	0.06	0.02	0.17	1,498
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.10	0.09	0.81	0.82	< 0.005	0.04	0.18	0.21	0.03	0.09	0.12	—	128	128	0.01	< 0.005	0.01	128
2025	0.15	0.59	1.12	1.44	< 0.005	0.05	0.01	0.06	0.04	< 0.005	0.05	—	247	247	0.01	< 0.005	0.03	248

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.	1.67	3.22	1.36	10.8	0.02	0.06	1.60	1.65	0.05	0.41	0.46	15.0	2,653	2,669	1.67	0.09	7.62	2,745
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.40	2.95	1.49	8.62	0.02	0.05	1.60	1.65	0.05	0.41	0.46	15.0	2,523	2,538	1.69	0.10	0.66	2,610

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.46	3.02	1.33	9.08	0.02	0.05	1.58	1.62	0.05	0.40	0.45	15.0	2,400	2,415	1.68	0.10	3.56	2,489
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27	0.55	0.24	1.66	< 0.005	0.01	0.29	0.30	0.01	0.07	0.08	2.49	397	400	0.28	0.02	0.59	412

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	1.42	1.34	0.83	8.61	0.02	0.01	1.60	1.61	0.01	0.41	0.42	—	1,863	1,863	0.09	0.08	7.15	1,897
Area	0.20	1.85	0.13	1.97	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	148	148	< 0.005	< 0.005	—	149
Energy	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	621	621	0.06	< 0.005	—	624
Water	—	—	—	—	—	—	—	—	—	—	—	2.37	20.5	22.9	0.25	0.01	—	30.9
Waste	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Total	1.67	3.22	1.36	10.8	0.02	0.06	1.60	1.65	0.05	0.41	0.46	15.0	2,653	2,669	1.67	0.09	7.62	2,745
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.34	1.25	0.98	8.40	0.02	0.01	1.60	1.61	0.01	0.41	0.42	—	1,738	1,738	0.11	0.09	0.19	1,768
Area	0.01	1.68	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	143	143	< 0.005	< 0.005	—	143
Energy	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	621	621	0.06	< 0.005	—	624
Water	—	—	—	—	—	—	—	—	—	—	—	2.37	20.5	22.9	0.25	0.01	—	30.9
Waste	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47

Total	1.40	2.95	1.49	8.62	0.02	0.05	1.60	1.65	0.05	0.41	0.46	15.0	2,523	2,538	1.69	0.10	0.66	2,610
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.33	1.24	0.92	7.96	0.02	0.01	1.58	1.59	0.01	0.40	0.41	—	1,752	1,752	0.10	0.09	3.09	1,783
Area	0.09	1.76	0.01	0.95	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.07	6.07	< 0.005	< 0.005	—	6.09
Energy	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	621	621	0.06	< 0.005	—	624
Water	—	—	—	—	—	—	—	—	—	—	—	2.37	20.5	22.9	0.25	0.01	—	30.9
Waste	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Total	1.46	3.02	1.33	9.08	0.02	0.05	1.58	1.62	0.05	0.40	0.45	15.0	2,400	2,415	1.68	0.10	3.56	2,489
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.24	0.23	0.17	1.45	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	290	290	0.02	0.01	0.51	295
Area	0.02	0.32	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.01	1.01	< 0.005	< 0.005	—	1.01
Energy	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	103	103	0.01	< 0.005	—	103
Water	—	—	—	—	—	—	—	—	—	—	—	0.39	3.39	3.79	0.04	< 0.005	—	5.11
Waste	—	—	—	—	—	—	—	—	—	—	—	2.09	0.00	2.09	0.21	0.00	—	7.33
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.27	0.55	0.24	1.66	< 0.005	0.01	0.29	0.30	0.01	0.07	0.08	2.49	397	400	0.28	0.02	0.59	412

3. Construction Emissions Details

3.1. Demolition (2024) - 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	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.20	0.20	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	< 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	0.06	0.06	0.04	0.68	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.57	137
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	0.02	< 0.005	0.22	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	168	168	0.01	0.03	0.36	176

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	6.94
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	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.19	9.19	< 0.005	< 0.005	0.01	9.66
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.15
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.60

3.3. Site Preparation (2024) - 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	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	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	0.18	0.16	< 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	0.07	0.05	0.79	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	157	157	< 0.005	0.01	0.66	160
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	0.07	0.06	0.06	0.67	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	144	144	< 0.005	0.01	0.02	146
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	—	3.99	3.99	< 0.005	< 0.005	0.01	4.05
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	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.5. Grading (2024) - 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	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969

Dust From Material Movement:	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
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	1.00	1.03	< 0.005	0.05	—	0.05	0.04	—	0.04	—	162	162	0.01	< 0.005	—	163
Dust From Material Movement:	—	—	—	—	—	—	0.39	0.39	—	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	0.02	0.02	0.18	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.8	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movement:	—	—	—	—	—	—	0.07	0.07	—	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	0.06	0.05	0.05	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	125
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	6.94
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	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.15
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. Building Construction (2024) - 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	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	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	0.14	0.12	1.08	1.26	< 0.005	0.05	—	0.05	0.04	—	0.04	—	230	230	0.01	< 0.005	—	231
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	0.03	0.02	0.20	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	38.1	38.1	< 0.005	< 0.005	—	38.2
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	0.04	0.04	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	99.7	99.7	0.01	0.01	0.01	104
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.76	9.76	< 0.005	< 0.005	0.02	9.90
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.56	9.56	< 0.005	< 0.005	0.01	10.0
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	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.62	1.62	< 0.005	< 0.005	< 0.005	1.64
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.58	1.58	< 0.005	< 0.005	< 0.005	1.66
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. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
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	0.72	0.60	5.60	6.99	0.01	0.23	—	0.23	0.21	—	0.21	—	1,286	1,286	0.05	0.01	—	1,290
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	0.13	0.11	1.02	1.28	< 0.005	0.04	—	0.04	0.04	—	0.04	—	213	213	0.01	< 0.005	—	214
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	0.05	0.04	0.03	0.51	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.43	110
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.0	98.0	0.01	0.01	0.26	103
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	0.04	0.04	0.04	0.43	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.7	98.7	< 0.005	< 0.005	0.01	100
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.1	98.1	0.01	0.01	0.01	102
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	0.02	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	0.10	54.3
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	52.6	52.6	< 0.005	0.01	0.06	55.0
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.86	8.86	< 0.005	< 0.005	0.02	8.99
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.71	8.71	< 0.005	< 0.005	0.01	9.10
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

3.11. 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	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	0.05	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	123	
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.70	6.70	< 0.005	< 0.005	0.01	6.80	
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	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.13	

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	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	0.00

3.13. 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
Architect ural Coatings	—	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architect ural Coatings	—	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22

Architect Coatings	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.7	19.7	< 0.005	< 0.005	< 0.005	20.0
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	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.11
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	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
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

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.02	< 0.005	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.02	< 0.005	—	119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.02	< 0.005	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.02	< 0.005	—	119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	19.5	19.5	< 0.005	< 0.005	—	19.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	19.5	19.5	< 0.005	< 0.005	—	19.6

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	504	504	0.04	< 0.005	—	505
Total	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	504	504	0.04	< 0.005	—	505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	504	504	0.04	< 0.005	—	505
Total	0.05	0.02	0.40	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	504	504	0.04	< 0.005	—	505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.4	83.4	0.01	< 0.005	—	83.6
Total	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.4	83.4	0.01	< 0.005	—	83.6

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.01	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	143	143	< 0.005	< 0.005	—	143
Consumer Products	—	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.17	0.02	1.92	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.16	5.16	< 0.005	< 0.005	—	5.18
Total	0.20	1.85	0.13	1.97	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	148	148	< 0.005	< 0.005	—	149
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.01	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	143	143	< 0.005	< 0.005	—	143
Consumer Products	—	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.01	1.68	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	143	143	< 0.005	< 0.005	—	143
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.58	0.58	< 0.005	< 0.005	—	0.59
Consumer Products	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.42	0.42	< 0.005	< 0.005	—	0.42
Total	0.02	0.32	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.01	1.01	< 0.005	< 0.005	—	1.01

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.37	20.5	22.9	0.25	0.01	—	30.9
Total	—	—	—	—	—	—	—	—	—	—	—	2.37	20.5	22.9	0.25	0.01	—	30.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.37	20.5	22.9	0.25	0.01	—	30.9
Total	—	—	—	—	—	—	—	—	—	—	—	2.37	20.5	22.9	0.25	0.01	—	30.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.39	3.39	3.79	0.04	< 0.005	—	5.11
Total	—	—	—	—	—	—	—	—	—	—	—	0.39	3.39	3.79	0.04	< 0.005	—	5.11

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.3
Total	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.3
Total	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.09	0.00	2.09	0.21	0.00	—	7.33
Total	—	—	—	—	—	—	—	—	—	—	—	2.09	0.00	2.09	0.21	0.00	—	7.33

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Demolition	Demolition	9/1/2024	9/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	9/30/2024	10/14/2024	5.00	10.0	—
Grading	Grading	10/15/2024	11/12/2024	5.00	20.0	—
Building Construction	Building Construction	11/13/2024	10/1/2025	5.00	230	—
Paving	Paving	10/2/2025	10/30/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	10/31/2025	11/28/2025	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
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	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
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
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	2.30	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	12.2	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	3.63	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—

Architectural Coating	Worker	2.45	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	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	134,258	44,753	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Ton of Debris)	Material Exported (Ton of Debris)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	4,000	—
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	0.00	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.37

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
Single Family Housing	0.37	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	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
Total all Land Uses	362	362	362	132,130	2,264	2,264	2,264	826,360

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	7
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	27

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
134257.5	44,753	0.00	0.00	—

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)
Single Family Housing	210,285	204	0.0330	0.0040	1,571,545

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,237,339	5,809,243

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	23.5	—

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
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.16. 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)
-----------	--------	------------------------------	------------------------------

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	2.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.54	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.6
AQ-PM	29.3
AQ-DPM	56.3
Drinking Water	57.6
Lead Risk Housing	24.5

Pesticides	42.9
Toxic Releases	29.1
Traffic	17.0
Effect Indicators	—
CleanUp Sites	88.5
Groundwater	40.8
Haz Waste Facilities/Generators	44.7
Impaired Water Bodies	77.3
Solid Waste	22.1
Sensitive Population	—
Asthma	62.3
Cardio-vascular	64.2
Low Birth Weights	42.8
Socioeconomic Factor Indicators	—
Education	41.9
Housing	29.7
Linguistic	—
Poverty	35.4
Unemployment	53.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	62.79994867
Employed	78.07006288
Median HI	87.29629154

Education	—
Bachelor's or higher	53.83036058
High school enrollment	19.62017195
Preschool enrollment	39.0606955
Transportation	—
Auto Access	96.70216861
Active commuting	41.72975747
Social	—
2-parent households	82.75375337
Voting	61.17028102
Neighborhood	—
Alcohol availability	58.88617991
Park access	49.22366226
Retail density	25.47157706
Supermarket access	33.37610676
Tree canopy	68.71551392
Housing	—
Homeownership	75.52932119
Housing habitability	63.98049532
Low-inc homeowner severe housing cost burden	41.3832927
Low-inc renter severe housing cost burden	55.34453997
Uncrowded housing	33.53009111
Health Outcomes	—
Insured adults	70.40934172
Arthritis	0.0
Asthma ER Admissions	32.0
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	32.3
Cognitively Disabled	46.5
Physically Disabled	65.4
Heart Attack ER Admissions	14.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	43.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	70.0
English Speaking	85.7
Foreign-born	51.0
Outdoor Workers	23.6

Climate Change Adaptive Capacity	—
Impervious Surface Cover	58.1
Traffic Density	27.0
Traffic Access	52.6
Other Indices	—
Hardship	43.9
Other Decision Support	—
2016 Voting	51.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	51.0
Healthy Places Index Score for Project Location (b)	74.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	34 single-family dwelling units. Total project lot acreage is 9.6 acres.

Contra Costa	2024 LHD2	Aggregate	Aggregate	Diesel	3307.738831	131282.2914	9.992554874	13.14
Contra Costa	2024 MCY	Aggregate	Aggregate	Gasoline	18015.43382	103611.1879	2.509850758	41.28
Contra Costa	2024 MDV	Aggregate	Aggregate	Gasoline	101283.7622	3842161.513	193.6376743	19.84
Contra Costa	2024 MDV	Aggregate	Aggregate	Diesel	1627.302932	64622.95422	2.64996745	24.39
Contra Costa	2024 MH	Aggregate	Aggregate	Gasoline	1757.818458	16248.5562	3.677398079	4.42
Contra Costa	2024 MH	Aggregate	Aggregate	Diesel	778.1731031	7477.58259	0.795438312	9.40
Contra Costa	2024 Motor Coach	Aggregate	Aggregate	Diesel	25.62586948	3575.409789	0.650165352	5.50
Contra Costa	2024 OBUS	Aggregate	Aggregate	Gasoline	253.1475798	11671.57743	2.43884844	4.79
Contra Costa	2024 PTO	Aggregate	Aggregate	Diesel	0	14109.51972	2.869179565	4.92
Contra Costa	2024 SBUS	Aggregate	Aggregate	Gasoline	75.79113375	4157.440014	0.404510868	10.28
Contra Costa	2024 SBUS	Aggregate	Aggregate	Diesel	428.9886064	10014.75514	1.21550503	8.24
Contra Costa	2024 T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	1.625006729	106.5642092	0.011949599	8.92
Contra Costa	2024 T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	2.168708058	146.2949915	0.016401199	8.92
Contra Costa	2024 T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	7.076411609	381.0677894	0.042074755	9.06
Contra Costa	2024 T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	11.93030526	2401.043409	0.247902952	9.69
Contra Costa	2024 T6 Instate Delivery (	Aggregate	Aggregate	Diesel	274.4755933	9205.333311	1.11864524	8.23
Contra Costa	2024 T6 Instate Delivery (	Aggregate	Aggregate	Diesel	219.208098	7500.559084	0.911432062	8.23
Contra Costa	2024 T6 Instate Delivery (	Aggregate	Aggregate	Diesel	482.2798037	16272.93066	1.980479168	8.22
Contra Costa	2024 T6 Instate Delivery (	Aggregate	Aggregate	Diesel	48.67690748	2629.991804	0.310380596	8.47
Contra Costa	2024 T6 Instate Other Cla	Aggregate	Aggregate	Diesel	636.7183118	26037.06831	3.051749885	8.53
Contra Costa	2024 T6 Instate Other Cla	Aggregate	Aggregate	Diesel	1405.781945	61118.78911	7.164329941	8.53
Contra Costa	2024 T6 Instate Other Cla	Aggregate	Aggregate	Diesel	1090.909974	46303.56714	5.398463937	8.58
Contra Costa	2024 T6 Instate Other Cla	Aggregate	Aggregate	Diesel	618.4889267	28444.98814	3.265689937	8.71
Contra Costa	2024 T6 Instate Tractor C	Aggregate	Aggregate	Diesel	10.18280113	501.7853112	0.06011706	8.35
Contra Costa	2024 T6 Instate Tractor C	Aggregate	Aggregate	Diesel	69.87423964	4154.904409	0.46296295	8.97
Contra Costa	2024 T6 OOS Class 4	Aggregate	Aggregate	Diesel	0.92678739	60.2625293	0.006724972	8.96
Contra Costa	2024 T6 OOS Class 5	Aggregate	Aggregate	Diesel	1.231087996	82.66935356	0.009230631	8.96
Contra Costa	2024 T6 OOS Class 6	Aggregate	Aggregate	Diesel	4.036387686	216.0173861	0.023694065	9.12
Contra Costa	2024 T6 OOS Class 7	Aggregate	Aggregate	Diesel	6.331428375	1570.715012	0.160992485	9.76
Contra Costa	2024 T6 Public Class 4	Aggregate	Aggregate	Diesel	81.19104212	2751.885797	0.361293613	7.62
Contra Costa	2024 T6 Public Class 5	Aggregate	Aggregate	Diesel	133.2140927	4923.965039	0.635118854	7.75
Contra Costa	2024 T6 Public Class 6	Aggregate	Aggregate	Diesel	128.0801618	4531.722783	0.591430531	7.66
Contra Costa	2024 T6 Public Class 7	Aggregate	Aggregate	Diesel	190.7981306	8478.771772	1.089127282	7.78
Contra Costa	2024 T6 Utility Class 5	Aggregate	Aggregate	Diesel	61.4376622	2497.702844	0.282389977	8.84
Contra Costa	2024 T6 Utility Class 6	Aggregate	Aggregate	Diesel	11.66025915	471.7432463	0.053150787	8.88
Contra Costa	2024 T6 Utility Class 7	Aggregate	Aggregate	Diesel	13.18262903	652.9749984	0.073148823	8.93
Contra Costa	2024 T6TS	Aggregate	Aggregate	Gasoline	739.4954007	38664.27392	8.107551767	4.77
Contra Costa	2024 T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	615.3730838	124105.7354	20.31564787	6.11
Contra Costa	2024 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	553.9497358	148482.5375	23.88389085	6.22
Contra Costa	2024 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	233.3387103	53953.65639	8.822907105	6.12
Contra Costa	2024 T7 Other Port Class	Aggregate	Aggregate	Diesel	64.35327591	11844.6454	1.992754645	5.94
Contra Costa	2024 T7 POAK Class 8	Aggregate	Aggregate	Diesel	413.773454	41046.78545	7.035015049	5.83
Contra Costa	2024 T7 Public Class 8	Aggregate	Aggregate	Diesel	459.443799	19740.81036	3.792262497	5.21
Contra Costa	2024 T7 Single Concrete/	Aggregate	Aggregate	Diesel	78.10888513	5448.988265	0.91939886	5.93
Contra Costa	2024 T7 Single Dump Clas	Aggregate	Aggregate	Diesel	519.1423122	30689.88356	5.299930401	5.79
Contra Costa	2024 T7 Single Other Clas	Aggregate	Aggregate	Diesel	600.0148762	30961.86439	5.253216684	5.89
Contra Costa	2024 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	170.4292316	11053.99975	4.465909094	2.48
Contra Costa	2024 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	1339.4093	101925.6182	16.68411595	6.11
Contra Costa	2024 T7 Utility Class 8	Aggregate	Aggregate	Diesel	44.35615304	2007.688351	0.345648717	5.81
Contra Costa	2024 T7IS	Aggregate	Aggregate	Gasoline	0.816073688	55.87226715	0.013779527	4.05
Contra Costa	2024 UBUS	Aggregate	Aggregate	Gasoline	102.4069604	5589.008616	0.90612729	6.17
Contra Costa	2024 UBUS	Aggregate	Aggregate	Diesel	211.7340781	21902.92773	2.74787936	7.97

On-road Mobile (Operational) Energy Usage

Note: Assumes that all vehicles that are generated as part of proposed project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by the project would use gasoline.

Unmitigated:

Step 1:

Therefore:

Average Daily VMT:

2,264 Source: CalEEMod

Step 2:

Given:

Fleet Mix (CalEEMod Output)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
56.17%	5.60%	17.96%	12.76%	2.38%	0.55%	0.71%	0.71%	0.05%	0.03%	2.58%	0.13%	0.34%

And:

Gasoline MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 Output)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
29.51	24.81	23.84	19.41	9.42	8.41	N/A	N/A	4.73	6.17	41.28	10.22	4.42

Therefore:

Weighted Average MPG Factors

Gasoline: 26.1

Step 3:

Therefore:

87 daily gallons of gasoline

or

31,666 annual gallons of gasoline

Off-road (i.e. On-site) Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source. Demolition, site preparation and grading off-road mobile vehicle on-site gallons of fuel are calculated below.

Given Factor:	82.2 metric tons	CO2	(provided in CalEEMod Output File)
Conversion Factor:	2204.6262 pounds	per metric ton	
Intermediate Result:	181,220 pounds	CO2	
Conversion Factor:	22.38 pounds	CO2 per 1 gallon of diesel fuel	Source: U.S. EIA, 2016
Final Result:	8,097 gallons	diesel fuel	http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11

Mitigated Onsite Scenario	Total CO2 (MT/yr) (provided in CalEEMod Output File)
Demolition	31.2000
Site Preparation	24.1000
Grading	26.9000

On-road Mobile (Construction) Energy Usage - Demolition

Note: Year 2022 MPG factors were derived for construction-related energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)** 15 **Total Daily Hauler Trips (CalEEMod Output)** 2

Worker Trip Length (miles) (CalEEMod Output) 11.7 **Hauler Trip Length (miles) (CalEEMod Output)** 20

Therefore:
Average Worker Daily VMT: 176 **Average Vendor Daily VMT:** 46

Step 2: Given:
Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

Fleet Mix for Haulers (CalEEMod Output)

MHD	HHD
50%	50%

Assumed Fleet Mix for Vendors

And:
MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2023

<u>Gasoline:</u>			<u>Diesel:</u>	
LDA	LDT1	LDT2	MHD	HHD
29.51	24.81	23.84	8.42	5.45

Therefore:
Weighted Average Worker (Gasoline) MPG Factor 26.92 **Weighted Average Vendor (Diesel) MPG Factor** 6.93

Step 3: **Therefore:** 7 Worker daily gallons of gasoline **Therefore:** 7 Vendor daily gallons of diesel

Step 4: 20 # of Days (CalEEMod Output)
 Therefore: 130 Total gallons of gasoline **Therefore:** 133 Total gallons of diesel

On-road Mobile (Construction) Energy Usage - Site Preparation

Note: Year 2022 MPG factors were derived for construction-related energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

18

Worker Trip Length (miles) (CalEEMod Output)

11.7

Therefore:

Average Worker Daily VMT:

211

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2023

LDA	LDT1	LDT2
29.51	24.81	23.84

Therefore:

Weighted Average Worker MPG Factor

26.92

Step 3: **Therefore:**

8 Worker daily gallons of gasoline

Step 4: 10 # of Days (CalEEMod Output)

Therefore:

Result: 78 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Grading

Note: Year 2022 MPG factors were derived for construction-related energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

11.7

Therefore:

Average Worker Daily VMT:

176

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2023

LDA	LDT1	LDT2
29.51	24.81	23.84

Therefore:

Weighted Average Worker MPG Factor

26.92

Step 3: **Therefore:**

7 Worker daily gallons of gasoline

Step 4: 20 # of Days (CalEEMod Output)

Therefore:

Result: 130 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Building Construction

Note: Year 2022 MPG factors were derived for construction-related energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

12

Total Daily Vendor Trips (CalEEMod Output)

4

Worker Trip Length (miles) (CalEEMod Output)

11.7

Vendor Trip Length (miles) (CalEEMod Output)

8.4

Therefore:

Average Worker Daily VMT:

143

Average Vendor Daily VMT:

34

Step 2:

Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

Fleet Mix for Workers (CalEEMod Output)

MHD	HHD
50%	50%

Assumed Fleet Mix for Vendors

And:

MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2023

Gasoline:

LDA	LDT1	LDT2
29.51	24.81	23.84

Diesel:

MHD	HHD
8.42	5.45

Therefore:

Weighted Average Worker (Gasoline) MPG Factor

26.92

Weighted Average Vendor (Diesel) MPG Factor

6.93

Step 3:

Therefore:

5 Worker daily gallons of gasoline

Therefore:

5 Vendor daily gallons of diesel

Step 4:

230 # of Days (CalEEMod Output)

Therefore:

1,220 Total gallons of gasoline

Therefore:

1,115 Total gallons of diesel

On-road Mobile (Construction) Energy Usage - Paving

Note: Year 2022 MPG factors were derived for construction-related energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

11.7

Therefore:

Average Worker Daily VMT:

176

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2023

LDA	LDT1	LDT2
29.51	24.81	23.84

Therefore:

Weighted Average Worker MPG Factor

26.9

Step 3: **Therefore:**

7 Worker daily gallons of gasoline

Step 4: 20 # of Days (CalEEMod Output)

Therefore:

Result: 130 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Architectural Coating

Note: Year 2022 MPG factors were derived for construction-related energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

2

Worker Trip Length (miles) (CalEEMod Output)

11.7

Therefore:

Average Worker Daily VMT:

29

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023

LDA	LDT1	LDT2
29.51	24.81	23.84

Therefore:

Weighted Average Worker MPG Factor

26.9

Step 3: **Therefore:**

1 Worker daily gallons of gasoline

Step 4: **20 # of Days (CalEEMod Output)**

Therefore:

Result: 21 Total gallons of gasoline

Appendix D

Geotechnical Investigation Report



**MCCOY PROPERTY
BRENTWOOD, CALIFORNIA**

GEOTECHNICAL EXPLORATION

SUBMITTED TO
Mr. David Best
Shea Homes - Northern California
P.O. Box 5064
Livermore, CA 94551

PREPARED BY
ENGEO Incorporated

June 5, 2023

PROJECT NO.
22989.000.001

Project No.
22989.000.001

June 5, 2023

Mr. David Best
Shea Homes – Northern California
P.O. Box 5064
Livermore, CA 94551

Subject: McCoy Property (1901 Lone Oak Road)
Brentwood, California

GEOTECHNICAL EXPLORATION

Dear Mr. Best:

ENGEO prepared this geotechnical report for Shea Homes – Northern California, as outlined in our agreement dated April 13, 2023. We characterized the subsurface conditions at the site to provide the enclosed geotechnical recommendations for design.

Our experience and that of our profession clearly indicate that the risk of costly design, construction, and maintenance problems can be significantly lowered by retaining the design geotechnical engineering firm to review the project plans and specifications and provide geotechnical observation and testing services during construction. Please let us know when working drawings are nearing completion, and we will be glad to discuss these additional services with you.

If you have any questions or comments regarding this report, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated



Connor Dunn

cd/sh/ar



Steve Harris, GE



TABLE OF CONTENTS

LETTER OF TRANSMITTAL

1.0	INTRODUCTION	1
1.1	PURPOSE AND SCOPE	1
1.2	PROJECT LOCATION.....	1
1.3	PROJECT DESCRIPTION.....	1
2.0	FINDINGS	2
2.1	SITE BACKGROUND	2
2.2	FIELD EXPLORATION	2
2.3	GEOLOGY AND SEISMICITY	2
	2.3.1 Geology	2
	2.3.2 Seismicity	3
2.4	SURFACE CONDITIONS	4
2.5	SUBSURFACE CONDITIONS	4
2.6	GROUNDWATER CONDITIONS.....	4
2.7	LABORATORY TESTING.....	4
3.0	CONCLUSIONS.....	5
3.1	EXPANSIVE SOIL	5
3.2	EXISTING FILL	5
3.3	SEISMIC HAZARDS.....	5
	3.3.1 Ground Rupture	6
	3.3.2 Ground Shaking	6
	3.3.3 Liquefaction	6
	3.3.4 Flooding.....	6
3.4	2022 CBC SEISMIC DESIGN PARAMETERS	6
4.0	CONSTRUCTION MONITORING	7
5.0	EARTHWORK RECOMMENDATIONS.....	8
5.1	GENERAL SITE CLEARING.....	8
5.2	UNDOCUMENTED FILL REMOVAL.....	8
5.3	OVER-OPTIMUM SOIL MOISTURE CONDITIONS	8
5.4	ACCEPTABLE FILL.....	9
5.5	ENGINEERED FILL COMPACTION	9
	5.5.1 Grading in Structural Areas	9
	5.5.2 Underground Utility Backfill	9
5.6	SLOPES.....	10
	5.6.1 Gradients	10
5.7	SITE DRAINAGE.....	10
	5.7.1 Surface Drainage	10
6.0	FOUNDATION RECOMMENDATIONS	10
6.1	POST-TENSIONED MAT FOUNDATIONS	10
	6.1.1 Slab Moisture Vapor Reduction	11

TABLE OF CONTENTS (Continued)

6.2	EXTERIOR FLATWORK.....	11
6.3	TRENCH BACKFILL.....	11
7.0	SOUNDWALL AND RETAINING WALLS	12
7.1	LATERAL SOIL PRESSURES.....	12
7.2	RETAINING WALL DRAINAGE	12
7.3	BACKFILL	13
7.4	FOUNDATIONS	13
	7.4.1 Footings.....	13
	7.4.2 Cast-In-Place Drilled Piers	14
8.0	PAVEMENT DESIGN	14
8.1	FLEXIBLE PAVEMENTS.....	14
8.2	SUBGRADE AND AGGREGATE BASE COMPACTION	14
9.0	LIMITATIONS AND UNIFORMITY OF CONDITIONS	15
SELECTED REFERENCES		
FIGURES		
APPENDIX A – Exploration Log		
APPENDIX B – Laboratory Test Data		

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

ENGEO prepared this geotechnical report for design of the McCoy Property residential development located in Brentwood, California. The purpose of this geotechnical report is to provide conclusions and recommendations regarding site development and foundation design parameters for the proposed development. We prepared this report as outlined in our agreement dated April 13, 2023. Shea Home – Northern California authorized ENGEO to conduct the following scope of services.

- Subsurface field exploration
- Soil laboratory testing
- Data analysis and conclusions
- Report preparation

For our use, we were provided with the McCoy Preferred Site Plan by CBG, dated October 18, 2022.

This report was prepared for the exclusive use of Shea Home – Northern California and their consultants for design of this project. In the event that any changes are made in the character, design or layout of the development, we must be contacted to review the conclusions and recommendations contained in this report to evaluate whether modifications are recommended. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without our express written consent.

1.2 PROJECT LOCATION

The site is located at 1901 Lone Oak Road in Brentwood, California, as shown on Figure 1. The approximately 9.7-acre site currently consists of fallow land with a small structure on the southeastern corner of the Property. The small residential parcel southeast of the site is not a part of this scope. Figure 2 shows the approximate location of our explorations and the boundaries of the project.

1.3 PROJECT DESCRIPTION

We understand the proposed improvements will include the construction of approximately 34 single-family homes/duplexes, a bioretention area, internal roadways, underground utilities, and associated improvements.

Structural loads and grading are yet to be determined; however, we assume that structural loads will be representative for this type of construction and that only minor grading will be required.

2.0 FINDINGS

2.1 SITE BACKGROUND

Historical images available online indicate that the subject site has been historically used for agriculture. Currently, the site is not being used for agricultural purposes and appears to have been left fallow since 2006. Upon reviewing available aerial photographs, it appears that a creek channel previously crossed the site in a diagonal direction from the northwestern corner to the southeastern corner of the site, which was filled in at some point between 1939 and 1965. The dimensions of the former creek are unknown and are expected to vary; however, we expect the depth to be on the order of a few feet. The approximate location of the creek is identified as “undocumented fill” on Figure 2.

2.2 FIELD EXPLORATION

Our field exploration included drilling five borings at the locations shown in the Site Plan, Figure 2. We performed our field exploration on May 11, 2023. The locations of our explorations shown in the Site Plan are approximate and were estimated by utilizing smart phones with GPS and Google Earth; they should be considered accurate only to the degree implied by the method used.

An ENGEO representative observed the drilling and logged the subsurface conditions at each boring location. We retained a drilling subcontractor who employed a truck-mounted Soil Test Ranger drill rig equipped with 4½-inch-diameter solid-flight augers. The borings were advanced to a maximum depth of approximately 25 feet below existing grade.

Soil samples were collected at frequent intervals using either a 3-inch outside-diameter (O.D.) California-type split-spoon sampler fitted with 6-inch-long brass liners, or a 2-inch O.D. standard penetration test (SPT) split-spoon sampler. The samplers were advanced with a 140-pound hammer with a 30-inch drop, employing a rope-and-cathead hammer system. The penetration of the sampler was field recorded as the number of blows needed to drive the sampler 18 inches in 6-inch increments. The boring logs show the number of blows required for the last 1 foot of penetration, or the number of blows per depth of penetration for samples that met driving refusal. The blow counts depicted on the boring logs have not been converted using any correction factors.

We used the field logs to develop the final logs presented in Appendix A. The logs depict subsurface conditions within the borings at the time the exploration was conducted. Subsurface conditions at other locations may differ from conditions noted at these locations. The passage of time may result in altered subsurface conditions. In addition, stratification lines represent the approximate boundaries between soil types and the transitions may be gradual.

2.3 GEOLOGY AND SEISMICITY

2.3.1 Geology

We present the following discussion of site geology based on our field reconnaissance, subsurface exploration, and review of the CGS *Geologic Map of the San Francisco-San Jose Quadrangle* (Wagner, Bortugno, and McJunkin 1991).

The site is located in the Great Valley geomorphic province. The Great Valley is an elongate, northwest-trending structural trough bound by the Coast Range on the west and the Sierra Nevada on the east. The Great Valley has been and is presently being filled with sediments primarily derived from the Sierra Nevada.

The referenced geologic map indicates that the underlying geologic formation at the site is Holocene aged Alluvial Fan Deposits, which generally consists of interbedded clay, silt, sand, and gravel.

2.3.2 Seismicity

The site is located in a seismically active region. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and no known surface expressions of active faults are believed to exist within the site. An active fault is defined by the State Mining and Geology Board (California Geological Survey, 2007) as one that has had surface displacement within Holocene time (about the last 11,000 years). According to the 2008 National Seismic Hazard Maps Spatial Query, the two nearest earthquake faults from the center of the site designated as active seismic sources are the Greenville Connected Fault, located approximately 8½ miles west and the Great Valley Fault, located approximately 9 miles south. Other active seismic sources in the region are summarized in the table below. Figure 4 shows the approximate locations of these faults and significant historic earthquake epicenters recorded within the region.

TABLE 2.3.2-1: Active Faults Capable of Producing Significant Ground Shaking at the Site
Latitude: 37.952783, Longitude: -121.704029

FAULT NAME	DISTANCE FROM SITE (miles)	DIRECTION FROM SITE	MAXIMUM MOMENT MAGNITUDE
Greenville Connected	8.5	West	7.0
Great Valley	8.9	South	6.9
Mount Diablo Thrust	15.9	Southwest	6.7
Green Valley Connected	16.1	Southwest	6.8
Calaveras	19.2	Southwest	7.0
Hayward-Rodgers Creek	27.9	West	7.3

Portions of the Great Valley fault are considered seismically active blind thrust faults; however, since the fault segments are not known to extend to the ground surface, the fault is not defined as active by the State Mining and Geology Board as per the definition above and the State of California has not defined Earthquake Fault Zones around postulated traces.

The Great Valley fault is considered capable of causing significant ground shaking at the site, but the recurrence interval is believed longer than for more distant, strike-slip faults. Recent studies suggest that this boundary fault may have been the cause of the Vacaville-Winters earthquake sequence of April 1892 (Eaton, 1986; Wong and Biggar, 1989; Moores and others, 1991). Other large (>M_w7) earthquakes have historically occurred in the Bay Area to the west and along the margins of the Central Valley and many earthquakes of low magnitude occur every year.

2.4 SURFACE CONDITIONS

While we were not provided with a topographic survey of the site, based on our site reconnaissance, the site topography appeared relatively flat. Elevations range from approximately Elevation 67 feet on the eastern site boundary to Elevation 72 feet along the western boundary (WGS84), based on our review of Google Earth elevations. At the time of our field exploration, the site consisted of vacant land with significant vegetation growth. We observed the following site features during our reconnaissance.

- The perimeter of the site was bounded by chain link fencing and welded wire fencing. A fence also ran east to west through the site approximately 35 feet north of the existing home southeast of the site.
- Drainage ditches were located on the south and east site boundaries.
- A barn was located in the southeastern corner of site.
- Stockpiles of soil and construction debris were located in the southwestern corner of the site.

Please refer to the Site Plan, Figure 2, for more information on site features.

2.5 SUBSURFACE CONDITIONS

The soil encountered in our explorations generally consisted of fat clay in the upper 5 feet, and then transitioned to lean clay to the maximum depth explored of approximately 25 feet below existing ground surface. The surface clays were characterized with a high expansion potential; laboratory testing showed a plasticity index (PI) of 41 to 50.

The log contains the soil type, color, consistency, and visual classification in general accordance with the Unified Soil Classification System. The log graphically depicts the subsurface conditions encountered at the time of the exploration

2.6 GROUNDWATER CONDITIONS

We observed static groundwater in our subsurface explorations, as summarized in the table below.

TABLE 2.6-1: Depth to Groundwater

BORING	DEPTH TO GROUNDWATER (feet)
1-B01	8
1-B02	N/A
1-B03	14
1-B04	N/A
1-B05	12½

Fluctuations in the level of groundwater may occur due to variations in rainfall, irrigation practice, and other factors not evident at the time measurements were made.

2.7 LABORATORY TESTING

We performed laboratory tests on selected soil samples to evaluate their engineering properties. For this project, we performed moisture, dry density, plasticity index, sieve analysis, hydrometer, unconfined compression, and triaxial testing. Select laboratory data is recorded on the exploration logs in Appendix A. Laboratory test reports are included in Appendix B.

3.0 CONCLUSIONS

From a geotechnical engineering viewpoint, in our opinion, the proposed project may be designed as planned, provided the geotechnical recommendations in this report are properly incorporated into the design plans and specifications. The primary geotechnical concern that could affect development on the site is surficial highly expansive soil. We summarize our conclusions below.

3.1 EXPANSIVE SOIL

We observed potentially expansive soil near the surface of the site in our borings. Our laboratory testing indicates that this soil exhibits high shrink/swell potential with variations in moisture content.

Expansive soil changes in volume with changes in moisture. It can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. To reduce the potential for damage to the planned structures, we recommend that all residential structures be supported on properly designed post-tensioned (PT) mat foundations bearing on engineered fill or compacted native soil. We recommend that other structural elements, such as pavements and flatwork, be designed for highly expansive soil conditions.

Successful performance of structures on expansive soil requires special attention during construction. It is imperative that exposed soil be kept moist prior to placement of concrete for foundation construction. It can be difficult to remoisturize clayey soil without excavation, moisture conditioning, and recompaction. We provide specific grading recommendations in Section 5 for compaction of expansive soil at the site. The purpose of these recommendations is to reduce the swell potential of the soil by compacting at a higher moisture content and controlling the amount of compaction.

3.2 EXISTING FILL

We did not observe any undocumented fill in any of our borings. Some fill may still be present due to backfilling of the historic creek channel and/or in the vicinity of the existing barn structure on the southeastern corner of the property. The location of the historic creek channel is shown on Figure 2 as “undocumented fill”.

Undocumented fill can undergo excessive settlement, especially under new fill or building loads. Fill is considered “undocumented” if there are no records regarding the placement and compaction for use as engineered fill. All undocumented fill should be removed and recompacted as engineered fill. We present fill removal recommendations in Section 5.2.

3.3 SEISMIC HAZARDS

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking, liquefaction, and ground lurching. The following sections present a discussion of these hazards as they apply to the site. Based on topographic and lithologic data, the risk of regional subsidence or uplift, soil liquefaction, lateral spreading, landslides, tsunamis, flooding or seiches is considered low to negligible at the site.

3.3.1 Ground Rupture

Since there are no known active faults crossing the property and the site is not located within an Earthquake Fault Special Study Zone, it is our opinion that ground rupture is unlikely at the subject property.

3.3.2 Ground Shaking

An earthquake of moderate to high magnitude generated within the San Francisco Bay Region could cause considerable ground shaking at the site, similar to that which has occurred in the past. To mitigate the shaking effects, all structures should be designed using sound engineering judgment and the current California Building Code (CBC) requirements, as a minimum. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead and live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some non-structural damage, and (3) resist major earthquakes without collapse but with some structural, as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake; however, it is reasonable to expect that a well-designed and well-constructed structure will not collapse or cause loss of life in a major earthquake (SEAOC, 1996).

3.3.3 Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soil most susceptible to liquefaction are clean, loose, saturated, uniformly graded fine-grained sand. We generally encountered fine-grained clayey soil in our explorations. For this reason and based upon engineering judgment, it is our opinion that the potential for liquefaction at the site is low during seismic shaking and liquefaction-induced settlements are estimated to be negligible.

3.3.4 Flooding

Based on review of the FEMA flood zone map, the subject development is designated as Flood Zone X – Area of minimal flood hazard. The civil engineer should review pertinent information relating to possible flood levels for the subject site based on final pad elevations and provide appropriate design measures for development of the project, if necessary.

3.4 2022 CBC SEISMIC DESIGN PARAMETERS

The 2022 CBC utilizes seismic design criteria established in the ASCE/SEI Standard “Minimum Design Loads and Associated Criteria for Buildings and Other Structures,” (ASCE 7-16). Based on the subsurface conditions encountered, we characterized the site as Site Class D. ASCE 7-16 requires a site-specific ground-motion hazard analysis for Site Class D sites with a mapped S_1 value greater than or equal to 0.2; however, Section 11.4.8 of ASCE 7-16 and Supplement No. 3 provide an exception to this requirement. A site-specific ground-motion hazard analysis is not required where the value of the parameter S_{M1} determined by Equation 11.4-2, and shown in Table 3.4-1, is increased by 50 percent for developing the mapped Risk-Targeted Maximum Considered Earthquake (MCER) spectral response, calculating S_{D1} , and evaluating C_s in accordance with Chapter 12 of ASCE 7-16.

In Table 3.4-1 below, we provide the 2022 CBC seismic parameters based on the United States Geological Survey’s (USGS’) Seismic Design Maps for your use. When using this table, considerations should be given to exceptions in Section 11.4.8 of ASCE 7-16, as described in this report.

TABLE 3.4-1: 2022 CBC Seismic Design Parameters, Latitude: 37.952783, Longitude: -121.704029

PARAMETER	VALUE
Site Class	D
Mapped MCE _R Spectral Response Acceleration at Short Periods, S _S (g)	1.36
Mapped MCE _R Spectral Response Acceleration at 1-second Period, S ₁ (g)	0.48
Site Coefficient, F _a	1
Site Coefficient, F _v	1.82*
MCE _R Spectral Response Acceleration at Short Periods, S _{MS} (g)	1.36
MCE _R Spectral Response Acceleration at 1-second Period, S _{M1} (g)	0.87*
Design Spectral Response Acceleration at Short Periods, S _{DS} (g)	0.90
Design Spectral Response Acceleration at 1-second Period, S _{D1} (g)	0.58*
Mapped MCE Geometric Mean (MCE _G) Peak Ground Acceleration, PGA (g)	0.56
Site Coefficient, F _{PGA}	1.1
MCE _G Peak Ground Acceleration adjusted for Site Class effects, PGA _M (g)	0.61
Long period transition-period, T _L (sec)	8

*The parameters above should only be used for calculation of T_s, determination of Seismic Design Category, and, when taking the exceptions under Items 1 and 2 of ASCE 7-16 Section 11.4.8. (Supplement Number 3 <https://ascelibrary.org/doi/epdf/10.1061/9780784414248.sup3>).

We recommend that we collaborate with the structural engineer of record to further evaluate the effects of taking the exception on the structural design and identify the need for performing a site-specific ground-motion hazard analysis. We can prepare a proposal for a site-specific ground-motion hazard analysis, if requested.

4.0 CONSTRUCTION MONITORING

Our experience and that of our profession clearly indicate that the risk of costly design, construction, and maintenance problems can be significantly lowered by retaining the design geotechnical engineering firm to:

1. Review the final grading and foundation plans and specifications prior to construction to evaluate whether our recommendations have been implemented, and to provide additional or modified recommendations, as needed. This also allows us to check if any changes have occurred in the nature, design, or location of the proposed improvements and provides the opportunity to prepare a written response with updated recommendations.
2. Perform construction monitoring to check the validity of the assumptions we made to prepare this report. Earthwork operations should be performed under the observation of our representative to check that the site is properly prepared, the selected fill materials are satisfactory, and that placement and compaction of the fills has been performed in accordance with our recommendations and the project specifications. Sufficient notification to us prior to earthwork is important.

If we are not retained to perform the services described above, then we are not responsible for any party’s interpretation of our report (and subsequent addenda, letters, and verbal discussions).

5.0 EARTHWORK RECOMMENDATIONS

The relative compaction and optimum moisture content of soil, rock, and aggregate base referred to in this report is based on the most recent ASTM D1557 test method. Compacted soil is not acceptable if it is unstable. It should exhibit only minimal flexing or pumping, as observed by an ENGEO representative.

The term “moisture condition” refers to adjusting the moisture content of the soil by either drying if too wet or adding water if too dry.

We define “structural areas” as any area sensitive to settlement of compacted soil. These areas include, but are not limited to building pads, sidewalks, pavement areas, and retaining walls.

5.1 GENERAL SITE CLEARING

Areas to be developed should be cleared of surface and subsurface deleterious materials, including the existing barn structure on the southeast corner of the property, any undocumented fill, buried utility and irrigation lines, debris, and designated trees, shrubs, and associated roots. Clean and backfill excavations extending below the planned finished site grades with suitable material compacted to the recommendations presented in Section 5.5.

Following clearing, surface vegetation should be mowed as close to the ground as possible and removed from the site. The remaining vegetation should then be thoroughly disked in the upper 12 inches of the site until approved by ENGEO.

5.2 UNDOCUMENTED FILL REMOVAL

Although no undocumented fill was encountered during our field exploration, as previously discussed, based on our review of historical aerial photos, an old creek channel that used to cross the property was previously backfilled. Undocumented fill may also be present in the vicinity of the existing structure on the southeastern corner of the property.

Remove any existing undocumented fill encountered during grading to competent native soil, as evaluated by ENGEO. We expect that the material can then be placed back as an engineered fill provided it meets the criteria in Section 5.4.

5.3 OVER-OPTIMUM SOIL MOISTURE CONDITIONS

The contractor should anticipate encountering excessively over-optimum (wet) soil moisture conditions during winter or spring grading, or during or following periods of rain. Wet soil can make proper compaction difficult or impossible. Wet soil conditions can be mitigated by:

1. Frequent spreading and mixing during warm dry weather;
2. Mixing with drier materials;
3. Mixing with a lime or cement product; or
4. Stabilizing with aggregate, geotextile stabilization fabric, or both.

Options 3 and 4 should be evaluated by ENGEO prior to implementation.

5.4 ACCEPTABLE FILL

On-site soil material is suitable as fill material provided it is processed to remove concentrations of organic material, debris, and particles greater than 6 inches in maximum dimension.

Imported fill materials should have a plasticity index less than the on-site material. Allow ENGEO to sample and test proposed imported fill materials at least 5 days prior to delivery to the site.

5.5 ENGINEERED FILL COMPACTION

5.5.1 Grading in Structural Areas

Perform subgrade compaction prior to fill placement, following cutting operations, and in areas left as follows.

- Scarify to a depth of 12 inches.
- Moisture condition to at least 4 percentage points over optimum.
- Compact the soil to a minimum of 90 percent of relative compaction. Compact the upper 12 inches of finish pavement subgrade to at least 92 percent relative compaction prior to aggregate base placement.

After the subgrade has been compacted, place and compact acceptable fill as follows.

- Spread fill in loose lifts that do not exceed 12 inches.
- Moisture condition to at least 4 percentage points over optimum.
- Compact the soil to a minimum of 90 percent of relative compaction. Compact the upper 12 inches of finish pavement subgrade to at least 92 percent relative compaction prior to aggregate base placement.

Compact the pavement Caltrans Class 2 Aggregate Base section to at least 95 percent relative compaction (ASTM D1557). Moisture condition aggregate base to or slightly above the optimum moisture content prior to compaction.

5.5.2 Underground Utility Backfill

Place and compact trench backfill as follows.

- Trench backfill should have a maximum particle size of 6 inches.
- Spread fill in loose lifts that do not exceed 12 inches.
- Moisture condition to at least 4 percentage points over optimum outside the trench.
- Compact the soil to a minimum of 90 percent of relative compaction. Compact the upper 12 inches of finish pavement subgrade to at least 92 percent relative compaction prior to aggregate base placement.

Where utility trenches cross underneath buildings, we recommend that a plug be placed within the trench backfill to help prevent the normally granular bedding materials from acting as a conduit for water to enter beneath the building. The plug should be constructed using a sand-cement slurry (minimum 28-day compressive strength of 500 psi) or relatively impermeable native soil for pipe bedding and backfill. We recommend that the plug extend for a distance of at least 3 feet in

each direction from the point where the utility enters the building perimeter. Jetting of backfill is not an acceptable means of compaction.

The contractor is responsible for conducting trenching and shoring in accordance with Cal/OSHA requirements. Project consultants involved in utility design should specify pipe-bedding materials.

5.6 SLOPES

5.6.1 Gradients

Construct final slope gradients to 3:1 (horizontal:vertical) or flatter. The contractor is responsible to construct temporary construction slopes in accordance with Cal/OSHA requirements.

5.7 SITE DRAINAGE

5.7.1 Surface Drainage

The project civil engineer is responsible for designing surface drainage improvements. With regard to geotechnical engineering issues, we recommend that finish grades be sloped away from buildings and pavements to the maximum extent practical to reduce the potentially damaging effects of expansive soil. As a minimum, we recommend the following.

1. Discharge roof downspouts into closed conduits and direct away from foundations to appropriate drainage devices.
2. Consider the use of rear lot surface drainage collection systems to reduce overland surface drainage from back to front of lot.
3. Do not allow water to pond near foundations, pavements, or exterior flatwork.

6.0 FOUNDATION RECOMMENDATIONS

We developed structural improvement recommendations using data obtained from our field exploration, laboratory test results, and engineering analysis.

6.1 POST-TENSIONED MAT FOUNDATIONS

Due to the presence of near-surface expansive soil, we recommend that the proposed residential structures be supported on post-tensioned (PT) concrete mat foundations founded on engineered fill or compacted native soil to mitigate potential impacts from the native highly expansive surficial soil.

We recommend that PT mats have a thickened edge at least 2 inches greater than the mat thickness. The thickened edge should be at least 12 inches wide. The structural engineer should determine the appropriate PT mat thickness using the geotechnical recommendations in this report; we defer to the professional judgment of the structural engineer on the necessary mat thickness. ENGEO should be retained to review the PT mat foundation design.

Design PT mats for an average allowable bearing pressure of 1,000 pounds per square foot (psf) for dead-plus-live loads, with maximum localized bearing pressures of 1,500 psf at column or wall loads. Allowable bearing pressures can be increased by one-third for all loads including wind or seismic. Design PT mats using the criteria presented in Table 6.1-1 below.

TABLE 6.1-1: Post-Tensioned Mat Design Recommendations

CONDITION	CENTER LIFT	EDGE LIFT
Edge Moisture Variation Distance, e_m (feet)	5.8	3.2
Differential Soil Movement, y_m (inches)	0.6	2.1

The above design criteria are based on the procedure presented by the Post-Tensioning Institute “Design of Post-Tensioned Slabs-on-Ground” Third Edition, including appropriate addenda (2004).

Underlay PT mats with a moisture reduction system, as recommended below. In addition, moisture condition the pad subgrade to a moisture content at least 4 percentage points above optimum prior to foundation construction. The depth of moisture conditioning should be a minimum of 12 inches. Moisture conditioning deeper than 12 inches may be necessary due to the time of year, drought conditions, adjacent slopes, open utility trenches, etc. The actual depth of moisture conditioning to achieve a moisture content of a minimum of 4 percentage points above the optimum moisture content should be determined by ENGEO just prior to foundation construction. ENGEO is not contracted to perform the moisture conditioning of the building pads prior to foundation construction; the firm that is contracted must determine and document the depth of moisture conditioning required to a moisture content at least 4 percentage points above optimum prior to foundation construction.

6.1.1 Slab Moisture Vapor Reduction

When buildings are constructed with concrete slab-on-grade, such as post-tensioned mats, water vapor from beneath the slab will migrate through the slab and into the building. This water vapor can be reduced but not stopped. Vapor transmission can negatively affect floor coverings and lead to increased moisture within a building. When water vapor migrating through the slab would be undesirable, we recommend the following to reduce, but not stop, water vapor transmission upward through the slab-on-grade.

Install a vapor retarder membrane directly beneath the slab. Seal the vapor retarder at all seams and pipe penetrations. Vapor retarders shall conform to Class A vapor retarder in accordance with ASTM E1745 “Standard Specification for Plastic Water Vapor Retarders used in Contact with Soil or Granular Fill under Concrete Slabs”.

6.2 EXTERIOR FLATWORK

Exterior flatwork includes items such as concrete sidewalks, steps, and outdoor courtyards exposed to foot traffic only. Provide a minimum section of 4 inches of concrete over 4 inches of aggregate base. Compact the aggregate base to at least 90 percent relative compaction (ASTM D1557) to help control moisture variations in the subgrade and place wire mesh or rebar within the middle third of the slab to help control the width and offset of cracks. Construct control and construction joints in accordance with current Portland Cement Association Guidelines. As previously discussed, the site is underlain by highly expansive soil. The subgrade soil for exterior flatwork should be saturated to a minimum of 4 percentage points above the optimum moisture content prior to concrete placement. The depth of saturation required will vary based on the site condition at the time the work is performed.

6.3 TRENCH BACKFILL

Backfill and compact all trenches below building slabs-on-grade and to 5 feet laterally beyond any edge in accordance with Section 5.

7.0 SOUNDWALL AND RETAINING WALLS

7.1 LATERAL SOIL PRESSURES

Proposed conventional retaining walls should be designed to resist lateral earth pressures from adjoining natural materials and/or backfill and from any surcharge loads. Provided that adequate drainage is included as recommended below, retaining walls not restrained at the top should be designed for active lateral loading conditions, while walls restrained at the top should be designed for at-rest lateral loading conditions. The recommended lateral equivalent fluid pressures for retaining wall design are presented below.

TABLE 7.1-1: Retaining Wall Design Parameters (Drained)

BACKFILL SLOPE CONDITION	ACTIVE PRESSURE (pcf)	AT-REST PRESSURE (pcf)
Level	40	60
4:1	50	70
3:1	60	80
2:1	65	85

In accordance with 2022 California Building Code requirements, foundation walls and retaining walls supporting more than 6 feet of backfill height are to be designed for dynamic seismic lateral earth pressures corresponding to design earthquake ground motions. We recommend a dynamic seismic lateral earth pressure corresponding to an equivalent fluid pressure of 32 pcf for a yielding wall design. When considering seismic earth pressures for retaining walls, the recommended seismic earth pressure increment should be added to the active earth pressures provided above.

Appropriate surcharge loads from buildings, hardscape, and vehicles should be incorporated when the surcharge loading is situated above a 1:1 (horizontal:vertical) line of projection extending up the rear base edge of the bottom of the footing. A uniform horizontal surcharge load of 50 percent of the vertical surcharge load should be assumed to act over the height of the wall.

If adequate drainage is not provided, we recommend that an additional equivalent fluid pressure of 40 pcf be added to the values recommended above for both restrained and unrestrained walls. Damp-proofing of the walls should be included in areas where wall moisture would be problematic.

Passive pressures acting on foundations may be assumed as 300 pounds per cubic foot (pcf) provided that the area in front of the retaining wall is level for a distance of at least 10 feet or three times the depth of foundation, whichever is greater. The friction factor for sliding resistance may be assumed as 0.3. The upper 2 feet of soil should be excluded from passive pressure computations unless it is confined by pavement or a concrete slab. Passive pressures should be reduced by ½ if used in combination with sliding friction.

7.2 RETAINING WALL DRAINAGE

Construct either graded rock drains or geosynthetic drainage composites behind the retaining walls to reduce hydrostatic lateral forces. For rock drain construction, we recommend two types of rock drain alternatives.

1. A minimum 12-inch-thick layer of Class 2 Permeable Filter Material (Caltrans Specification 68--1.025) placed directly behind the wall, or

2. A minimum 12-inch-thick layer of washed, crushed rock with 100 percent passing the ¾-inch sieve and less than 5 percent passing the No. 4 sieve. Envelop rock in a minimum 6-ounce, nonwoven geotextile filter fabric.

For both types of rock drains:

1. Place the rock drain directly behind the walls of the structure.
2. Extend rock drains from the wall base to within 12 inches of the top of the wall.
3. Place a minimum of 4-inch-diameter perforated pipe at the base of the wall, inside the rock drain and fabric, with perforations placed down.
4. Place pipe at a gradient at least 1 percent to direct water away from the wall by gravity to a drainage facility.

ENGEO should review and approve geosynthetic composite drainage systems prior to use.

7.3 BACKFILL

Backfill behind retaining walls should be placed and compacted in accordance with Earthwork Recommendations contained in this report. Use light compaction equipment within 5 feet of the wall face. If heavy compaction equipment is used, the walls should be temporarily braced to avoid excessive wall movement.

7.4 FOUNDATIONS

7.4.1 Footings

Sound and retaining walls may be supported on continuous footings as follows in Table 7.4.1-1 below.

TABLE 7.4.1-1: Minimum Footing Dimensions

FOOTING TYPE	*MINIMUM DEPTH (inches)	MINIMUM WIDTH (inches)
Continuous	24	12

*below lowest adjacent pad grade

Minimum footing depths shown above are taken from lowest adjacent pad grade. The cold joint between the exterior footing and slab-on-grade should be located at least 4 inches above adjacent exterior grade. Design foundations recommended above for a maximum allowable bearing pressure of 1,500 pounds per square foot (psf) for dead-plus-live loads. Increase this bearing capacity by one-third for the short-term effects of wind or seismic loading.

The maximum allowable bearing pressure is a net value; the weight of the footing may be neglected for design purposes. All footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1:1 (horizontal:vertical) plane projected upward from the bottom edge of the trench to the footing.

7.4.2 Cast-In-Place Drilled Piers

The following design criteria should be incorporated into site retaining walls and soundwalls supported on a drilled pier foundation system. Actual pier depths and spacing should be determined by the designer based on structural design considerations.

Maximum allowable skin friction: 250 pounds per square foot (psf). This value may be increased by one-third when considering seismic or wind loads. Starting at a depth of 2 feet below adjacent grade (assuming continuous level conditions).

Minimum pier spacing: 3 pier diameters, center-to-center.

An equivalent fluid weight of 300 pounds per cubic foot acting on two times the pier diameter may be used to evaluate passive resistance, starting at a depth of 1 foot below lowest adjacent pad grade for a level foreground condition. The passive pressure may be increased by one-third for transient loads such as wind or seismic.

8.0 PAVEMENT DESIGN

8.1 FLEXIBLE PAVEMENTS

Due to surface soil consisting of predominately expansive material across the site, it is our opinion that an R-value of 5 is applicable for design. Using estimated traffic indices for various pavement loading requirements, we developed the following recommended pavement sections using Topic 633 of the Caltrans Highway Design Manual (including the asphalt factor of safety), presented in the table below.

TABLE 8.1-1: Recommended Asphalt Concrete Pavement Sections

TRAFFIC INDEX	SECTION	
	ASPHALT CONCRETE (inches)	CLASS 2 AGGREGATE BASE (inches)
4	4*	8*
5	4*	8*
6	4	12
7	4	16

*Minimum pavement section component thickness as required by City of Brentwood.

The City of Brentwood requires a geotextile fabric over the subgrade soil prior to aggregate base placement, where the subgrade soil has an R-value of 10 or less. Pavement materials and construction should comply with the specifications and requirements of the Standard Specifications by the State of California Division of Highways, City of Brentwood.

The civil engineer should determine the appropriate traffic indices based on the estimated traffic loads and frequencies.

8.2 SUBGRADE AND AGGREGATE BASE COMPACTION

Compact finish subgrade and aggregate base in accordance with Section 5.5. Aggregate Base should meet the requirements for ¾-inch maximum Class 2 AB in accordance with Section 26-1.02B of the latest Caltrans Standard Specifications.

9.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

This report presents geotechnical recommendations for design of the improvements discussed in Section 1.3 for the McCoy Property project. If changes occur in the nature or design of the project, we should be allowed to review this report and provide additional recommendations, if any. It is the responsibility of the owner to transmit the information and recommendations of this report to the appropriate organizations or people involved in design of the project, including but not limited to developers, owners, buyers, architects, engineers, and designers. The conclusions and recommendations contained in this report are solely professional opinions and are valid for a period of no more than 2 years from the date of report issuance.

We strived to perform our professional services in accordance with generally accepted principles and practices currently employed in the area; there is no warranty, express or implied. There are risks of earth movement and property damages inherent in building on or with earth materials. We are unable to eliminate all risks; therefore, we are unable to guarantee or warrant the results of our services.

This report is based upon field and other conditions discovered at the time of report preparation. We developed this report with limited subsurface exploration data. We assumed that our subsurface exploration data are representative of the actual subsurface conditions across the site. Considering possible underground variability of soil and groundwater, additional costs may be required to complete the project. We recommend that the owner establish a contingency fund to cover such costs. If unexpected conditions are encountered, ENGEO must be notified immediately to review these conditions and provide additional and/or modified recommendations, as necessary.

Our services did not include excavation sloping or shoring, soil volume change factors, flood potential, or a geohazard exploration. In addition, our geotechnical exploration did not include work to determine the existence of possible hazardous materials. If any hazardous materials are encountered during construction, the proper regulatory officials must be notified immediately.

This document must not be subject to unauthorized reuse that is, reusing without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time.

Actual field or other conditions will necessitate clarifications, adjustments, modifications, or other changes to ENGEO's documents. Therefore, ENGEO must be engaged to prepare the necessary clarifications, adjustments, modifications, or other changes before construction activities commence or further activity proceeds. If ENGEO's scope of services does not include on-site construction observation, or if other persons or entities are retained to provide such services, ENGEO cannot be held responsible for any or all claims arising from or resulting from the performance of such services by other persons or entities, and from any or all claims arising from or resulting from clarifications, adjustments, modifications, discrepancies, or other changes necessary to reflect changed field or other conditions.

We determined the lines designating the interface between layers on the exploration log using visual observations. The transition between the materials may be abrupt or gradual. The exploration log contains information concerning samples recovered, indications of the presence of various materials such as clay, sand, silt, rock, existing fill, etc., and observations of groundwater encountered. The field log also contains our interpretation of the subsurface conditions between sample locations. Therefore, the log contains both factual and interpretative information. Our recommendations are based on the contents of the final log, which represents our interpretation of the field log.

SELECTED REFERENCES

- ASTM E1745-17, Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs, ASTM International, West Conshohocken, PA, 2017, www.astm.org.
- Bryant, W. and Hart, E., 2007, Special Publication 42, "Fault-Rupture Hazard Zones in California", Interim Revision 2007, California Department of Conservation.
- California Building Code, 2019.
- California Department of Conservation, <http://maps.conservation.ca.gov/cgs/fam>
- California Department of Transportation, 2017. Highway Design Manual.
- California Geologic Survey, 2008, Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California.
- City of Brentwood, <https://www.brentwoodca.gov/default.asp>
- Design of Post-Tensioned Slabs-on-ground third ed. 2004 Post-Tensioning Institute. Design of Post-Tensioned Slabs-on-Ground. 3rd ed. USA: First Printing, 2004.
- Division of Mines and Geology, 1997, Special Publication 117, Guidelines for Evaluation and Mitigating Seismic Hazards in California, Adopted March 13.
- Eaton J., 1986, Tectonic Environment of the 1892 Vacaville/Winters Earthquakes and the Potential of Large Earthquakes along the Western Edge of the Sacramento Valley: U.S. Geological Survey Open-File Report 86-370.
- Federal Emergency Management Agency, <https://msc.fema.gov/portal/home>
- United States Geologic Survey, <https://earthquake.usgs.gov/hazards/designmaps/>
- Wagner D.L., Bortugno E.J., and. McJunkin R.D, Compilation; 1991, Geologic Map of the San Francisco-San Jose Quadrangle, California 1:250,000.



FIGURES

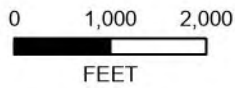
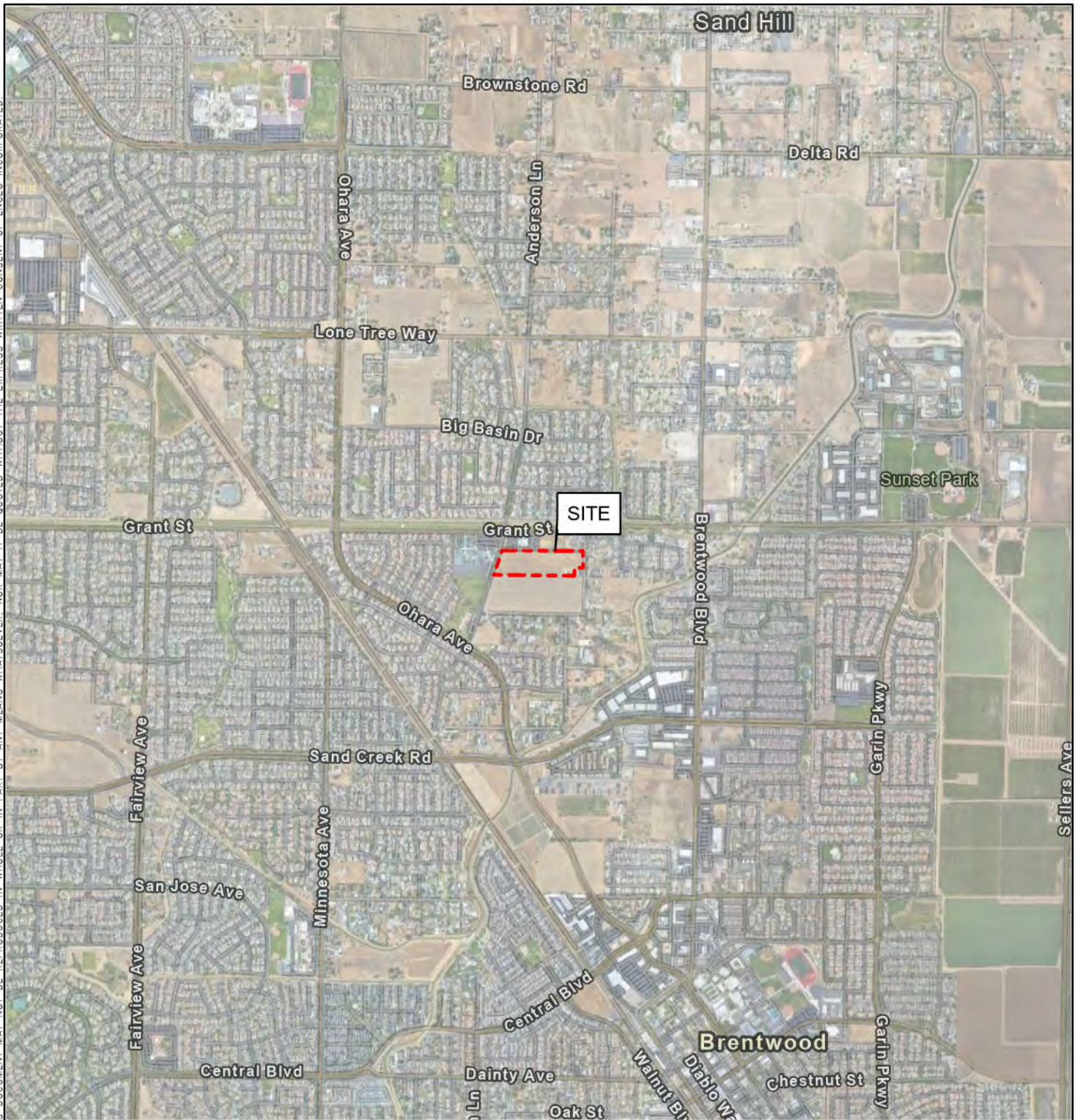
FIGURE 1: Vicinity Map

FIGURE 2: Site Plan

FIGURE 3: Regional Geologic Map

FIGURE 4: Regional Faulting and Seismicity Map

COPYRIGHT © 2023 BY ENGEО INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEО INCORPORATED



BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2022



VICINITY MAP
 MCCOY PROPERTY
 BRENTWOOD, CALIFORNIA

PROJECT NO. : 22989.000.001

SCALE: AS SHOWN

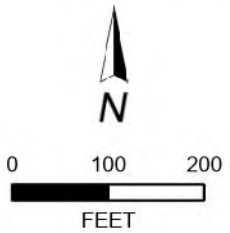
DRAWN BY: QRL

CHECKED BY: SPM

FIGURE NO.

1

COPYRIGHT © 2023 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER. NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

- ALL LOCATIONS ARE APPROXIMATE
- PROJECT SITE
- ⊕ BORING (ENGEO, 2023)
- UNDOCUMENTED FILL

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021 AND CBG, 2022

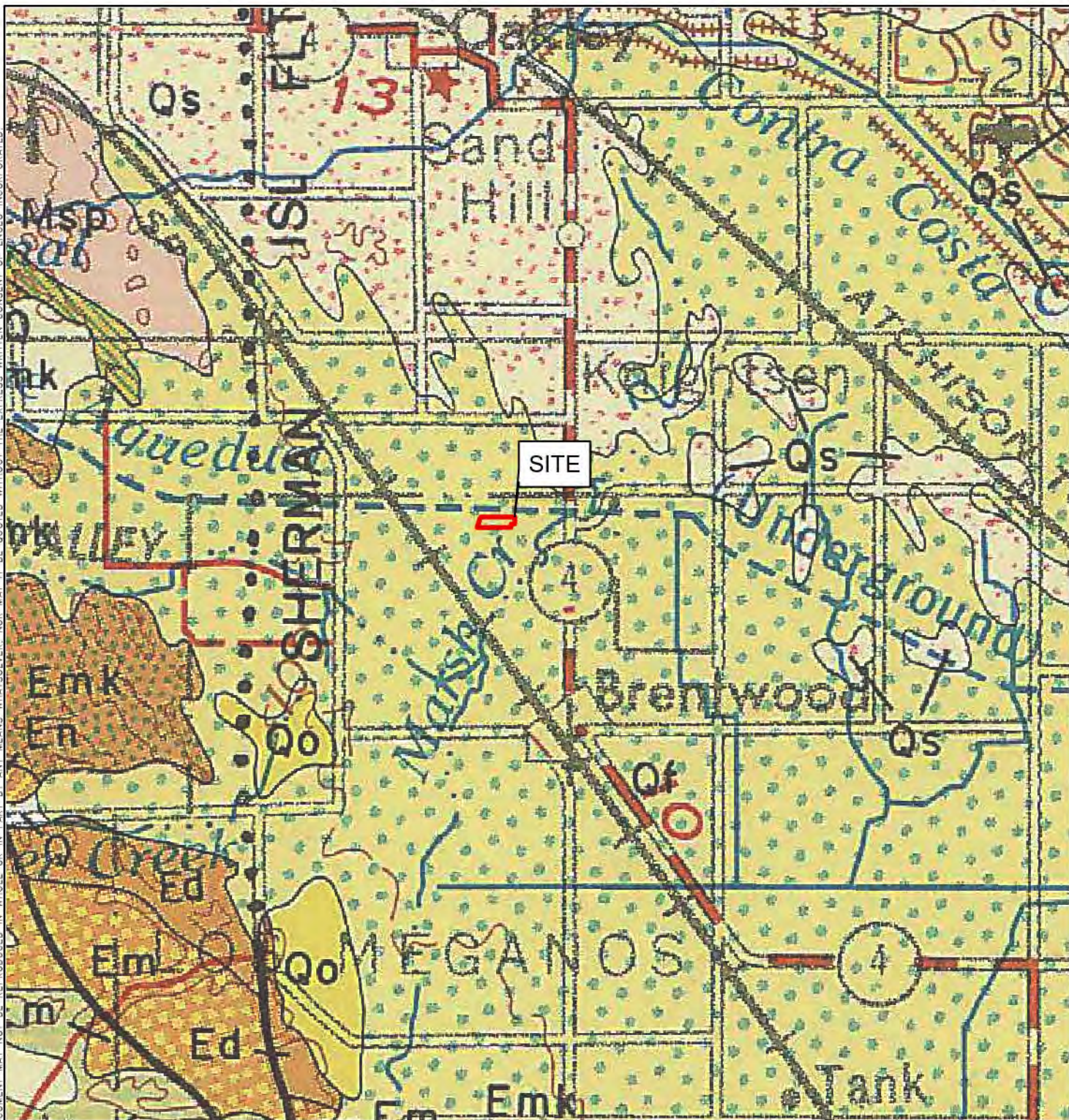


SITE PLAN
MCCOY PROPERTY
BRENTWOOD, CALIFORNIA

PROJECT NO. : 22989.000.001	
SCALE: AS SHOWN	
DRAWN BY: QRL	CHECKED BY: SPM

FIGURE NO.
2

COPYRIGHT © 2003 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- | | |
|------------------------------|-------------------------------|
| Qf ARTIFICIAL FILL | En NORTONVILLE SHALE |
| Qs DUNE SAND | Ed DOMENGINE SANDSTONE |
| Qo OLDER ALLUVIUM | Em MEGANOS FORMATION |
| Msp SAN PABLO GROUP | |
| Emk MARKLEY SANDSTONE | |

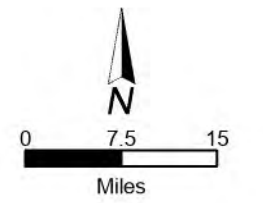
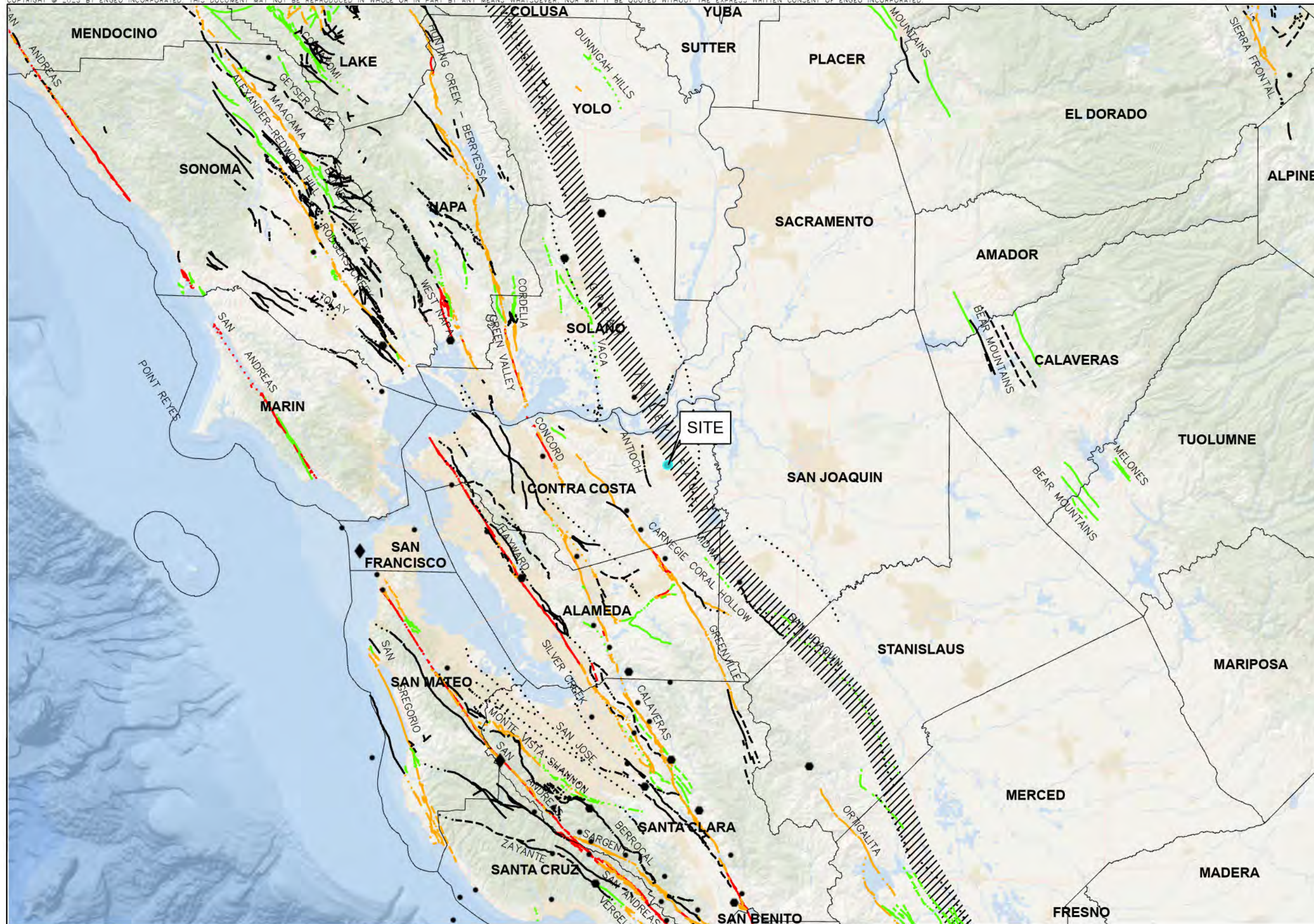
BASEMAP SOURCE: WAGNER, 1991



REGIONAL GEOLOGIC MAP
MCCOY PROPERTY
BRENTWOOD, CALIFORNIA

PROJECT NO. : 22989.000.001
SCALE: AS SHOWN
DRAWN BY: LL CHECKED BY: SPM

FIGURE NO.
3



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

EARTHQUAKE

- ◆ MAGNITUDE 7+
- MAGNITUDE 6-7
- MAGNITUDE 5-6

QUATERNARY FAULTS 2020

BASED ON TIME OF MOST RECENT SURFACE DEFORMATION

- HISTORICAL (<150 YEARS), WELL CONSTRAINED LOCATION
- - - HISTORICAL (<150 YEARS), MODERATELY CONSTRAINED LOCATION
- HISTORICAL (<150 YEARS), INFERRED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), WELL CONSTRAINED LOCATION
- - - LATEST QUATERNARY (<15,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), INFERRED LOCATION
- LATE QUATERNARY (<130,000 YEARS), WELL CONSTRAINED LOCATION
- - - LATE QUATERNARY (<130,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATE QUATERNARY (<130,000 YEARS), INFERRED LOCATION
- UNDIFFERENTIATED QUATERNARY (<1.6 MILLION YEARS), WELL CONSTRAINED LOCATION
- - - UNDIFFERENTIATED QUATERNARY (<1.6 MILLION YEARS), MODERATELY CONSTRAINED LOCATION
- UNDIFFERENTIATED QUATERNARY (<1.6 MILLION YEARS), INFERRED LOCATION
- ||||| GREAT VALLEY FAULT ZONE

BASE MAP SOURCE
 ESRI, GEBCO, DELORME, NATURALVUE
 COLOR HILLSHADE IMAGE BASED ON THE NATIONAL ELEVATION DATA SET (NED) AT 30 METER RESOLUTION
 U.S.G.S. QUATERNARY FAULT DATABASE, 2020
 U.S.G.S. HISTORIC EARTHQUAKE DATABASE (1800-PRESENT)
 U.S.G.S OPEN-FILE REPORT 96-705



REGIONAL FAULTING AND SEISMICITY MAP
 MCCOY PROPERTY
 BRENTWOOD, CALIFORNIA

PROJECT NO. : 22989.000.001
 SCALE: AS SHOWN
 DRAWN BY: SPPE CHECKED BY: SPM












FIGURE NO.
4



APPENDIX A

KEY TO BORING LOGS EXPLORATION LOGS

KEY TO BORING LOGS

MAJOR TYPES		DESCRIPTION	
COARSE-GRAINED SOILS MORE THAN HALF OF MAT'L LARGER THAN #200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	CLEAN GRAVELS WITH LESS THAN 5% FINES	 GW - Well graded gravels or gravel-sand mixtures GP - Poorly graded gravels or gravel-sand mixtures
		GRAVELS WITH OVER 12 % FINES	 GM - Silty gravels, gravel-sand and silt mixtures GC - Clayey gravels, gravel-sand and clay mixtures
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 5% FINES	 SW - Well graded sands, or gravelly sand mixtures SP - Poorly graded sands or gravelly sand mixtures
		SANDS WITH OVER 12 % FINES	 SM - Silty sand, sand-silt mixtures SC - Clayey sand, sand-clay mixtures
FINE-GRAINED SOILS MORE THAN HALF OF MAT'L SMALLER THAN #200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50 % OR LESS		 ML - Inorganic silt with low to medium plasticity  CL - Inorganic clay with low to medium plasticity  OL - Low plasticity organic silts and clays
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50 %		 MH - Elastic silt with high plasticity  CH - Fat clay with high plasticity  OH - Highly plastic organic silts and clays
	HIGHLY ORGANIC SOILS		 PT - Peat and other highly organic soils

For fine-grained soils with 15 to 29% retained on the #200 sieve, the words "with sand" or "with gravel" (whichever is predominant) are added to the group name.

For fine-grained soil with >30% retained on the #200 sieve, the words "sandy" or "gravelly" (whichever is predominant) are added to the group name.

GRAIN SIZES

U.S. STANDARD SERIES SIEVE SIZE				CLEAR SQUARE SIEVE OPENINGS				
	200	40	10	4	3/4 "	3"	12"	
SILTS AND CLAYS	SAND				GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE			

RELATIVE DENSITY

<u>SANDS AND GRAVELS</u>	BLOWS/FOOT (S.P.T.)
VERY LOOSE	0-4
LOOSE	4-10
MEDIUM DENSE	10-30
DENSE	30-50
VERY DENSE	OVER 50

CONSISTENCY

<u>SILTS AND CLAYS</u>	<u>STRENGTH*</u>
VERY SOFT	0-1/4
SOFT	1/4-1/2
MEDIUM STIFF	1/2-1
STIFF	1-2
VERY STIFF	2-4
HARD	OVER 4



MOISTURE CONDITION

DRY	Dusty, dry to touch
MOIST	Damp but no visible water
WET	Visible freewater









LINE TYPES

—————	Solid - Layer Break
-----	Dashed - Gradational or approximate layer break

GROUNDWATER SYMBOLS

	Groundwater level during drilling
	Stabilized groundwater level

SAMPLER SYMBOLS

	Modified California (3" O.D.) sampler
	California (2.5" O.D.) sampler
	S.P.T. - Split spoon sampler
	Shelby Tube
	Dames and Moore Piston
	Continuous Core
	Bag Samples
	Grab Samples
NR	No Recovery

(S.P.T.) Number of blows of 140 lb. hammer falling 30" to drive a 2-inch O.D. (1-3/8 inch I.D.) sampler

* Unconfined compressive strength in tons/sq. ft., asterisk on log means determined by pocket penetrometer



LOG OF BORING 1-B01

LATITUDE: 37.953003

LONGITUDE: -121.702556

Geotechnical Exploration
1901 Lone Oak Road
Brentwood, CA
22989.000.001

DATE DRILLED: 5/11/2023
HOLE DEPTH: Approx. 22½ ft.
HOLE DIAMETER: 4 ½ in.
SURF ELEV (WGS84): Approx. 68 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits			Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
							Liquid Limit	Plastic Limit	Plasticity Index						
41			FAT CLAY (CH), dark brown, very stiff, moist, high plasticity, contains fine-grained sand			41							3.0*	PP	
17						17			95						
5			LEAN CLAY (CL), yellowish brown, hard, moist to wet, medium plasticity, <15% fine-grained sand			55							4.5*	PP	
60															
10			LEAN CLAY WITH SAND (CL), yellowish brown, hard, wet, medium plasticity, 15-25% fine-grained sand, contains carbonates			68							>4.5*	PP	
55															
15			SANDY LEAN CLAY (CL), yellowish brown, hard, wet, low to medium plasticity, 30-40% fine-grained sand			50			84				4*	PP	
50			LEAN CLAY WITH SAND (CL), hard, wet, medium plasticity, fine-grained sand, 15-25% fine-grained sand			50									
20			LEAN CLAY (CL), yellowish brown, very stiff, wet, medium plasticity, <10% fine-grained sand			58									
			Bottom of boring at approximately 22 ½ feet. Groundwater encountered at approximately 8 feet at the time of drilling.												

LOG - GEOTECHNICAL_SU+QU_W/ELEV 22989000001_PH002_1-B01-1-B05_2023-05-11.GPJ ENGEO INC.GDT 6/2/23



LOG OF BORING 1-B02

LATITUDE: 37.953048

LONGITUDE: -121.704225

Geotechnical Exploration
1901 Lone Oak Road
Brentwood, CA
22989.000.001

DATE DRILLED: 5/11/2023
HOLE DEPTH: Approx. 16½ ft.
HOLE DIAMETER: 4 ½ in.
SURF ELEV (WGS84): Approx. 70 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits			Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
							Liquid Limit	Plastic Limit	Plasticity Index						
			LEAN CLAY (CH), dark brown, hard, moist, high plasticity, <10% fine-grained sand, rootlets present			39	64	23	41	21	99	2.69	4.5*	UC PP	
5	65		LEAN CLAY WITH SAND (CL), yellowish brown, very stiff to hard, moist, medium plasticity, 15-25% fine-grained sand			38									
10	60		LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, <10% fine-grained sand, contains carbonates			53						4*		PP	
15	55					88						3.75*	>4.5*	PP PP	
			Bottom of boring at approximately 16 1/2 feet. Groundwater not encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 22989000001_PH002_1-B01-1-B05_2023-05-11.GPJ_ENGEO INC.GDT 6/2/23



LOG OF BORING 1-B03

LATITUDE: 37.952695

LONGITUDE: -121.704718

Geotechnical Exploration
1901 Lone Oak Road
Brentwood, CA
22989.000.001

DATE DRILLED: 5/11/2023
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4 1/2 in.
SURF ELEV (WGS84): Approx. 71 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits			Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
							Liquid Limit	Plastic Limit	Plasticity Index						
70			FAT CLAY (CL), dark brown, hard, moist, high plasticity, <10% fine-grained sand, rootlets present			75				20	101		>4.5*	PP	
			Grades to contain carbonates			27							>4.5*	PP	
5			LEAN CLAY (CL), yellowish brown, very stiff, moist, medium plasticity, <10% fine-grained sand			54									
65			LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15-25% fine-grained sand			51				20	104		4.25*	PP	
10			LEAN CLAY (CL), yellowish brown, hard, moist to wet, medium plasticity, fine-grained sand			76			85	18	113		>4.5* 4.5*	PP PP	
60			Grades to contain carbonates			65				21	105		3*	PP	
15						57									
55															
20			Bottom of boring at approximately 20 feet. Groundwater encountered at approximately 14 feet at the time of drilling.												

LOG - GEOTECHNICAL_SU+QU_W/ELEV_22989000001_PH002_1-B01-1-B05_2023-05-11.GPJ ENGEO INC.GDT 6/2/23



LOG OF BORING 1-B04

LATITUDE: 37.952695

LONGITUDE: -121.703408

Geotechnical Exploration
1901 Lone Oak Road
Brentwood, CA
22989.000.001

DATE DRILLED: 5/11/2023
HOLE DEPTH: Approx. 15 ft.
HOLE DIAMETER: 4 ½ in.
SURF ELEV (WGS84): Approx. 69 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits			Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
							Liquid Limit	Plastic Limit	Plasticity Index						
40			FAT CLAY (CH), dark brown, hard, moist, high plasticity, <15% fine-grained sand, rootlets present			40				20	103		3.8	UC	
22	65					22	58	22	36	91					
48	5		LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, <10% fine-grained sand			48							4*	PP	
84	60					84							>4.5*	PP	
	10												>4.5*	PP	
68	55		LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15-25% fine-grained sand, contains carbonates			68							4.5*	PP	
	15												4.5*	PP	
			Bottom of boring at approximately 15 feet. Groundwater not encountered at the time of drilling.												

LOG - GEOTECHNICAL_SU+QU_W/ELEV 22989000001_PH002_1-B01-1-B05_2023-05-11.GPJ ENGEO INC.GDT 6/2/23



LOG OF BORING 1-B05

LATITUDE: 37.952785

LONGITUDE: -121.705035

Geotechnical Exploration
1901 Lone Oak Road
Brentwood, CA
22989.000.001

DATE DRILLED: 5/11/2023
HOLE DEPTH: Approx. 25 ft.
HOLE DIAMETER: 4 1/2 in.
SURF ELEV (WGS84): Approx. 71 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits			Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
							Liquid Limit	Plastic Limit	Plasticity Index						
70			FAT CLAY (CH), brown, hard, moist, high plasticity, contains fine-grained sand			48	74	24	50	92		3*	4.25*	PP PP	
5			LEAN CLAY (CL), yellowish brown, stiff to very stiff, moist to wet, medium plasticity, <15% fine-grained sand, contains silt fines			23									
65						16					24	99	1341	UU	
10						67									
60			Grades to contain carbonates			76						4*	3.25*	PP PP	
15															
55			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff, wet, medium plasticity, 15-25% fine-grained sand, contains mica			54									
20															

LOG - GEOTECHNICAL_SU+QU_W/ELEV_22989000001_PH002_1-B01-1-B05_2023-05-11.GPJ ENGEO INC.GDT 6/2/23



LOG OF BORING 1-B05

LATITUDE: 37.952785

LONGITUDE: -121.705035

Geotechnical Exploration
1901 Lone Oak Road
Brentwood, CA
22989.000.001

DATE DRILLED: 5/11/2023
HOLE DEPTH: Approx. 25 ft.
HOLE DIAMETER: 4 ½ in.
SURF ELEV (WGS84): Approx. 71 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits			Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
							Liquid Limit	Plastic Limit	Plasticity Index						
50			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff, wet, medium plasticity, 15-25% fine-grained sand, contains mica												
25			Bottom of boring at approximately 25 feet. Groundwater encountered at approximately 12 ½ feet at the time of drilling.			54						3.5*			PP
												3.5*			PP

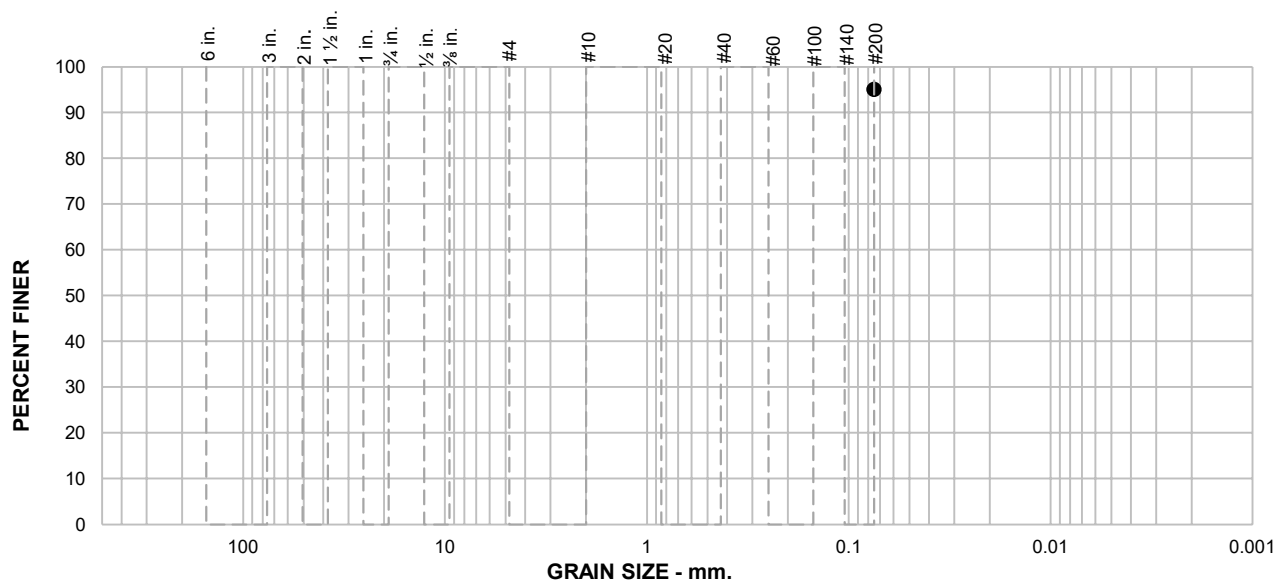


APPENDIX B

LABORATORY TEST DATA

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B01 @ 3'

DEPTH (ft): 3

LOCATION: 1-B01

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
							95.1
SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)	SOIL DESCRIPTION			
#200	95.1			See exploration logs			
ATTERBERG LIMITS							
PL =		LL =		PI =			
COEFFICIENTS							
D ₉₀ =		D ₈₅ =		D ₆₀ =			
D ₅₀ =		D ₃₀ =		D ₁₅ =			
D ₁₀ =		C _u =		C _c =			
CLASSIFICATION							
USCS =							
REMARKS							
Soak time = 180 min Dry sample weight = 410.2 g Largest particle size < No. 4 Sieve							

* (no specification provided)

CLIENT: Shea Homes - Northern California



PROJECT NAME: 1901 Lone Oak Road

PROJECT NO: 22989.000.001 PH002

PROJECT LOCATION: Brentwood, CA

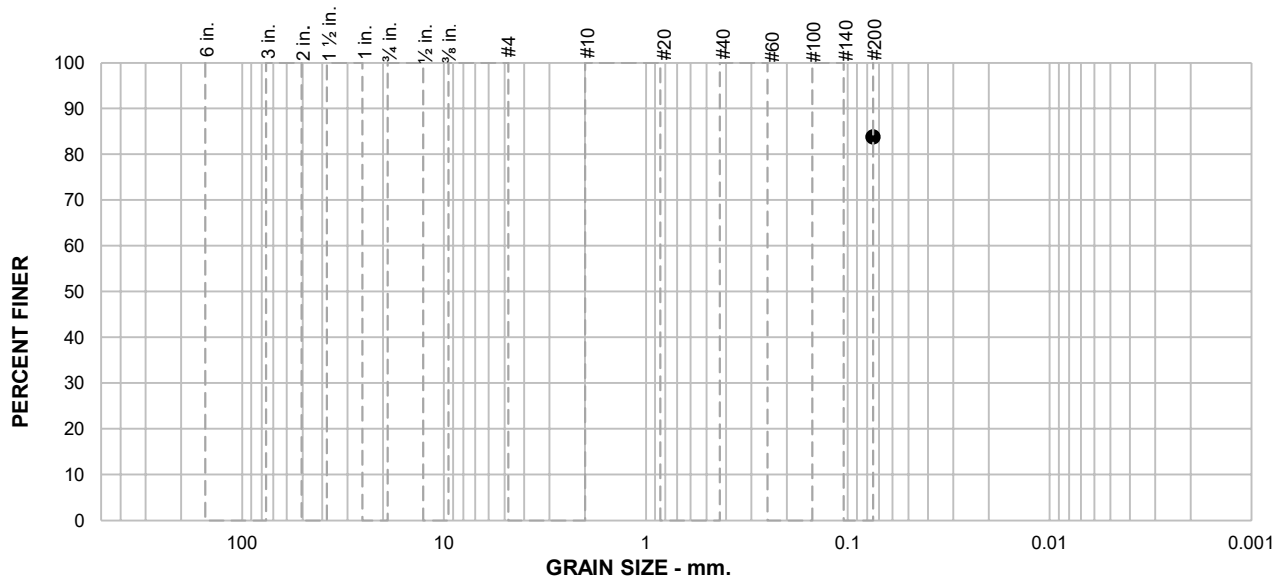
REPORT DATE: 5/22/2023

TESTED BY: V. Nunez

REVIEWED BY: D. Bryant

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B01 @ 15.5'
DEPTH (ft): 15.5
LOCATION: 1-B01

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
							84
SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)	SOIL DESCRIPTION			
#200	84			See exploration logs			
ATTERBERG LIMITS							
PL =		LL =		PI =			
COEFFICIENTS							
D ₉₀ =		D ₈₅ =		D ₆₀ =			
D ₅₀ =		D ₃₀ =		D ₁₅ =			
D ₁₀ =		C _u =		C _c =			
CLASSIFICATION							
USCS =							
REMARKS							
Soak time = 180 min Dry sample weight = 708.4 g Largest particle size ≥ No. 4 Sieve							

* (no specification provided)

CLIENT: Shea Homes - Northern California



PROJECT NAME: 1901 Lone Oak Road

PROJECT NO: 22989.000.001 PH002

PROJECT LOCATION: Brentwood, CA

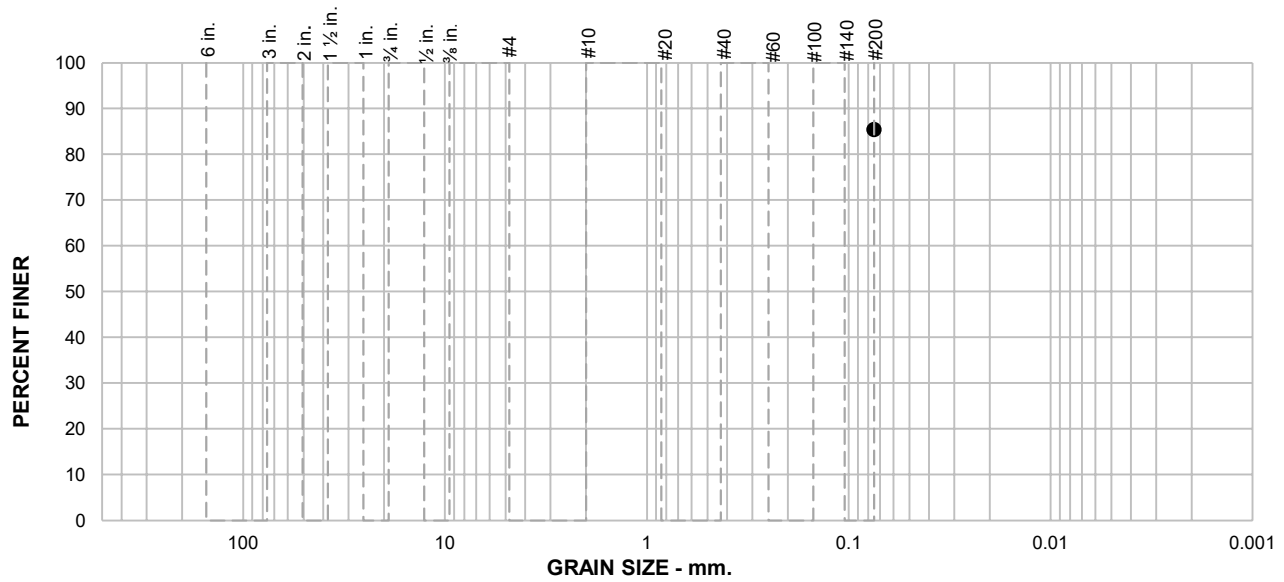
REPORT DATE: 5/22/2023

TESTED BY: V. Nunez

REVIEWED BY: D. Bryant

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B03 @ 12'
DEPTH (ft): 12
LOCATION: 1-B03

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
							85.4
SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)	SOIL DESCRIPTION			
#200	85.4			See exploration logs			
ATTERBERG LIMITS							
PL =		LL =		PI =			
COEFFICIENTS							
D ₉₀ =		D ₈₅ =		D ₆₀ =			
D ₅₀ =		D ₃₀ =		D ₁₅ =			
D ₁₀ =		C _u =		C _c =			
CLASSIFICATION							
USCS =							
REMARKS							
Soak time = 180 min Dry sample weight = 387.8 g Largest particle size < No. 4 Sieve							

* (no specification provided)

CLIENT: Shea Homes - Northern California



PROJECT NAME: 1901 Lone Oak Road

PROJECT NO: 22989.000.001 PH002

PROJECT LOCATION: Brentwood, CA

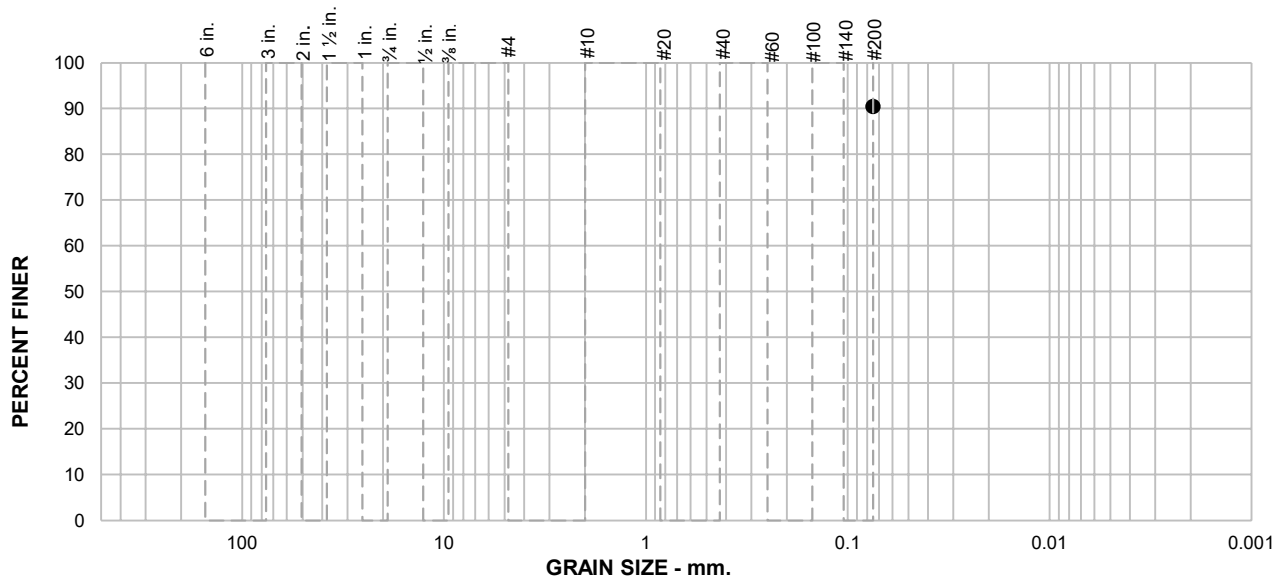
REPORT DATE: 5/22/2023

TESTED BY: V. Nunez

REVIEWED BY: D. Bryant

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B04 @ 3'
DEPTH (ft): 3
LOCATION: 1-B04

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
							90.5
SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)	SOIL DESCRIPTION			
#200	90.5			See exploration logs			
ATTERBERG LIMITS							
PL = 22		LL = 58		PI = 36			
COEFFICIENTS							
D ₉₀ =		D ₈₅ =		D ₆₀ =			
D ₅₀ =		D ₃₀ =		D ₁₅ =			
D ₁₀ =		C _u =		C _c =			
CLASSIFICATION							
USCS = CH							
REMARKS							
PI: ASTM D4318, Wet Method Soak time = 180 min Dry sample weight = 266.5 g Largest particle size < No. 4 Sieve							

* (no specification provided)

CLIENT: Shea Homes - Northern California



PROJECT NAME: 1901 Lone Oak Road

PROJECT NO: 22989.000.001 PH002

PROJECT LOCATION: Brentwood, CA

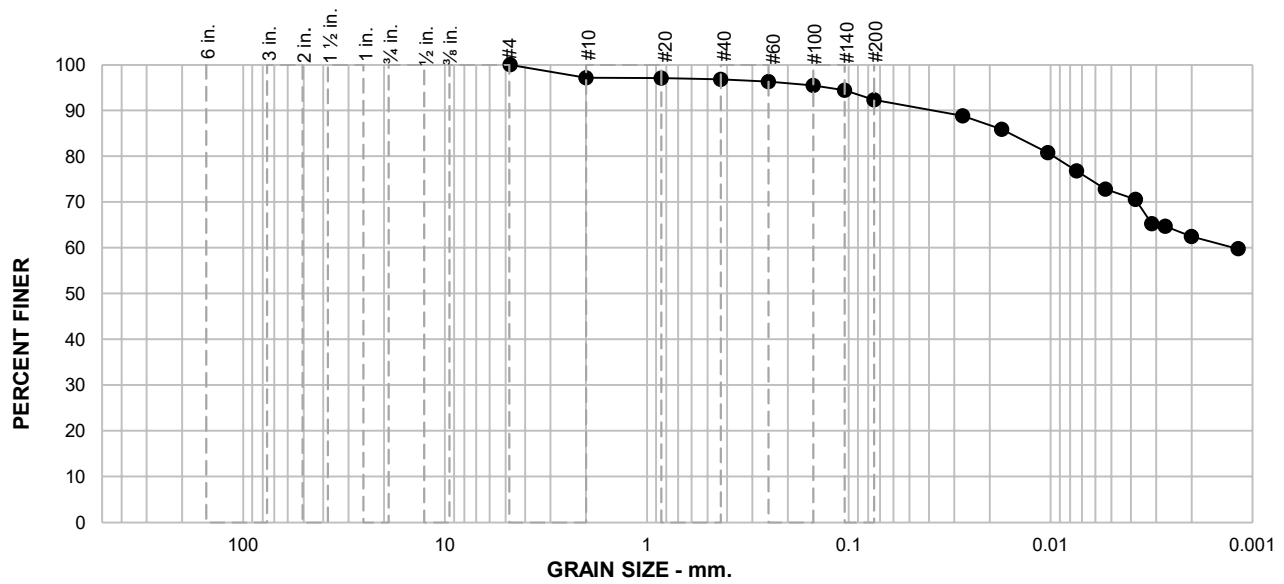
REPORT DATE: 5/22/2023

TESTED BY: V. Nunez

REVIEWED BY: D. Bryant

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D422



SAMPLE ID: 1-B05 @ 1.5'
DEPTH (ft): 1.5
LOCATION: 1-B05

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
			2.8	0.4	4.5	29.8	62.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)	SOIL DESCRIPTION
				See exploration logs
#4	100.0			
#10	97.2			
#20	97.1			
#40	96.8			
#60	96.3			
#100	95.5			
#140	94.4			
#200	92.3			
0.0273 mm.	88.8			
0.0175 mm.	85.9			
0.0103 mm.	80.8			
0.0075 mm.	76.8			
0.0054 mm.	72.8			
0.0038 mm.	70.5			
0.0032 mm.	65.3			
0.0027 mm.	64.7			
0.0020 mm.	62.5			
0.0012 mm.	59.8			

ATTERBERG LIMITS		
PL = 24	LL = 74	PI = 50

COEFFICIENTS		
D ₉₀ = 0.0386 mm	D ₈₅ = 0.0160 mm	D ₆₀ = 0.0012 mm
D ₅₀ =	D ₃₀ =	D ₁₅ =
D ₁₀ =	C _u =	C _c =

CLASSIFICATION	
USCS = CH	

REMARKS	
Silt/clay division of 0.002mm used	
PI: ASTM D4318, Wet Method	
USCS: ASTM D2488	

* (no specification provided)

CLIENT: Shea Homes - Northern California



PROJECT NAME: 1901 Lone Oak Road

PROJECT NO: 22989.000.001 PH002

PROJECT LOCATION: Brentwood, CA

REPORT DATE: 5/22/2023

TESTED BY: V. Nunez

REVIEWED BY: D. Bryant

MOISTURE-DENSITY DETERMINATION REPORT
ASTM D7263

SAMPLE ID	1-B03	1-B03	1-B03	1-B03				
DEPTH (ft.)	2	8.5	12	14.5				
METHOD A OR B	B	B	B	B				
MOISTURE CONTENT (%)	20.0	20.1	18.0	20.6				
DRY DENSITY (pcf)	100.5	104.0	113.3	104.7				

SAMPLE ID								
DEPTH (ft.)								
METHOD A OR B								
MOISTURE CONTENT (%)								
DRY DENSITY (pcf)								



CLIENT: Shea Homes - Northern California

PROJECT NAME: 1901 Lone Oak Road

PROJECT NO: 22989.000.001 PH002

PROJECT LOCATION: Brentwood, CA

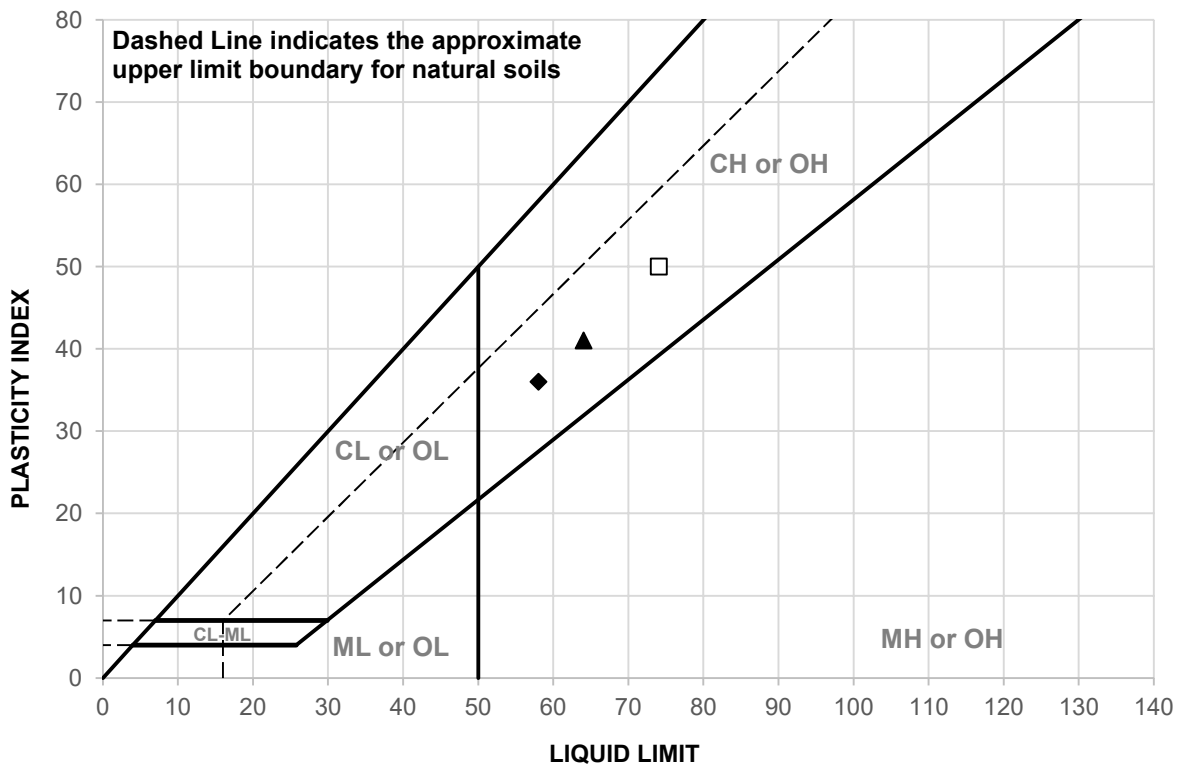
REPORT DATE: 5/22/2023

TESTED BY: V. Nunez

REVIEWED BY: K. Lecce

LIQUID AND PLASTIC LIMITS TEST REPORT

ASTM D4318



SAMPLE ID	DEPTH (ft)	MATERIAL DESCRIPTION	LL	PL	PI
▲ 1-B02 @ 2	2	See exploration logs	64	23	41
◆ 1-B04 @ 3	3	See exploration logs	58	22	36
□ 1-B05 @ 1.5	1.5	See exploration logs	74	24	50

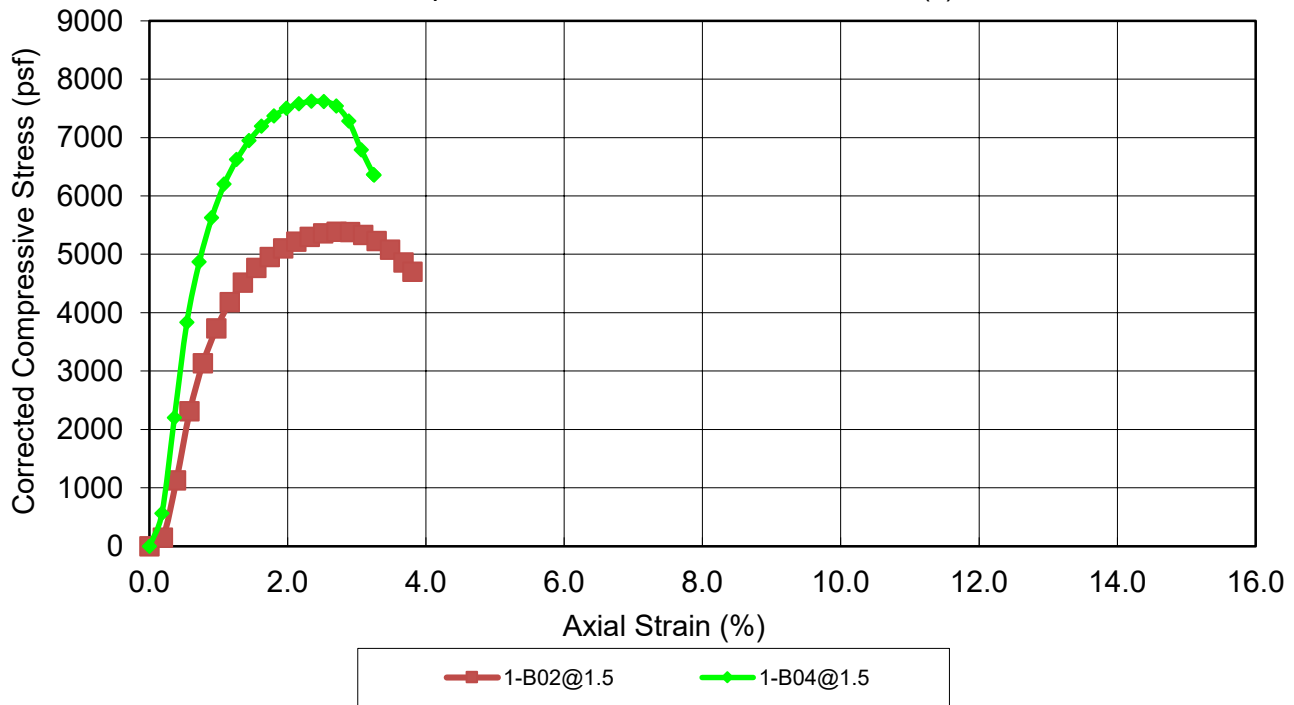
SAMPLE ID	TEST METHOD	REMARKS
▲ 1-B02 @ 2	PI: ASTM D4318, Wet Method	
◆ 1-B04 @ 3	PI: ASTM D4318, Wet Method	
□ 1-B05 @ 1.5	PI: ASTM D4318, Wet Method	



CLIENT: Shea Homes - Northern California
PROJECT NAME: 1901 Lone Oak Road
PROJECT NO: 22989.000.001 PH002
PROJECT LOCATION: Brentwood, CA
REPORT DATE: 5/22/2023
TESTED BY: V. Nunez
REVIEWED BY: D. Bryant

UNCONFINED COMPRESSION TEST REPORT (ASTM D2166)

Compressive Stress vs. Axial Strain Curve(s)



BEFORE TEST	SPECIMEN 1-B02@1.5	SPECIMEN 1-B04@1.5
Test Moisture Content (%)	21.32	20.41
Dry Density (pcf)	98.5	103.5
Saturation (%)	80.0	86.7
Void Ratio	0.72	0.64
Diameter (in)	2.390	2.380
Height (in)	5.170	5.550
Height-To-Diameter Ratio	2.16	2.33
TEST DATA		
Unconfined Compressive Strength (psf)	5384	7620
Undrained Shear Strength (psf)	2692.01	3810.14
Strain Rate (in/min)	0.050	0.050
Specific Gravity (ASSUMED)	2.720	2.720
Strain at Failure(%)	2.71	2.34
Test Remarks		
SPECIMEN	DESCRIPTION	
1-B02@1.5	See exploration logs	
1-B04@1.5	See exploration logs	

PROJECT NAME: 1901 Lone Oak Road

Test Date: 5/19/2023

PROJECT NO: 22989.000.001 PH002

Tested By: V. Nunez

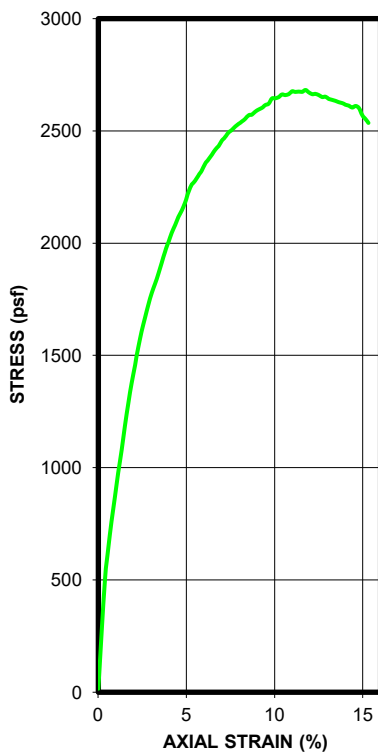
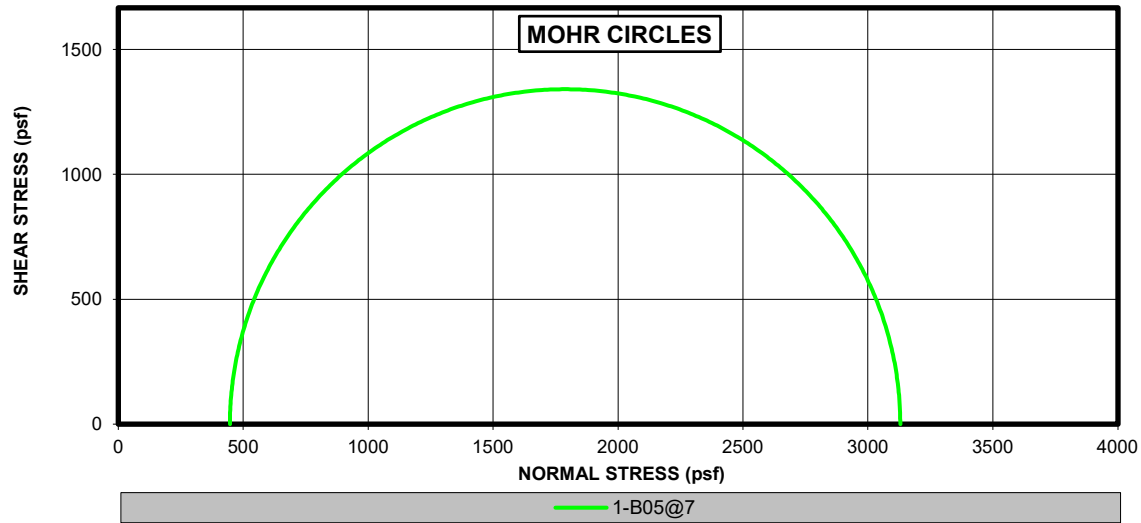
CLIENT: Shea Homes - Northern California

Reviewed By: D. Bryant

LOCATION: Brentwood, CA



ISOTROPIC UNCONSOLIDATED UNDRAINED TRIAXIAL REPORT ASTM D2850

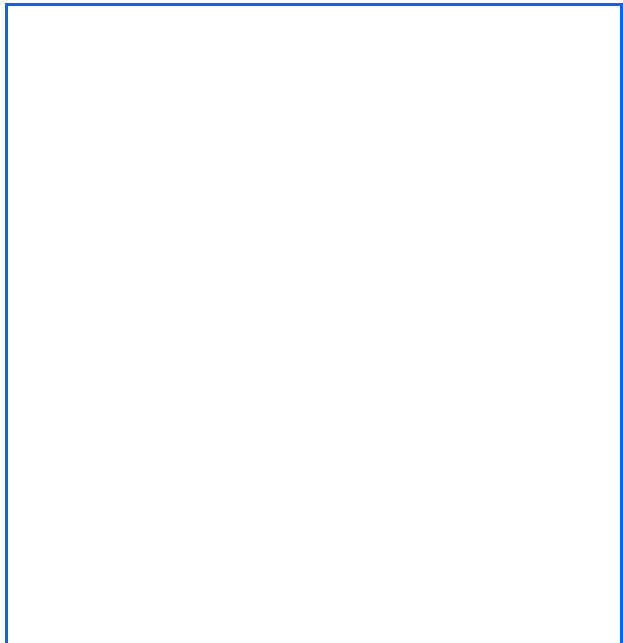
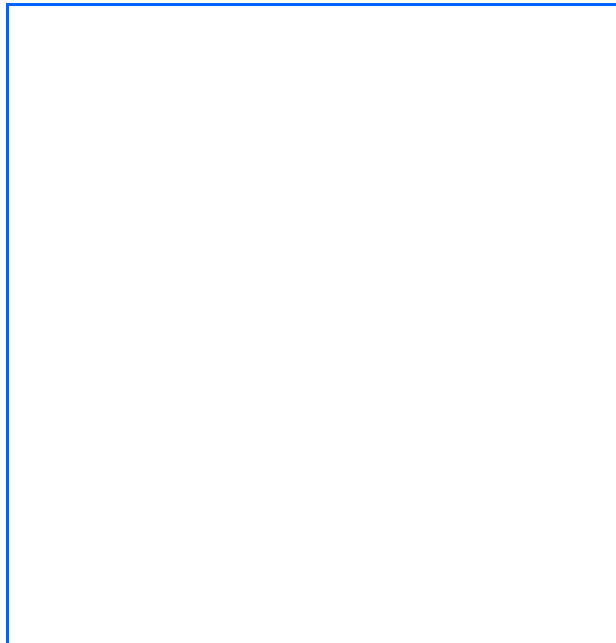
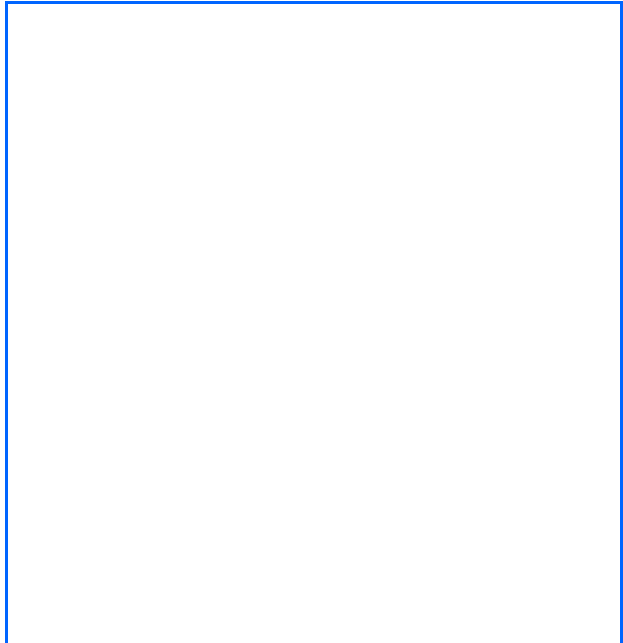
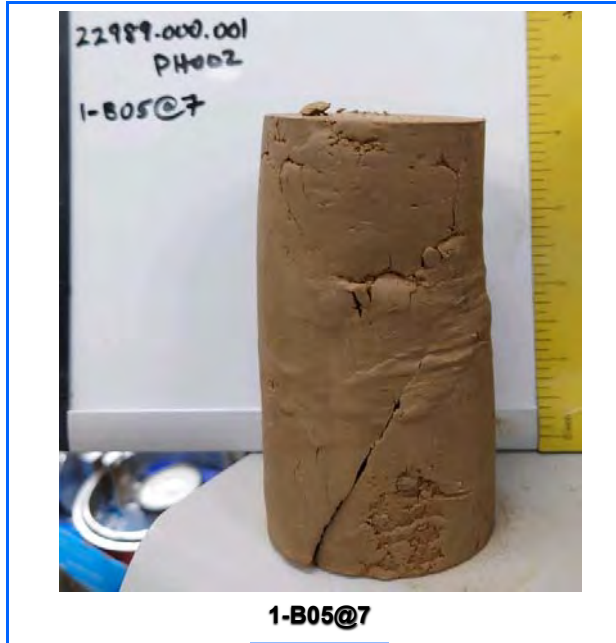


SPECIMEN				
INITIAL PARAMETERS	1-B05@7			
MOISTURE (%)	24.41			
DRY DENSITY (PCF)	98.80			
SATURATION (%)	92.49			
VOID RATIO	0.718			
DIAMETER (IN.)	2.380			
HEIGHT (IN.)	5.280			
DIAMETER-TO-HEIGHT RATIO	2.218			
LIQUID LIMIT (ASTM D4318)				
PLASTIC LIMIT (ASTM D4318)				
SPECIFIC GRAVITY (ASTM D854)	2.720			
FINAL PARAMETERS	1-B05@7			
MOISTURE (%)	24.41			
SATURATION (%)	92.49			
STRAIN RATE (%/MIN.)	0.95			
PEAK DEVIATOR STRESS (PSF)	2682.6			
AXIAL STRAIN AT FAILURE (%)	11.743			
CELL PRESSURE				
CELL PRESSURE (PSF)	446.4			
BACK PRESSURE (PSF)	n/a			
PRINCIPLE STRESSES AT FAILURE				
σ_1 (PSF)	3129.0			
σ_3 (PSF)	446.4			
COHESION AT FAILURE WITH A ZERO FRICTION ANGLE ($\phi=0$)				
COHESION, C (PSF)	1341.3	0.0	0.0	0.0
REMARKS				



CLIENT: Shea Homes - Northern California
PROJECT NAME: 1901 Lone Oak Road
PROJECT NO: 22989.000.001 PH002
PROJECT LOCATION: Brentwood, CA
REPORT DATE: 5/22/2023
TESTED BY: V. Nunez
REVIEWED BY: D. Bryant

ISOTROPIC UNCONSOLIDATED UNDRAINED TRIAXIAL REPORT
ASTM D2850



CLIENT: Shea Homes - Northern California
PROJECT NAME: 1901 Lone Oak Road
PROJECT NO: 22989.000.001 PH002
PROJECT LOCATION: Brentwood, CA
REPORT DATE: 5/22/2023
TESTED BY: V. Nunez
REVIEWED BY: D. Bryant



Appendix E

Modified Phase I Environmental Site Assessment



MCCOY PROPERTY
BRENTWOOD, CALIFORNIA

MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT

DRAFT

SUBMITTED TO
Mr. David Best
Shea Homes – Northern California
P.O. Box 5064
Livermore, CA 94550-5064

PREPARED BY
ENGEO Incorporated

June 5, 2023

PROJECT NO.
22989.000.001

Project No.
22989.000.001

June 5, 2023

Mr. David Best
Shea Homes – Northern California
P.O. Box 5064
Livermore, CA 94550-5064

Subject: McCoy Property
Brentwood, California

MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT

Dear Mr. Best

ENGEO is pleased to present our modified phase I environmental site assessment of the subject property (Property), located in Brentwood, California. The attached report includes a description of the site assessment activities, along with ENGEO's findings, opinions, and conclusions regarding the Property.

ENGEO has the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the Property, and has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312 and the American Society for Testing and Materials (ASTM) Practice E1527-21. We declare that, to the best of our professional knowledge and belief, the responsible charge for this study meets the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 and ASTM E1527-21.

We are pleased to be of service to you on this project. If you have any questions concerning the contents of our report, please contact us.

Sincerely,

ENGEO Incorporated

Cody Johnson, PG

Shawn Munger, CHG

cj/sm/ca

TABLE OF CONTENTS

LETTER OF TRANSMITTAL

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	3
1.1 PURPOSE OF PHASE I ENVIRONMENTAL SITE ASSESSMENT	3
1.2 DETAILED SCOPE OF SERVICES	3
1.3 SITE LOCATION AND DESCRIPTION	3
1.4 SITE AND VICINITY CHARACTERISTICS	4
1.5 INDOOR AIR QUALITY	4
2.0 RECORDS REVIEW	5
2.1 PROPERTY RECORDS	5
2.1.1 Title Report/Ownership	5
2.1.2 Environmental Liens and Activity Use Limitations	5
2.2 HISTORICAL RECORD SOURCES	5
2.2.1 Historical Topographic Maps/Aerial Photographs/Sanborn Maps	6
2.2.2 City Directory	6
2.3 ENVIRONMENTAL RECORD SOURCES	6
2.3.1 Environmental Records	7
2.3.1.1 Property	7
2.3.1.2 Other Properties	7
2.4 REGULATORY AGENCY FILES AND RECORDS	7
3.0 SITE RECONNAISSANCE	8
3.1 METHODOLOGY	8
3.2 GENERAL SITE SETTING	8
3.3 EXTERIOR OBSERVATIONS	8
3.4 INTERIOR OBSERVATIONS	9
3.5 ASBESTOS, LEAD, AND PCB-CONTAINING MATERIALS	9
4.0 INTERVIEWS	9
5.0 AGRICHEMICAL SOIL ASSESSMENT	10
5.1 SOIL SAMPLING	10
5.1 ANALYTICAL RESULTS	10
6.0 FINDINGS AND OPINIONS	11
6.1 SIGNIFICANT DATA GAPS	11
7.0 CONCLUSIONS	11
8.0 LIMITATIONS	12
8.1 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT	12
8.2 SPECIAL TERMS AND CONDITIONS	12

SELECTED REFERENCES

FIGURES

TABLE OF CONTENTS (Continued)

APPENDIX A – Environmental Data Resources, Inc., Radius Map Report

APPENDIX B – Chicago Title Company, Preliminary Title Report

APPENDIX C – Environmental Data Resources, Inc., Historical Topographic Map Report

APPENDIX D – Environmental Data Resources, Inc., Aerial Photo Decade Package

APPENDIX E – Environmental Data Resources, Inc., Sanborn Map Report

APPENDIX F – Environmental Data Resources, Inc., City Directory

APPENDIX G – Environmental Site Assessment Questionnaires (2)

APPENDIX H – California Laboratory Services, Laboratory Analytical Reports

APPENDIX I – Qualifications of Environmental Professional

DRAFT

EXECUTIVE SUMMARY

ENGEO conducted a modified phase I environmental site assessment for the subject property located at 1901 Lone Oak Road, Brentwood, California (Property). The Property is approximately 9.7 acres in area and is identified as a portion of Assessor's Parcel Number (APN) 016-040-004.

The Property consists of a fallow agricultural field with a small barn located in the southeastern corner. Review of historical records indicates that the Property has been utilized for agricultural purposes since at least 1949. The barn was constructed circa 1949 – 1959.

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil, soil gas, or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate ASTM search distances that would reasonably be expected to impact the Property.

Since the Property was historically utilized for agricultural activities and given the age of the barn, an agrichemical assessment of the surface soil was conducted to evaluate the potential for residual concentrations of organochlorine pesticides (OCPs), arsenic, and lead. In general conformance Cal-EPA Department of Toxic Substances Control guidance, a total of 20 soil samples were recovered across the Property, which were analyzed for OCPs, lead, and arsenic.

The following is a summary of the laboratory results.

- 4,4',DDE ranged from non-detect to 3.7 micrograms per kilogram ($\mu\text{g}/\text{kg}$), which are below the current residential screening level of 2,000 $\mu\text{g}/\text{kg}$.
- Arsenic concentrations ranged from 7.9 to 9.8 milligrams per kilogram (mg/kg). The results are indicative of naturally occurring background arsenic concentrations for the vicinity of the Property and are not indicative of anthropogenic impacts.
- Lead concentrations ranged from 13 to 15 mg/kg , which are below the current residential screening level of 80 mg/kg .

Based on the findings of this assessment, no Recognized Environmental Conditions (RECs), no historical RECs, and no controlled RECs were identified for the Property.

We have performed a modified phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-21 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312). Any exception to, or deletions from this practice are described in Section 8.1 of the report.

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gap was identified.

- The interior of the barn was not available to view during the site reconnaissance.

The data gap identified during this process do not affect the conclusions as to the presence or lack of presence of RECs at the Property.

This assessment has revealed no evidence of RECs in connection with the Property, and the Property is suitable for residential development. We recommend no further environmental studies at this time.

We recommend that the interior of the barn is viewed prior to demolition to determine if hazardous materials are present, or other environmental conditions.

Please note, the findings from this report are valid until April 28, 2024, and updates of portions of the assessment may be necessary after October 28, 2023.

DRAFT

1.0 INTRODUCTION

1.1 PURPOSE OF PHASE I ENVIRONMENTAL SITE ASSESSMENT

This assessment was performed at the request of Shea Homes – Northern California for the purpose of environmental due diligence during property acquisition. The objective of this modified phase I environmental site assessment is to identify Recognized Environmental Conditions (RECs) associated with the Property. As defined in the ASTM Standard Practice E1527-21, an REC is “(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.”

1.2 DETAILED SCOPE OF SERVICES

The scope of services performed included the following.

- A review of publicly available and practicably reviewable standard local, state, tribal, and federal environmental record sources.
- A review of publicly available and practicably reviewable standard historical sources, aerial photographs, fire insurance maps and physical setting sources.
- A reconnaissance of the Property to review site use and current conditions. The reconnaissance was conducted to check for the storage, use, production or disposal of hazardous or potentially hazardous materials.
- Written/oral interviews with owners/occupants and public sector officials.
- An agrichemical impact assessment of soil at the Property.
- Preparation of this report with our findings, opinions, and conclusions.

1.3 SITE LOCATION AND DESCRIPTION

The Property is located in Brentwood, California (Figures 1 and 2). The approximately 9.7-acre Property is identified as APN 016-040-004 (Figure 3) and consists of a fallow agricultural field with a small barn located in the southeastern corner.

TABLE 1.3-1: Adjoining Site Uses

DIRECTION	SITE USE
North	Residential and The Rock Church
South	Fallow agricultural field
East	Lone Oak Road and residential
West	Adams Lane and Marsh Creek Elementary School

1.4 SITE AND VICINITY CHARACTERISTICS

According to published topographic maps, site grades at the Property ranges from approximately Elevation 68 feet (WGS84) in the east to approximately Elevation 73 feet to the west. Review of the 2006 Dibblee Geologic Map found that the Property is underlain by alluvial clay (Qc).

Geocheck – Physical Setting Source Summary of the Environmental Data Resources, Inc. (EDR) report (Appendix A) indicated nine federal United States Geological Survey (USGS) and 70 state wells located within 1 mile of the Property.

We reviewed the Department of Water Resources On-line Water Data Library for depth to water in the vicinity of the Property. The website five wells within 1 mile of the Property.

We reviewed EnviroStor, a website maintained by the State of California Department of Toxic Substances Control, and GeoTracker, a website maintained by the State of California Water Resources Control Board, for nearby facilities with records that include depth-to-groundwater measurements. The following information was obtained regarding local groundwater conditions.

TABLE 1.4-1: Local Groundwater Conditions

PROXIMITY TO PROPERTY	REPORTED DEPTH TO GROUNDWATER	REPORTED GROUNDWATER FLOW DIRECTION
USGS40000186246	100 feet east	28 feet
SB-1	2,900 feet east-southeast	17 feet
01N03E06E997M	3,600 feet north-northeast	50 – 73 feet
379589N1216917W001	3,400 feet northeast	18 – 21 feet

The site-specific depth to groundwater and direction of groundwater flow were not determined as part of this assessment. Fluctuations in groundwater levels may occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors.

We reviewed the Department of Conservation, Geologic Energy Management (CalGEM), website and map database to determine if any historic oil or gas wells were located within the Property. 28 dry and plugged gas wells were mapped within 1 mile of the Property.

We reviewed the National Pipeline Mapping System (NPMS) public viewer website for information about petroleum, natural gas, or hazardous liquid storage, processing, or transmission facilities in the vicinity of the Property. No facilities or pipelines were mapped within ¼ mile of the Property.

1.5 INDOOR AIR QUALITY

An evaluation of indoor air quality, mold, or radon was not included as part of the contracted scope of services. The California Department of Public Health has conducted studies of radon risks throughout the state, sorted by zip code. Results of the studies indicate that 6 tests were conducted within the Property zip code, with no tests exceeding the current EPA action level of 4 picocuries per liter (pCi/L)¹.

¹ California Department of Public Health – Radon Program–
(<https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf>).

In accordance with ASTM E2600-15 (Tier 1) (*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*); there are no potential petroleum hydrocarbon sources for vapor intrusion within 1/10 mile of the Property or volatile organic compound (VOCs) sources within 1/3 mile of the Property.

2.0 RECORDS REVIEW

2.1 PROPERTY RECORDS

2.1.1 Title Report/Ownership

The Title Report lists recorded land title detail, ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against a subject property. Laws and regulations pertaining to land trusts vary from state to state and the detail of information presented in a Title Report can vary greatly by jurisdiction. As a result, ENGEO utilizes a Title Report, when provided to us, as a supplement to other historical record sources. ENGEO assumes that any environmental lien, activity use limitations (AUL), and/or institutional controls for the Property are noted in the Preliminary Title Report.

A Preliminary Title Report for the Property, prepared by Chicago Title Company and dated April 4, 2023, was provided for our review. The Property title is vested in *Gloria Jean McCoy, a widow and Gloria Jean McCoy Living Trust dated June 11, 1998, as their interests appear of record.*

No references to environmental liens, deed restrictions or other potential environmental issues were noted. This report is included in Appendix B.

2.1.2 Environmental Liens and Activity Use Limitations

The Preliminary Title Report had no references to environmental liens, deed restrictions or other potential environmental issues. In addition, a questionnaire completed by the Client or authorized representative indicated that they are not aware of any environmental cleanup liens recorded against the Property.

We reviewed two engineering control (EC) and institutional control (IC) registries: EnviroStor, a website maintained by the State of California Department of Toxic Substances Control, and GeoTracker, a website maintained by the State of California Water Resources Control Board, for environmental liens or AULs associated with the Property. No records of environmental liens or AULs were noted.

2.2 HISTORICAL RECORD SOURCES

The purpose of the historical record review is to develop a history of the previous uses or occupancies of the Property and surrounding areas to identify those uses or occupancies that are likely to have led to recognized environmental conditions on the Property.

2.2.1 Historical Topographic Maps/Aerial Photographs/Sanborn Maps

Historical USGS topographic maps and aerial photographs maps were reviewed to determine if discernible changes pertaining to the Property had been recorded. EDR provided the following maps and photographs, presented in Appendices C, D, and E. A Sanborn fire insurance map search did not identify maps for the Property; the search report is presented in Appendix E.

TABLE 2.2.1-1: Historical Review Summary

HISTORICAL MAP/PHOTOGRAPH	YEARS
Topographic Maps	1914, 1916, 1940, 1943, 1954, 1968, 1978, 2012, 2015, 2018
Aerial Photographs	1939, 1949, 1959, 1963, 1966, 1972, 1979, 1982, 1984, 1993, 1998, 2006, 2009, 2012, 2016, 2020
Sanborn Maps	N/A

In 1914, the Property is shown as vacant land with a tributary of Marsh Creek intersecting the central portion. Surrounding properties are vacant land. The property remains vacant land in 1939 while surrounding properties are utilized for agricultural cultivation. By 1949, the stream channel has been infilled. In 1959 the Property is being utilized for crop cultivation and the barn has been constructed. Lone Oak Drive is in its current alignment and multiple residences and farm structures are constructed to the east and northeast of the Property. The Property appears to be utilized for crop production through at least 2006. Gracie Lane to the south is visible in 1963 and rows of housing constructed along Gracie Lane by 1979. A housing subdivision is under construction to the northeast in 1993. In 2006, housing subdivisions are under construction to the south and west, Adams Lane is in the current alignment, and Marsh Creek Elementary School has been constructed to the west. A housing subdivision is under construction to the north in 2012 and completed by 2020.

2.2.2 City Directory

City Directories, published since the 18th century for major towns and cities, list the name of the resident or business associated with each address. A city directory search conducted by EDR is located in Appendix F.

TABLE 2.2.2-1: City Directory

YEAR	LISTING
2000, 2005, 2010, 2014, 2017	MCCOY, GLORIA J

2.3 ENVIRONMENTAL RECORD SOURCES

EDR performed a search of federal, tribal, state, and local databases regarding the Property and nearby properties. Details regarding the databases searched by EDR are provided in Appendix A. A list of the facilities documented by EDR within the approximate minimum search distance of the Property is provided below.

2.3.1 Environmental Records

2.3.1.1 Property

The Property is not listed on Environmental Record source databases.

2.3.1.2 Other Properties

The following databases include facilities listed within the appropriate ASTM search distances of the Property on Environmental Records sources.

TABLE 2.3.1.2-1: Environmental Database Listings for Nearby Properties

FACILITY	STREET	DATABASES
AMBER DAVIS	1900 LONE OAK ROAD	RCRA NONGEN / NLR
CLEMONS, EARL	1800 LONE OAK RD	CONTRA COSTA CO. SITE LIST
CHEVRON, MINNESOTA AVE, BRENTWOOD	CAMBRIAN PLACE	CPS-SLIC
PROPOSED FOURTH MIDDLE SCHOOL SITE	2340 SMITH ROAD	US BROWNFIELDS,FINDS
DUTRA, LEROY	SMITH LN	ENVIROSTOR,SCH,SWEEPS UST,CA FID UST,CONTRA COSTA CO. SITE LIST,CERS
SAND CREEK ELEMENTARY SCHOOL	SAND CREEK ROAD/GARIN PARKWAY	ENVIROSTOR,SCH
SKIPOLINI PROPERTY	7281 LONE TREE WAY	HWTS,ENVIROSTOR,VCP,HAZNE T

Based on the distances to the identified database sites, regional topographic gradient, and the EDR findings, it is unlikely that the above-stated database sites pose an environmental risk to the Property. Properties that are on the “Orphan Summary” list appear to be located beyond the ASTM recommended radius search criteria.

2.4 REGULATORY AGENCY FILES AND RECORDS

The following agencies were contacted pertaining to possible past development and/or activity at the Property.

TABLE 2.4-1: Regulatory Agency Records

NAME OF AGENCY	RECORDS REVIEWED
City of Brentwood Clerk	We contacted the City of Brentwood Clerk on April 28, 2023, regarding environmental records for the Property. The city clerk provided a sewer connection building permit dated January 22, 2016 for the residence located at 1901 Lone Oak Road.
Contra Costa County Environmental Health	We contacted Contra Costa County Environmental Health on April 28, 2023, regarding environmental records for the Property. Contra Costa Environmental Health provided a septic tank abandonment permit and indicated that the septic tank was removed from the Property in 2016.
Contra Costa County Fire Protection District	We contacted the Contra Costa County Fire Protection District on April 28, 2023, regarding environmental records for the Property. The Contra Costa County Fire Protection District indicated they have no files pertaining to the Property.

NAME OF AGENCY	RECORDS REVIEWED
Contra Costa County Assessor's Office	We reviewed online parcel maps provided by the Contra Costa County Assessor's Office. The property boundary and APNs provided in the EDR radius map report are consistent with the online parcel maps.
California State Water Resources Control Board	We reviewed GeoTracker, the website maintained by the State Water Resources Control Board, for files pertaining to the Property. No listings were found for the Property.
Department of Toxic Substances Control (DTSC)	We reviewed EnviroStor, the website maintained by DTSC, for files pertaining to the Property. No listings were found for the Property.

3.0 SITE RECONNAISSANCE

3.1 METHODOLOGY

We conducted a reconnaissance of the Property on May 2, 2023. The reconnaissance was performed by Cody Johnson, a project geologist of ENGEO. The Property was viewed for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The Property was also checked for evidence of fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks. Photographs taken during the site reconnaissance are presented in Figure 4.

3.2 GENERAL SITE SETTING

The Property is located in a rural-residential portion of Brentwood. The Property consists of a fallow agricultural field with a small barn located in the southeastern corner. A chicken coop is located at the southern exterior of the barn. The interior was not available to view.

The Property is bound by Lone Oak Drive and residential to the east, Adams Lane and Marsh Creek Elementary School to the west, residential and a church to the north, and a fallow agricultural field to the south.

3.3 EXTERIOR OBSERVATIONS

The following table summarizes our observations during the reconnaissance.

TABLE 3.3-1: Exterior Site Observations

FEATURE TYPE	OBSERVATIONS
Structures	A barn was observed during the site reconnaissance in the southeast corner of the Property.
Hazardous Substances and Petroleum Products in Connection with Identified Uses	No hazardous substances or petroleum products were observed within the Property during the site reconnaissance.
Storage Tanks (underground and above-ground)	No above-ground storage tanks or evidence of existing underground storage tanks were observed during the site reconnaissance.
Roads	No roadways are located on the Property. The property is bound by Lone Oak Drive to the east and Adams Lane to the West.
Strong, Pungent, or Noxious Odors and Their Sources	No odors indicative of hazardous materials or petroleum material impacts were noted at the time of the reconnaissance.

FEATURE TYPE	OBSERVATIONS
Standing Surface Water and Pools or Sumps Containing Liquids Likely to be Hazardous Substances or Petroleum Products	No pools of potentially hazardous liquid were observed within the Property at the time of our reconnaissance.
Drums, Totes, and Intermediate Bulk Containers	No drums were observed on the Property at the time of the reconnaissance.
Polychlorinated Biphenyls (PCBs) Containing Equipment	No potential PCB-containing equipment, including transformers, were observed within the Property during our site reconnaissance.
Hazardous Substances and Petroleum Product Containers	No hazardous substance or petroleum product containers were observed on the Property at the time of our reconnaissance.
Stains or Corrosion on Floors, Walls, or Ceilings (Except Water Staining)	No stains or corrosion on floors, walls, or ceilings were observed on the Property at the time of our reconnaissance.
Drains and Sumps	No drains or sumps were observed within the Property at the time of our reconnaissance.
Pits, Ponds, and Lagoons	No pits, ponds, or lagoons were observed within the Property at the time of our reconnaissance.
Stained Soil/Pavement	No stained soil or pavement were observed within the Property at the time of our reconnaissance.
Stressed Vegetation	No signs of stressed vegetation were observed on the Property at the time of our reconnaissance.
Solid Waste/Debris	No disposal of solid waste was observed at the Property.
Stockpiles/Fill Material	No stockpiles or fill material were observed on the Property during the reconnaissance.
Wastewater	No wastewater conveyance systems were observed at the Property during the reconnaissance.
Wells	No wells were found within the Property during our site reconnaissance.
Septic Systems	No septic systems were found within the Property during our site reconnaissance. A septic tank was removed from the residence located at 1901 Lone Oak Drive, which is not located on the Property

3.4 INTERIOR OBSERVATIONS

The interior of the barn was not available to view during the site reconnaissance. An empty chicken coup is located at the southern side of the barn.

3.5 ASBESTOS, LEAD, AND PCB-CONTAINING MATERIALS

An asbestos, lead, and PCB-containing building material survey was not conducted as part of this assessment. Given the age of the existing structure, it is conceivable that asbestos, lead, and PCB-containing materials may exist within the structure.

4.0 INTERVIEWS

Mr. David Best completed Client-based and Key Site Manager-related environmental site questionnaires pertaining to applicable environmental information regarding the Property on May 2, 2023. In the questionnaires, Mr. Best did not identify potentially environmentally related issues with the Property. Mr. Best is unaware of commonly known, reasonably ascertainable, or

specialized knowledge indicative of releases or threatened releases that is material to the potential presence of RECs.

Mr. Best has indicated that the purchase price of the Property is reflective of fair market value of the Property. The questionnaires are presented in Appendix G.

Ms. Amber Davis was contacted regarding her property 1900 Lone Oak Road being listed on the RCRA NONGEN / NLR environmental database. Ms. Davis was unaware of this listing and does not know why her residence would be listed. She stated that she and her husband moved into the house a few years ago and use the address solely as a residence.

5.0 AGRICHEMICAL SOIL ASSESSMENT

Review of historical records indicates that the Property has been used as agricultural land since at least 1949. Due to historical agricultural activities and the age of the barn structure, an assessment of the surface soil was conducted to evaluate the potential for residual concentrations of OCPs, termiticides, arsenic, and lead.

5.1 SOIL SAMPLING

Soil samples were collected on May 2, 2023, from 20 locations across the Property (Figure 2). Soil samples were collected from 0 to 6 inches below the surface of the existing grade. The soil samples were collected using 4-ounce, pre-cleaned glass jars. Upon collection of samples, a sample label was placed on the sample, including a unique sample number, sample location, and time/date collected. The soil samples were submitted under documented chain-of-custody to California Laboratory Services.

Laboratory analysis of the agrichemical soil samples included the following target analytes.

- OCPs (EPA Method 8081)
- Arsenic (EPA Method 6020)
- Lead (EPA Method 6020)

5.1 ANALYTICAL RESULTS

The following is a summary of the laboratory results.

- 4,4',DDE ranged from non-detect to 3.7 micrograms per kilogram ($\mu\text{g}/\text{kg}$), which are below the current residential screening level of 2,000 $\mu\text{g}/\text{kg}$.
- Arsenic concentrations ranged from 7.9 to 9.8 milligrams per kilogram (mg/kg). The results are indicative of naturally occurring background arsenic concentrations for the vicinity of the Property and are not indicative of anthropogenic impacts.
- Lead concentrations ranged from 13 to 15 mg/kg , which are below the current residential screening level of 80 mg/kg .

The laboratory report is presented in Appendix H.

6.0 FINDINGS AND OPINIONS

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil, soil gas, or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate ASTM search distances that would reasonably be expected to impact the Property.

Based on the findings of this assessment, no RECs, no historical RECs, and no controlled RECs were identified for the Property.

6.1 SIGNIFICANT DATA GAPS

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gap was identified.

- The interior of the barn was not available to view during the site reconnaissance.

The data gap identified during this process does not affect the conclusions as to the presence or lack of presence of RECs at the Property.

7.0 CONCLUSIONS

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC.

We have performed a modified phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-21 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312) of APN 016-040-004, the Property. Any exception to, or deletions from this practice are described in Section 8.1 of the report.

This assessment has revealed no evidence of RECs in connection with the Property, and the Property is suitable for residential development. We recommend no further environmental studies at this time.

We recommend that the interior of the barn is viewed prior to demolition to determine if hazardous materials are present, or other environmental conditions.

8.0 LIMITATIONS

8.1 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

The professional staff at ENGEO strives to perform its services in a proper and professional manner with reasonable care and competence but is not infallible. The recommendations and conclusions presented in this report were based on the findings of our study, which were developed solely from the contracted services. The findings of the report are based in part on contracted database research, out-of-house reports, and personal communications. The opinions formed by ENGEO are based on the assumed accuracy of the relied upon data in conjunction with our relevant professional experience related to such data interpretation. We assume no liability for the validity of the materials relied upon in the preparation of this report.

This document must not be subject to unauthorized reuse; that is, reuse without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time. The findings from a phase I environmental site assessment are valid for 1 year after from the earliest date of the following components: records review, site reconnaissance, interviews, declaration by environmental professional. Updates of portions of the assessment may be necessary after a period of 180 days from the earliest date of the four components.

A more extensive assessment that would include a subsurface exploration with laboratory testing of soil, soil gas, and groundwater samples could provide more definitive information concerning site-specific conditions. If additional assessment activities are considered for the Property and if other entities are retained to provide such services, ENGEO cannot be held responsible for any and all claims arising from or resulting from the performance of such services by other persons or entities. ENGEO can also not be held responsible from any and all claims arising or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

8.2 SPECIAL TERMS AND CONDITIONS

We have prepared this report for the exclusive use of our client, Shea Homes – Northern California. It is recognized and agreed that ENGEO has assumed responsibility only for undertaking the study for the Client. The responsibility for disclosures or reports to a third party and for remedial or mitigative action shall be solely that of the Client.

This phase I environmental site assessment is not intended to represent a complete soil, soil gas, or groundwater characterization, nor define the depth or extent of soil, soil gas, or groundwater contamination. It is intended to provide an evaluation of potential environmental concerns associated with the use of the Property. Laboratory testing of soil gas or groundwater samples was not within the scope of the contracted services. The assessment did not include an asbestos survey, an evaluation of lead-based paint, an inspection of light ballasts for polychlorinated biphenyls (PCBs), or a mold survey. A radon evaluation was not performed.

This report is based upon field and other conditions discovered at the time of preparation of ENGEO's assessment. Visual observations referenced in this report are intended only to represent conditions at the time of the reconnaissance. We would not be aware of site contamination, such as dumping and/or accidental spillage, that occurred subsequent to the reconnaissance conducted by ENGEO personnel.

SELECTED REFERENCES

Google Maps (<http://maps.google.com>)

California Department of Water Resources (<http://www.water.ca.gov/waterdatalibrary/>)

California Department of Public Health – Radon Program–
(<https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf>).

California Geologic Energy Management Division (CalGEM)
(<https://www.conservation.ca.gov/calgem>)

CalGEM Well Finder
(<https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.94276/37.12009/6>)

Dibblee Jr., T.W. 2006. Geologic Map of the Antioch South and Brentwood Quadrangles,
Contra Costa County, California; DF-193.

National Pipeline Mapping System (NPMS) public viewer website
<https://pvnpm.phmsa.dot.gov/PublicViewer/>



DRAFT

FIGURES

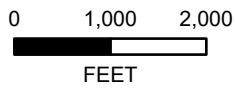
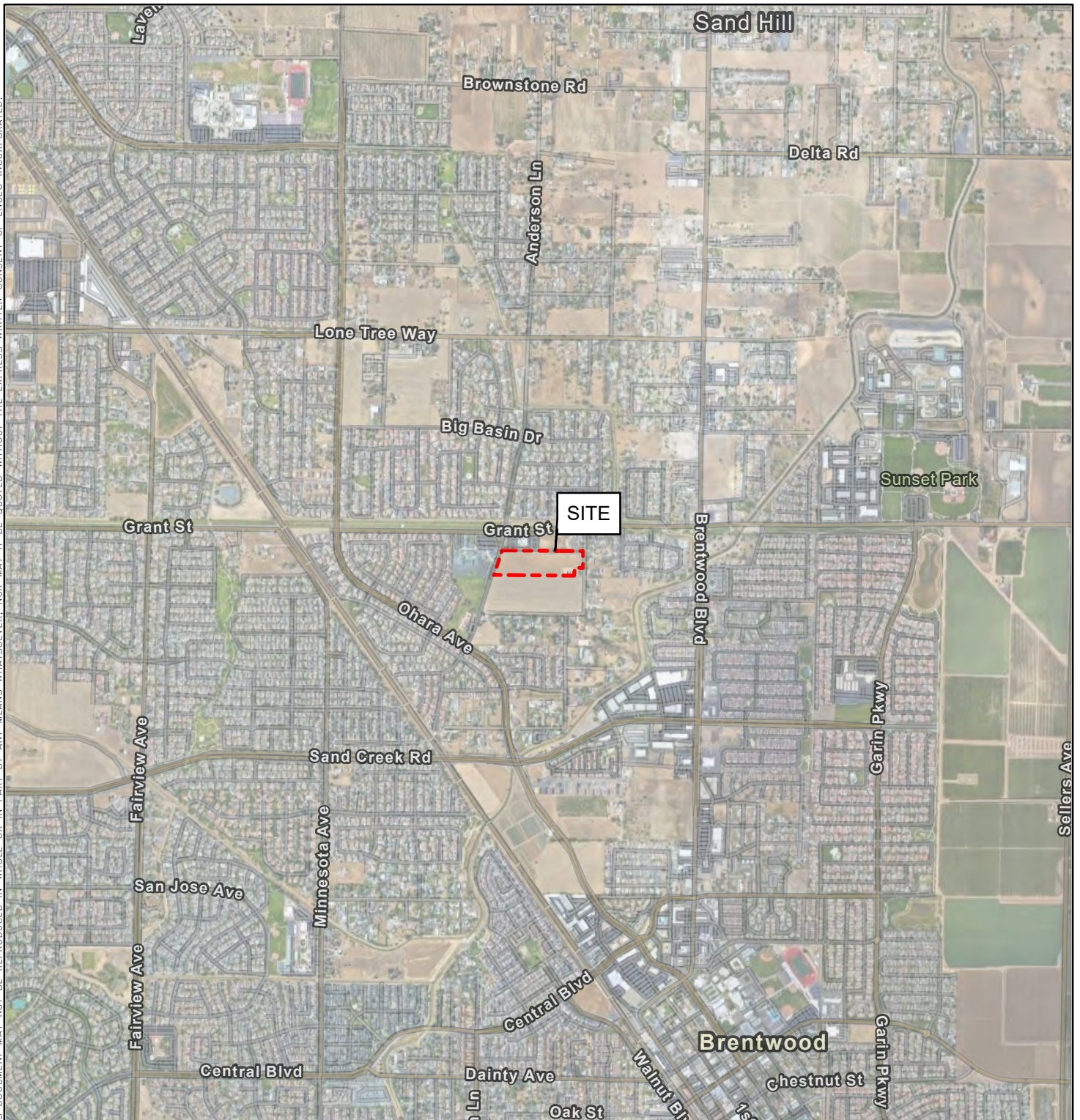
FIGURE 1: Vicinity Map

FIGURE 2: Site Plan

FIGURE 3: Assessor's Parcel Map

FIGURE 4: Site Photographs

COPYRIGHT © 2023 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2022



VICINITY MAP
1901 LONE OAK ROAD
BRENTWOOD, CALIFORNIA

PROJECT NO. : 22989.000.001

SCALE: AS SHOWN

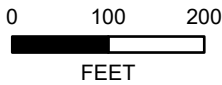
DRAWN BY: QRL

CHECKED BY: SPM

FIGURE NO.

1

COPYRIGHT © 2023 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE
- SAMPLE LOCATION (ENGEO, 2023)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021



SITE PLAN
 1901 LONE OAK ROAD
 BRENTWOOD, CALIFORNIA

PROJECT NO. : 22989.000.001

SCALE: AS SHOWN

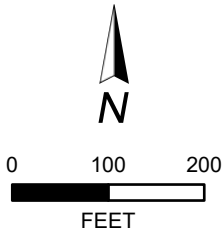
DRAWN BY: QRL

CHECKED BY: SPM

FIGURE NO.

2

COPYRIGHT © 2023 BY ENGEO, INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

 PROJECT SITE

 PARCEL BOUNDARY

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021 AND CONTRA COSTA COUNTY ASSESSOR'S OFFICE



ASSESSOR'S PARCEL MAP
1901 LONE OAK ROAD
BRENTWOOD, CALIFORNIA

PROJECT NO. : 22989.000.001	
SCALE: AS SHOWN	
DRAWN BY: QRL	CHECKED BY: SPM

FIGURE NO.
3

COPYRIGHT © 2023 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



PHOTO 1
NORTHEAST CORNER OF PROPERTY ALONG LONE OAK ROAD



PHOTO 2
CENTRAL PORTION OF PROPERTY



PHOTO 3
WESTERN PORTION OF PROPERTY ALONG ADAMS LANE



PHOTO 4
BARN STRUCTURE



SITE PHOTOGRAPHS
1901 LONE OAK ROAD
BRENTWOOD, CALIFORNIA

PROJECT NUMBER: 22989.000.001	
SCALE: NO SCALE	
DRAWN BY: QRL	CHECKED BY: SPM

FIGURE NO.
4



DRAFT

APPENDIX A

ENVIRONMENTAL DATA RESOURCES, INC.

Radius Map Report

McCoy Property

1901 Lone Oak Road
Brentwood, CA 94513

Inquiry Number: 7323104.2s
April 28, 2023

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	33
Government Records Searched/Data Currency Tracking	GR-1
<u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-11
Physical Setting Source Map Findings	A-13
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. **NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA) INFORMATION PROVIDED IN THIS REPORT.** Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, LLC. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, LLC, or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1901 LONE OAK ROAD
BRENTWOOD, CA 94513

COORDINATES

Latitude (North): 37.9527500 - 37° 57' 9.90"
Longitude (West): 121.7039920 - 121° 42' 14.37"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 613864.2
UTM Y (Meters): 4201159.0
Elevation: 71 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 12008688 BRENTWOOD, CA
Version Date: 2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140606
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 1901 LONE OAK ROAD
 BRENTWOOD, CA 94513

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	AMBER DAVIS	1900 LONE OAK ROAD	RCRA NonGen / NLR	Lower	86, 0.016, East
2	CLEMONS, EARL	1800 LONE OAK RD	CONTRA COSTA CO. SITE LIST	Lower	357, 0.068, SE
3	CHEVRON, MINNESOTA A	CAMBRIAN PLACE	CPS-SLIC	Higher	2363, 0.448, West
A4	PROPOSED FOURTH MIDD	2340 SMITH ROAD	US BROWNFIELDS, FINDS	Higher	2546, 0.482, NW
A5	DUTRA, LEROY	SMITH LN	ENVIROSTOR, SCH, SWEEPS UST, CA FID UST, CONTRA...	Higher	2546, 0.482, NW
6	SAND CREEK ELEMENTAR	SAND CREEK ROAD/GARI	ENVIROSTOR, SCH	Lower	4024, 0.762, ESE
7	SKIPOLINI PROPERTY	7281 LONE TREE WAY	ENVIROSTOR, VCP, HAZNET, HWTS	Higher	4531, 0.858, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL..... National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS..... Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE..... State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
CDL..... Clandestine Drug Labs

EXECUTIVE SUMMARY

CERS HAZ WASTE..... CERS HAZ WASTE
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing
HIST UST..... Hazardous Substance Storage Container Database
CA FID UST..... Facility Inventory Database
CERS TANKS..... California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites

EXECUTIVE SUMMARY

LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
PFAS NPL.....	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES.....	Federal Sites PFAS Information
PFAS TSCA.....	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST.....	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR.....	PFAS Contamination Site Location Listing
PFAS WQP.....	Ambient Environmental Sampling for PFAS
PFAS NPDES.....	Clean Water Act Discharge Monitoring Information
PFAS ECHO.....	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAINING.....	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT.....	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC.....	Aqueous Foam Related Incidents Listing
PFAS.....	PFAS Contamination Site Location Listing
AQUEOUS FOAM.....	Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
HAZNET.....	Facility and Manifest Data
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
HAZMAT.....	Hazardous Material Facilities
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)

EXECUTIVE SUMMARY

WELL STIM PROJ..... Well Stimulation Project (GEOTRACKER)
MINES MRDS..... Mineral Resources Data System
PFAS TRIS..... List of PFAS Added to the TRI
HWTS..... Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/23/2023 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DUTRA, LEROY Facility Id: 60000916 Status: Active	SMITH LN	NW 1/4 - 1/2 (0.482 mi.)	A5	14
SKIPOLINI PROPERTY Facility Id: 60002296 Status: Active	7281 LONE TREE WAY	WNW 1/2 - 1 (0.858 mi.)	7	25
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SAND CREEK ELEMENTAR Facility Id: 07100004 Status: No Further Action	SAND CREEK ROAD/GARI	ESE 1/2 - 1 (0.762 mi.)	6	22

Lists of state and tribal leaking storage tanks

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CHEVRON, MINNESOTA A Database: CPS-SLIC, Date of Government Version: 03/06/2023 Facility Status: Completed - Case Closed Global Id: SL0601377128	CAMBRIAN PLACE	W 1/4 - 1/2 (0.448 mi.)	3	11

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 04/06/2023 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PROPOSED FOURTH MIDD ACRES property ID: 133703	2340 SMITH ROAD	NW 1/4 - 1/2 (0.482 mi.)	A4	12

EXECUTIVE SUMMARY

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/06/2023 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMBER DAVIS EPA ID:: CAC003124158	1900 LONE OAK ROAD	E 0 - 1/8 (0.016 mi.)	1	9

CONTRA COSTA CO. SITE LIST: Lists includes sites from the Underground Tank Program, Hazardous Waste Generator Program & Business Plan 12185 Program

A review of the CONTRA COSTA CO. SITE LIST list, as provided by EDR, and dated 12/28/2022 has revealed that there is 1 CONTRA COSTA CO. SITE LIST site within approximately 0.25 miles of the target property.

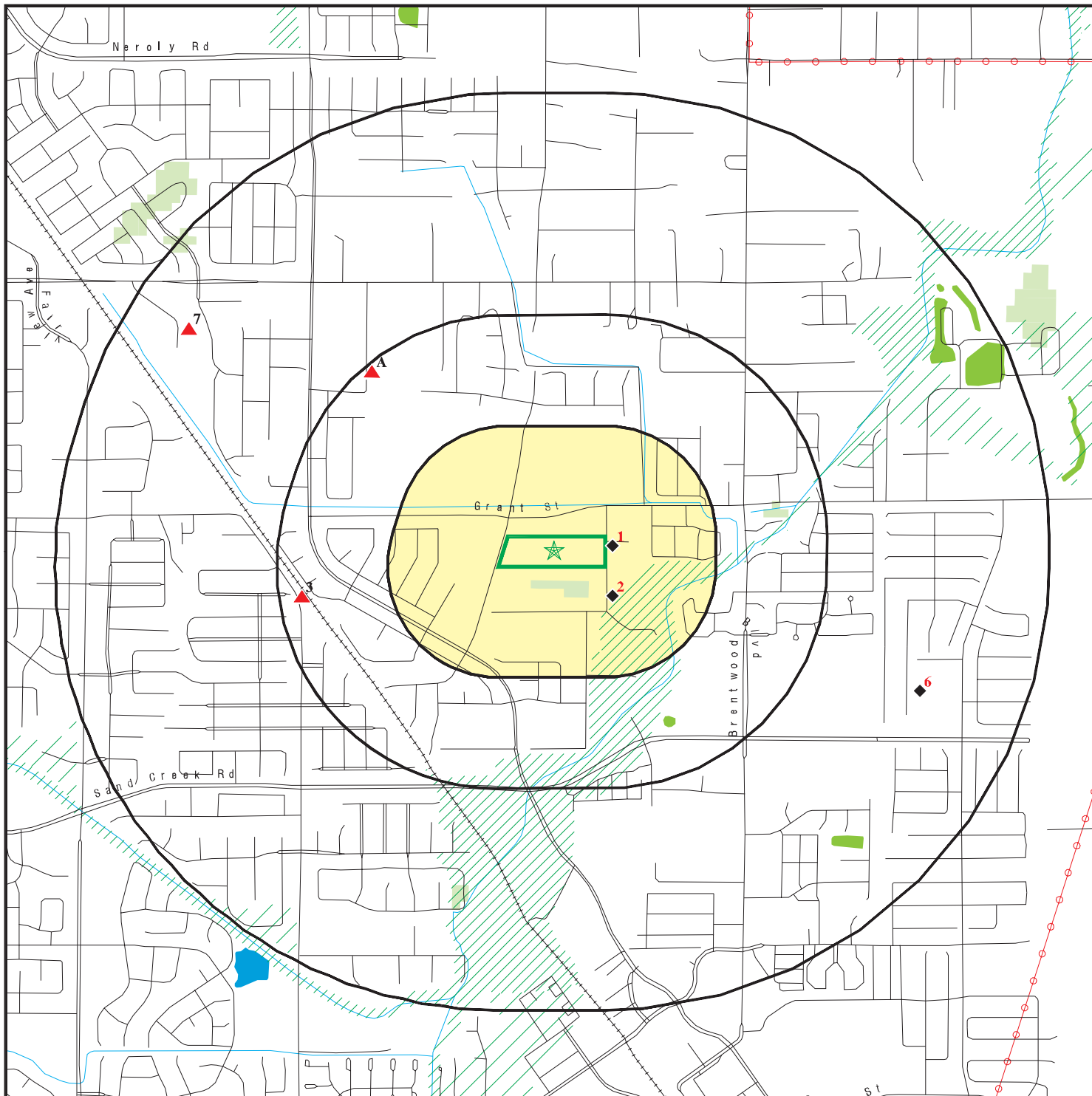
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CLEMONS, EARL Facility Id: FA0032176	1800 LONE OAK RD	SE 0 - 1/8 (0.068 mi.)	2	11

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 8 records.

<u>Site Name</u>	<u>Database(s)</u>
MARSH CANYON SANITARY LANDFILL	SWF/LF
COWELL RANCH/J.MARSH ST HIST PARK	SWF/LF
LYON WOODFIELD PROJECT - BRENTWOOD	CPS-SLIC
DOW CHEMICAL COMPANY - MARSH CREEK	CPS-SLIC
STATE ROUTE 4 BYPASS AUTHORITY	CPS-SLIC
VENTURINI LEASE SITE (BRENTWOOD OI	CPS-SLIC
OXY USA INC. (BRENTWOOD OIL & GAS	CPS-SLIC
COWELL RANCH/VINEYARDS AT MARSH CR	CPS-SLIC

OVERVIEW MAP - 7323104.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

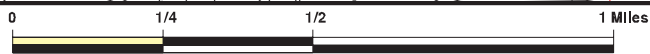
Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

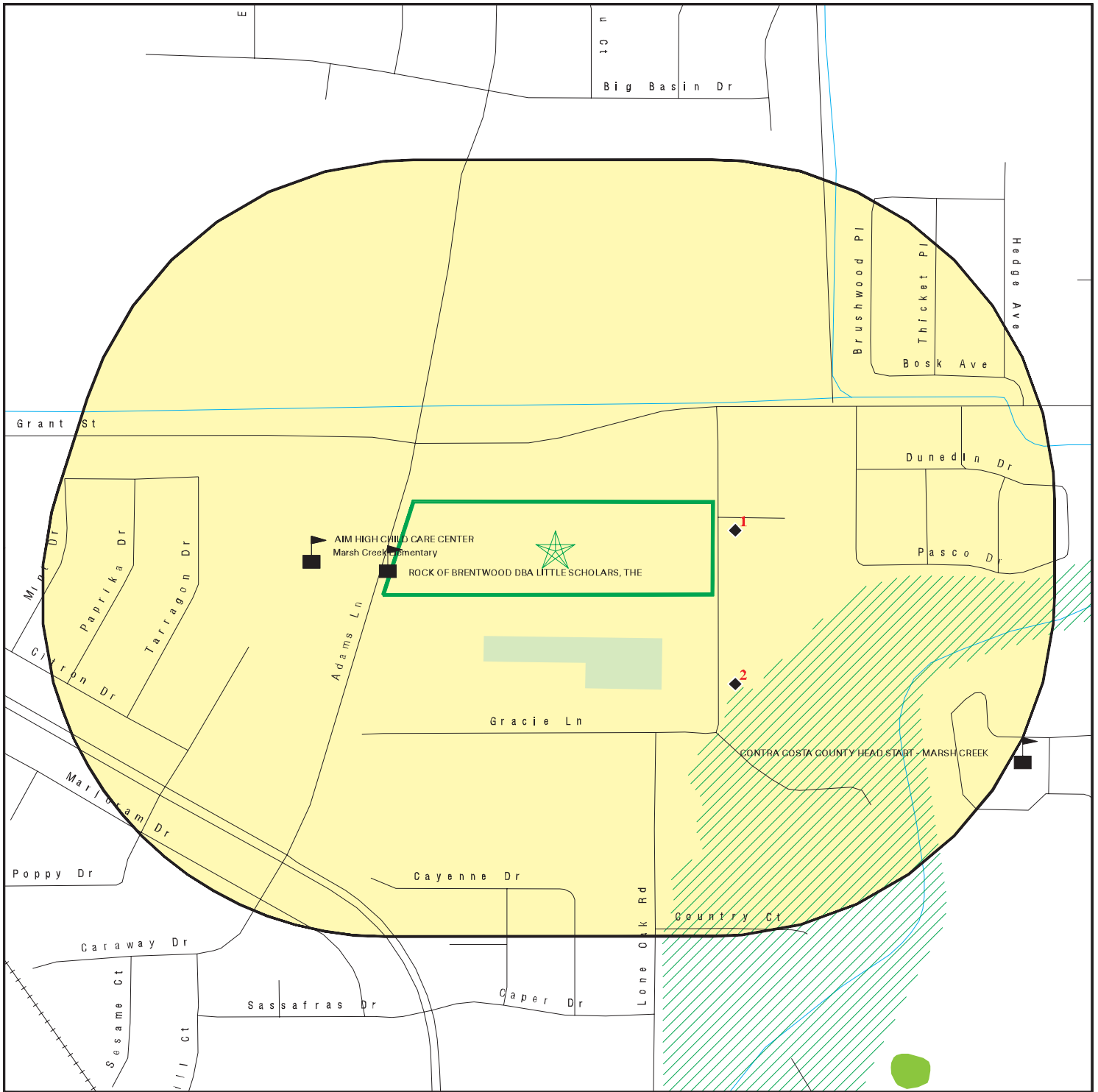









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.







SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood CA 94513
 LAT/LONG: 37.95275 / 121.703992

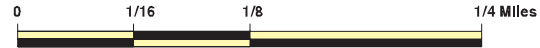
CLIENT: Engeo
 CONTACT: Cody Johnson
 INQUIRY #: 7323104.2s
 DATE: April 28, 2023 7:17 pm

DETAIL MAP - 7323104.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p>SITE NAME: McCoy Property ADDRESS: 1901 Lone Oak Road Brentwood CA 94513 LAT/LONG: 37.95275 / 121.703992</p>	<p>CLIENT: Engeo CONTACT: Cody Johnson INQUIRY #: 7323104.2s DATE: April 28, 2023 7:17 pm</p>
---	--

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Lists of Federal NPL (Superfund) sites</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Lists of Federal Delisted NPL sites</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Lists of Federal sites subject to CERCLA removals and CERCLA orders</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Lists of Federal CERCLA sites with NFRAP</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Lists of Federal RCRA facilities undergoing Corrective Action</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Lists of Federal RCRA TSD facilities</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Lists of Federal RCRA generators</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>Lists of state- and tribal (Superfund) equivalent sites</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>Lists of state- and tribal hazardous waste facilities</i>								
ENVIROSTOR	1.000		0	0	1	2	NR	3
<i>Lists of state and tribal landfills and solid waste disposal facilities</i>								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<i>Lists of state and tribal leaking storage tanks</i>								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	1	NR	NR	1
<i>Lists of state and tribal registered storage tanks</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>Lists of state and tribal voluntary cleanup sites</i>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<i>Lists of state and tribal brownfield sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	1	NR	NR	1
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
HAZMAT	0.250		0	0	NR	NR	NR	0
CONTRA COSTA CO. SITE	0.250		1	0	NR	NR	NR	1
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
---------	-------	--	---	---	---	---	----	---

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	2	0	3	2	0	7

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

Map ID	Direction	Distance	Elevation	Site	Database(s)	EDR ID Number	EPA ID Number
1	East	< 1/8	0.016 mi. 86 ft.	AMBER DAVIS 1900 LONE OAK ROAD BRENTWOOD, CA 94513	RCRA NonGen / NLR	1026811687	CAC003124158
Relative:				RCRA Listings:			
Lower				Date Form Received by Agency:	20210611		
Actual:				Handler Name:	Amber Davis		
68 ft.				Handler Address:	1900 LONE OAK ROAD		
				Handler City,State,Zip:	BRENTWOOD, CA 94513		
				EPA ID:	CAC003124158		
				Contact Name:	AMBER DAVIS		
				Contact Address:	1900 LONE OAK ROAD		
				Contact City,State,Zip:	BRENTWOOD, CA 94513		
				Contact Telephone:	925-325-2484		
				Contact Fax:	Not reported		
				Contact Email:	ALONDRA.DIAZ@SYNERGYCOMPANIES.ORG		
				Contact Title:	Not reported		
				EPA Region:	09		
				Land Type:	Not reported		
				Federal Waste Generator Description:	Not a generator, verified		
				Non-Notifier:	Not reported		
				Biennial Report Cycle:	Not reported		
				Accessibility:	Not reported		
				Active Site Indicator:	Not reported		
				State District Owner:	Not reported		
				State District:	Not reported		
				Mailing Address:	1900 LONE OAK ROAD		
				Mailing City,State,Zip:	BRENTWOOD, CA 94513		
				Owner Name:	Amber Davis		
				Owner Type:	Other		
				Operator Name:	Amber Davis		
				Operator Type:	Other		
				Short-Term Generator Activity:	No		
				Importer Activity:	No		
				Mixed Waste Generator:	No		
				Transporter Activity:	No		
				Transfer Facility Activity:	No		
				Recycler Activity with Storage:	No		
				Small Quantity On-Site Burner Exemption:	No		
				Smelting Melting and Refining Furnace Exemption:	No		
				Underground Injection Control:	No		
				Off-Site Waste Receipt:	No		
				Universal Waste Indicator:	No		
				Universal Waste Destination Facility:	No		
				Federal Universal Waste:	No		
				Active Site State-Reg Handler:	---		
				Federal Facility Indicator:	Not reported		
				Hazardous Secondary Material Indicator:	N		
				Sub-Part K Indicator:	Not reported		
				2018 GPRC Permit Baseline:	Not on the Baseline		
				2018 GPRC Renewals Baseline:	Not on the Baseline		
				202 GPRC Corrective Action Baseline:	No		
				Subject to Corrective Action Universe:	No		
				Non-TSDFs Where RCRA CA has Been Imposed Universe:	No		
				Corrective Action Priority Ranking:	No NCAPS ranking		
				Environmental Control Indicator:	No		
				Institutional Control Indicator:	No		

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMBER DAVIS (Continued)

1026811687

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210618
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: AMBER DAVIS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1900 LONE OAK ROAD
Owner/Operator City,State,Zip:	BRENTWOOD, CA 94513
Owner/Operator Telephone:	925-325-2484
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: AMBER DAVIS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1900 LONE OAK ROAD
Owner/Operator City,State,Zip:	BRENTWOOD, CA 94513
Owner/Operator Telephone:	925-325-2484
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20210611
Handler Name: AMBER DAVIS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMBER DAVIS (Continued)

1026811687

List of NAICS Codes and Descriptions:

NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

2
SE
< 1/8
0.068 mi.
357 ft.

CLEMONS, EARL
1800 LONE OAK RD
BRENTWOOD, CA 94513

CONTRA COSTA CO. SITE LIST **S101580858**
N/A

Relative:
Lower
Actual:
68 ft.

CONTRA COSTA CO. SITE LIST:
Name: CLEMONS, EARL
Address: 1800 LONE OAK RD
City: BRENTWOOD
Facility ID: FA0032176
Billing Status: INACTIVE, NON-BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: UNDERGROUND STORAGE TANK SITE
Region: CONTRA COSTA
Cupa Number: 737119
CERS ID: 10007053

3
West
1/4-1/2
0.448 mi.
2363 ft.

CHEVRON, MINNESOTA AVE, BRENTWOOD
CAMBRIAN PLACE
BRENTWOOD, CA 94513

CPS-SLIC **S108937541**
N/A

Relative:
Higher
Actual:
86 ft.

CPS-SLIC:
Name: CHEVRON, MINNESOTA AVE, BRENTWOOD
Address: CAMBRIAN PLACE
City,State,Zip: BRENTWOOD, CA 94513
Region: STATE
Facility Status: Completed - Case Closed
Status Date: 12/17/2009
Global Id: SL0601377128
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5F)
Lead Agency Case Number: Not reported
Latitude: 37.9513
Longitude: -121.7144
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: 2050139
File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Gasoline
EPA Region: 9

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

CHEVRON, MINNESOTA AVE, BRENTWOOD (Continued)

S108937541

Coordinate Source: * USGS Quad map
 Cuf Case: NO
 Quantity Released Gallons: Not reported
 Begin Date: 12/01/1991
 Leak Reported Date: 01/01/1992
 How Discovered: * Other Means
 How Discovered Description: FAILED HYDROSTATIC TEST FOR BAY AREA PIPELINE; AND EXCAVATION AND INSTALLATION OF SEWER LINE UNDER MINNESOTA AVE.
 Discharge Source: Piping
 Discharge Cause: Other
 Stop Method: Other Means
 Stop Description: Failed pipeline repaired 1992.
 No Further Action Date: 12/17/2009
 CA Water Watershed Name: San Joaquin Delta (544.00)
 Dwr Groundwater Subbasin Name: San Joaquin Valley - East Contra Costa (5-022.19)
 Disadvantaged Community: Not reported
 CA Enviroscreen 3 Score: 16-20%
 CA Enviroscreen 4 Score: 35-40%
 Military DOD Site: No
 Facility Project Subtype: Not reported
 RWQCB Region: CENTRAL VALLEY RWQCB (REGION 5S)
 Site History: The Site is located southeast of the intersections of Minnesota Avenue and Cambrian Place, between Minnesota Avenue and the railroad tracks in Brentwood, California. It is located on approximately 3 acres. Historically the Old Valley Pipeline transported crude oil and bunker fuel through the Site from the early 1900s to the late 1960s. In December of 1991 a hydrostatic test of BAPL pipeline identified a failure. Repairs to the pipeline required an 80 foot by 15 foot trench excavated to six feet below ground surface. Several soil samples were taken and indicated the presence of petroleum hydrocarbons in the soil. No Further Action Required letter approved by the Executive Officer was issued to Chevron on 17 December 2009.

[Click here to access the California GeoTracker records for this facility:](#)

**A4
 NW
 1/4-1/2
 0.482 mi.
 2546 ft.**

**PROPOSED FOURTH MIDDLE SCHOOL SITE
 2340 SMITH ROAD
 BRENTWOOD, CA 95413**

**US BROWNFIELDS 1023620470
 FINDS N/A**

Site 1 of 2 in cluster A

**Relative:
 Higher
 Actual:
 81 ft.**

US BROWNFIELDS:
 Name: PROPOSED FOURTH MIDDLE SCHOOL SITE
 Address: 2340 SMITH ROAD
 Recipient name: California Department of Toxic Substances Control
 Grant type: Section 128(a) State/Tribal
 Region: 9
 Property Number: 018-100-041-5 018-100-040-7 018-100-033-2
 Parcel size: 18.93
 Latitude: 37.958653
 Longitude: -121.710572
 HCM Label: Address Matching-House Number
 Map Scale: Not reported
 Point of Reference: Entrance Point of a Facility or Station
 Highlights: The work was requested to assist a hardship school district to complete environmental assessment of the proposed school site. The TSI grant amount was 40,000 for the project. Delineatio of lead and chlordane impacted soils in the area of existing structures was

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PROPOSED FOURTH MIDDLE SCHOOL SITE (Continued)

1023620470

completed. Based on the results of the supplemental site investigation, a response action will be required. Former Use: Site consists of APNs: 018-100-033-23.10-ac, 5-build & ag-land -040-7 7,21-ac, 3 build 500 gal gas UST/250 gal diesel AST, & ag -041-5 8.69-ac ag. AG since 1939. See attachment for more details.

Datum: North American Datum of 1983

Acres Property ID: 133703

IC Data Access: Not reported

Start Date: Not reported

Redev Completion Date: Not reported

Completed Date: Not reported

Acres Cleaned Up: Not reported

Cleanup Funding: Not reported

Cleanup Funding Source: Not reported

Assessment Funding: 40000

Assessment Funding Source: DTSC via 128a grnt

Redevelopment Funding: Not reported

Redev. Funding Source: Not reported

Redev. Funding Entity Name: Not reported

Redevelopment Start Date: Not reported

Assessment Funding Entity: State/Tribal Funding (non-section 128(a))

Cleanup Funding Entity: Not reported

Grant Type: Not reported

Accomplishment Type: Supplemental Assessment

Accomplishment Count: N

Cooperative Agreement Number: 00T14502

Start Date: 1/6/2011

Ownership Entity: Government

Completion Date: 4/30/2011

Current Owner: Brentwood Union Elementary School District

Did Owner Change: N

Cleanup Required: Y

Video Available: Not reported

Photo Available: Y

Institutional Controls Required: N

IC Category Proprietary Controls: Not reported

IC Cat. Info. Devices: Not reported

IC Cat. Gov. Controls: Not reported

IC Cat. Enforcement Permit Tools: Not reported

IC in place date: Not reported

IC in place: Not reported

State/tribal program date: 10/18/2010

State/tribal program ID: 204222-83

State/tribal NFA date: Not reported

Contaminant Found: Lead Other Contaminants

Contaminant Cleanup: Not reported

Media Affected: Soil

Media Cleanup: Not reported

Num. of cleanup and re-dev. jobs: Not reported

Past use greenspace acreage: Not reported

Past use residential acreage: 10.31

Past use commercial acreage: 8.62

Past use industrial acreage: Not reported

Future use greenspace acreage: Not reported

Future use residential acreage: 10.31

Future use commercial acreage: 8.62

Future use industrial acreage: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PROPOSED FOURTH MIDDLE SCHOOL SITE (Continued)

1023620470

Superfund Fed. landowner flag:	N
Future Use: Multistory	Not reported
Past Use: Multistory	Not reported
Property Description:	Site consists of APNs: 018-100-033-23.10-ac, 5-build & ag-land -040-7 7,21-ac, 3 build 500 gal gas UST/250 gal diesel AST, & ag -041-5 8.69-ac ag. AG since 1939. See attachment for more details.
Below Poverty Number:	146
Below Poverty Percent:	7.58
Meidan Income:	1814
Meidan Income Number:	318
Meidan Income Percent:	16.51
Vacant Housing Number:	32
Vacant Housing Percent:	5.53
Unemployed Number:	79
Unemployed Percent:	4.1

FINDS:

Registry ID: 110070068534

[Click Here for FRS Facility Detail Report:](#)

Environmental Interest/Information System:

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**A5
 NW
 1/4-1/2
 0.482 mi.
 2546 ft.**

**DUTRA, LEROY
 SMITH LN
 BRENTWOOD, CA 94513
 Site 2 of 2 in cluster A**

**ENVIROSTOR S101580840
 SCH N/A
 SWEEPS UST
 CA FID UST
 CONTRA COSTA CO. SITE LIST
 CERS**

**Relative:
 Higher**

**Actual:
 81 ft.**

ENVIROSTOR:

Name:	PROPOSED LONE TREE SCHOOL
Address:	2340 SMITH ROAD
City,State,Zip:	BRENTWOOD, CA 95413
Facility ID:	60000916
Status:	Active
Status Date:	01/29/2019
Site Code:	204222
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	15.91
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Jose Luevano
Supervisor:	Jose Salcedo
Division Branch:	Cleanup Legacy Landfills
Assembly:	11
Senate:	07, 3
Special Program:	EPA - Target Site Investigation
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

Latitude: 37.95865
Longitude: -121.7105
APN: 018-100-033-2, 018-100-040-7, 018-100-041-5, 018100040, 018100041
Past Use: AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, FUEL - VEHICLE STORAGE/ REFUELING
Potential COC: Arsenic Benzene Chlordane DDD DDE DDT Lead Toxaphene TPH-diesel TPH-gas
Confirmed COC: 30001-NO 30003-NO 30004-NO 30006-NO 30007-NO 30008-NO 30013-NO 30023-NO 30024-NO 30025-NO No Contaminants found
Potential Description: SOIL
Alias Name: Dutra Properties
Alias Type: Alternate Name
Alias Name: LONE TREE SCHOOL
Alias Type: Alternate Name
Alias Name: Proposed Fourth Middle School Site
Alias Type: Alternate Name
Alias Name: 018-100-033-2
Alias Type: APN
Alias Name: 018-100-040-7
Alias Type: APN
Alias Name: 018-100-041-5
Alias Type: APN
Alias Name: 018100040
Alias Type: APN
Alias Name: 018100041
Alias Type: APN
Alias Name: 204222
Alias Type: Project Code (Site Code)
Alias Name: 60000916
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 4.14 Request
Completed Date: 04/01/2009
Comments: DTSC approved Form SFPD 4.14.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 12/10/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/05/2022
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/12/2008
Comments: Phase I ESA submitted as background information for a PEAR site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/10/2009
Comments: DTSC concurred and approved the PEA with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 06/27/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 10/18/2010
Comments: CFA fully executed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 01/10/2011
Comments: DTSC PM and consultant (Stuart StClair, URS) conducted site visit. Met on-site by District representative (Barbara Tittle)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 01/07/2011
Comments: Work Order issued.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inactive Status Letter
Completed Date: 12/14/2011
Comments: Inactive status notice mailed out 12/14/2011

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/31/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: School Cleanup Agreement
Completed Date: 04/06/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 06/16/2008
Comments: DTSC fully executed the EOA. One original mailed to the District and the other maintained in the project file. DA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

Completed Document Type: Supplemental Site Investigation Report
Completed Date: 05/13/2011
Comments: DTSC approved the SSI Report with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 02/23/2011
Comments: DTSC approved the SSI Workplan for implementation. Field work is scheduled for Feb 28 and Mar 1, 2011.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/28/2011
Comments: DTSC provided SSI fieldwork oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/23/2019
Comments: On Jan 23, 2019, DTSC received letter from District requesting reactivation of the Proposed School Site project.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: PROPOSED LONE TREE SCHOOL
Address: 2340 SMITH ROAD
City,State,Zip: BRENTWOOD, CA 95413
Facility ID: 60000916
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 15.91
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Jose Luevano
Supervisor: Jose Salcedo
Division Branch: Cleanup Legacy Landfills
Site Code: 204222
Assembly: 11
Senate: 07, 3
Special Program Status: EPA - Target Site Investigation
Status: Active
Status Date: 01/29/2019

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

Restricted Use: NO
Funding: School District
Latitude: 37.95865
Longitude: -121.7105
APN: 018-100-033-2, 018-100-040-7, 018-100-041-5, 018100040, 018100041
Past Use: AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, FUEL - VEHICLE STORAGE/ REFUELING
Potential COC: Arsenic, Benzene, Chlordane, DDD, DDE, DDT, Lead, Toxaphene, TPH-diesel, TPH-gas
Confirmed COC: 30001-NO, 30003-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30013-NO, 30023-NO, 30024-NO, 30025-NO, No Contaminants found
Potential Description: SOIL
Alias Name: Dutra Properties
Alias Type: Alternate Name
Alias Name: LONE TREE SCHOOL
Alias Type: Alternate Name
Alias Name: Proposed Fourth Middle School Site
Alias Type: Alternate Name
Alias Name: 018-100-033-2
Alias Type: APN
Alias Name: 018-100-040-7
Alias Type: APN
Alias Name: 018-100-041-5
Alias Type: APN
Alias Name: 018100040
Alias Type: APN
Alias Name: 018100041
Alias Type: APN
Alias Name: 204222
Alias Type: Project Code (Site Code)
Alias Name: 60000916
Alias Type: Envirostor ID Number
Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 4.14 Request
Completed Date: 04/01/2009
Comments: DTSC approved Form SFPD 4.14.
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 12/10/2021
Comments: Not reported
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 01/05/2022
Comments: Not reported
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/12/2008
Comments: Phase I ESA submitted as background information for a PEAR site.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/10/2009
Comments: DTSC concurred and approved the PEA with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 06/27/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 10/18/2010
Comments: CFA fully executed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 01/10/2011
Comments: DTSC PM and consultant (Stuart StClair, URS) conducted site visit. Met on-site by District representative (Barbara Tittle)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 01/07/2011
Comments: Work Order issued.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inactive Status Letter
Completed Date: 12/14/2011
Comments: Inactive status notice mailed out 12/14/2011

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/31/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: School Cleanup Agreement
Completed Date: 04/06/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 06/16/2008
Comments: DTSC fully executed the EOA. One original mailed to the District and the other maintained in the project file. DA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 05/13/2011
Comments: DTSC approved the SSI Report with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 02/23/2011
Comments: DTSC approved the SSI Workplan for implementation. Field work is scheduled for Feb 28 and Mar 1, 2011.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/28/2011
Comments: DTSC provided SSI fieldwork oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/23/2019
Comments: On Jan 23, 2019, DTSC received letter from District requesting reactivation of the Proposed School Site project.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SWEEPS UST:

Name: DUTRA, LEROY
Address: SMITH LN
City: BRENTWOOD
Status: Not reported
Comp Number: 30096
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 07-000-030096-000001
Tank Status: Not reported
Capacity: 300
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

CA FID UST:

Facility ID: 07000800
Regulated By: UTKNI
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4156341795
Mail To: Not reported
Mailing Address: SMITH LN
Mailing Address 2: Not reported
Mailing City,St,Zip: BRENTWOOD 94513
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

CONTRA COSTA CO. SITE LIST:

Name: DUTRA, LEROY
Address: 2340 SMITH LN
City: BRENTWOOD
Facility ID: FA0032036
Billing Status: INACTIVE, NON-BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: UNDERGROUND STORAGE TANK SITE
Region: CONTRA COSTA
Cupa Number: 730096
CERS ID: 10006633

CERS:

Name: PROPOSED SCHOOL SITE
Address: 2340 SMITH ROAD
City,State,Zip: BRENTWOOD, CA 95413
Site ID: 609567
CERS ID: 60000916
CERS Description: School Cleanup

Affiliation:

Affiliation Type Desc: Lead Project Manager
Entity Name: Jose Luevano
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Supervisor
Entity Name: Jose Salcedo
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DUTRA, LEROY (Continued)

S101580840

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

6
ESE
1/2-1
0.762 mi.
4024 ft.

SAND CREEK ELEMENTARY SCHOOL
SAND CREEK ROAD/GARIN PARKWAY
BRENTWOOD, CA 94513

ENVIROSTOR **S116165382**
SCH **N/A**

Relative:
Lower

Actual:
58 ft.

ENVIROSTOR:
Name: SAND CREEK ELEMENTARY SCHOOL
Address: SAND CREEK ROAD/GARIN PARKWAY
City,State,Zip: BRENTWOOD, CA 94513
Facility ID: 07100004
Status: No Further Action
Status Date: 04/04/2006
Site Code: 204148
Site Type: School Investigation
Site Type Detailed: School
Acres: 12
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Mark Malinowski
Division Branch: Northern California Schools & Santa Susana
Assembly: 11
Senate: 07
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 37.9482
Longitude: -121.6889
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS, OIL FIELD
Potential COC: DDD Toxaphene Chromium III Toluene Xylenes
Confirmed COC: 30550-NO 30023-NO 30152-NO 30006-NO 30593-NO
Potential Description: SOIL
Alias Name: BRENTWOOD UNION SD-PROPOSED SAND CREEK ES
Alias Type: Alternate Name
Alias Name: 204148
Alias Type: Project Code (Site Code)
Alias Name: 07100003
Alias Type: Envirostor ID Number
Alias Name: 07100004
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 06/16/2005
Comments: Accepted changes made to the workplan and finalized letter for signature. Workplan Addendum addressing comments. Pea due 7/7/05
6/10/05 Verbal Approval of Workplan and letter signed 6/16/05

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAND CREEK ELEMENTARY SCHOOL (Continued)

S116165382

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 04/13/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/04/2006
Comments: DTSC approved the Preliminary Environmental Assessment with a no further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 06/14/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 03/07/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 01/19/2005
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: SAND CREEK ELEMENTARY SCHOOL
Address: SAND CREEK ROAD/GARIN PARKWAY
City,State,Zip: BRENTWOOD, CA 94513
Facility ID: 07100004
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 12
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Mark Malinowski

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAND CREEK ELEMENTARY SCHOOL (Continued)

S116165382

Division Branch: Northern California Schools & Santa Susana
Site Code: 204148
Assembly: 11
Senate: 07
Special Program Status: Not reported
Status: No Further Action
Status Date: 04/04/2006
Restricted Use: NO
Funding: School District
Latitude: 37.9482
Longitude: -121.6889
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS, OIL FIELD
Potential COC: DDD, Toxaphene, Chromium III, Toluene, Xylenes
Confirmed COC: 30550-NO, 30023-NO, 30152-NO, 30006-NO, 30593-NO
Potential Description: SOIL
Alias Name: BRENTWOOD UNION SD-PRPOSED SAND CREEK ES
Alias Type: Alternate Name
Alias Name: 204148
Alias Type: Project Code (Site Code)
Alias Name: 07100003
Alias Type: Envirostor ID Number
Alias Name: 07100004
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 06/16/2005
Comments: Accepted changes made to the workplan and finalized letter for signature. Workplan Addendum addressing comments. Pea due 7/7/05
6/10/05 Verbal Approval of Workplan and letter signed 6/16/05

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 04/13/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/04/2006
Comments: DTSC approved the Preliminary Environmental Assessment with a no further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 06/14/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 03/07/2005
Comments: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

SAND CREEK ELEMENTARY SCHOOL (Continued)

S116165382

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Environmental Oversight Agreement
 Completed Date: 01/19/2005
 Comments: Not reported

Future Area Name: Not reported
 Future Sub Area Name: Not reported
 Future Document Type: Not reported
 Future Due Date: Not reported
 Schedule Area Name: Not reported
 Schedule Sub Area Name: Not reported
 Schedule Document Type: Not reported
 Schedule Due Date: Not reported
 Schedule Revised Date: Not reported

7
WNW
1/2-1
0.858 mi.
4531 ft.

SKIPOLINI PROPERTY
7281 LONE TREE WAY
BRENTWOOD, CA 94513

ENVIROSTOR
VCP
HAZNET
HWTS

S112931201
N/A

Relative:
Higher
Actual:
92 ft.

ENVIROSTOR:
 Name: SKIPOLINI PROPERTY
 Address: 7281 LONE TREE WAY
 City,State,Zip: BRENTWOOD, CA 94513
 Facility ID: 60002296
 Status: Active
 Status Date: 01/01/2016
 Site Code: 202227
 Site Type: Voluntary Cleanup
 Site Type Detailed: Voluntary Agreement
 Acres: 1.72
 NPL: NO
 Regulatory Agencies: SMBRP
 Lead Agency: SMBRP
 Program Manager: Parag Shah
 Supervisor: Karina Navarro
 Division Branch: Cleanup Berkeley
 Assembly: , 11
 Senate: , 07, 3
 Special Program: Not reported
 Restricted Use: NO
 Site Mgmt Req: NONE SPECIFIED
 Funding: Responsible Party
 Latitude: 37.96159
 Longitude: -121.7193
 APN: 018-080-022, 018080022
 Past Use: AGRICULTURAL - ORCHARD, RESIDENTIAL AREA
 Potential COC: Lead
 Confirmed COC: Lead
 Potential Description: SOIL
 Alias Name: 018-080-022
 Alias Type: APN
 Alias Name: 018080022
 Alias Type: APN
 Alias Name: 202078
 Alias Type: Project Code (Site Code)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKIPOLINI PROPERTY (Continued)

S112931201

Alias Name: 202078
Alias Type: Project Code (Site Code)
Alias Name: 202227
Alias Type: Project Code (Site Code)
Alias Name: 60002296
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 01/27/2016
Comments: DTSC is the lead Agency. This project was assigned in Jan 2016

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/13/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/21/2017
Comments: FY 2017/2018 COST ESTIMATE FOR OVERSIGHT OF RESPONSE WORK COMPLETED.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/02/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 03/15/2019
Comments: The RP and DTSC signed on the Voluntary Cleanup Agreement for the Skipolini Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 06/30/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/30/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 07/08/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKIPOLINI PROPERTY (Continued)

S112931201

Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement Termination Notification
Completed Date: 03/21/2018
Comments: Date added to complete activity.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 11/11/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 11/11/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 08/02/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 02/27/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Project Management
Completed Date: 06/30/2021
Comments: completed fiscal year

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Request for Tribal Outreach
Completed Date: 01/13/2022
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/08/2021
Comments: Final DTSC Cost Letter

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Removal Action Workplan
Future Due Date: 2023
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Removal Action Completion Report
Future Due Date: 2023
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKIPOLINI PROPERTY (Continued)

S112931201

Future Document Type: No Further Action Letter
Future Due Date: 2024
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:

Name: SKIPOLINI PROPERTY
Address: 7281 LONE TREE WAY
City,State,Zip: BRENTWOOD, CA 94513
Facility ID: 60002296
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Agreement
Site Mgmt. Req.: NONE SPECIFIED
Acres: 1.72
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Parag Shah
Supervisor: Karina Navarro
Division Branch: Cleanup Berkeley
Site Code: 202227
Assembly: , 11
Senate: , 07, 3
Special Programs Code: Not reported
Status: Active
Status Date: 01/01/2016
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 37.96159 / -121.7193
APN: 018-080-022, 018080022
Past Use: AGRICULTURAL - ORCHARD, RESIDENTIAL AREA
Potential COC: 30013
Confirmed COC: 30013
Potential Description: SOIL
Alias Name: 018-080-022
Alias Type: APN
Alias Name: 018080022
Alias Type: APN
Alias Name: 202078
Alias Type: Project Code (Site Code)
Alias Name: 202078
Alias Type: Project Code (Site Code)
Alias Name: 202227
Alias Type: Project Code (Site Code)
Alias Name: 60002296
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 01/27/2016
Comments: DTSC is the lead Agency. This project was assigned in Jan 2016

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKIPOLINI PROPERTY (Continued)

S112931201

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/13/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/21/2017
Comments: FY 2017/2018 COST ESTIMATE FOR OVERSIGHT OF RESPONSE WORK COMPLETED.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/02/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 03/15/2019
Comments: The RP and DTSC signed on the Voluntary Cleanup Agreement for the Skipolini Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 06/30/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/30/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 07/08/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement Termination Notification
Completed Date: 03/21/2018
Comments: Date added to complete activity.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 11/11/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKIPOLINI PROPERTY (Continued)

S112931201

Completed Document Type: Fact Sheets
Completed Date: 11/11/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 08/02/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 02/27/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Project Management
Completed Date: 06/30/2021
Comments: completed fiscal year

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Request for Tribal Outreach
Completed Date: 01/13/2022
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/08/2021
Comments: Final DTSC Cost Letter

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Removal Action Workplan
Future Due Date: 2023
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Removal Action Completion Report
Future Due Date: 2023
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: No Further Action Letter
Future Due Date: 2024
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HAZNET:

Name: MERITAGE HOMES OF NORTHERN CALIFORNIA INC
Address: 7281 LONE TREE WAY
Address 2: Not reported
City,State,Zip: BRENTWOOD, CA 94513

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKIPOLINI PROPERTY (Continued)

S112931201

Contact: JOAN SYLVIA/MGR
Telephone: 9252883033
Mailing Name: Not reported
Mailing Address: 1800 SUTTER ST #500

Year: 2003
Gepaid: CAC002567472
TSD EPA ID: CAD982042475
CA Waste Code: 151 - Asbestos containing waste
Disposal Method: D80 - Disposal, Land Fill
Tons: 5.0568

Additional Info:

Year: 2003
Gen EPA ID: CAC002567472

Shipment Date: 20030711
Creation Date: 7/23/2004 9:17:57
Receipt Date: 20030725
Manifest ID: 22747799
Trans EPA ID: CAD982029258
Trans Name: Not reported
Trans 2 EPA ID: CAR000037283
Trans 2 Name: Not reported
TSD EPA ID: CAD982042475
Trans Name: Not reported
TSD EPA Alt ID: CAD982042475
TSD EPA Alt Name: Not reported
Waste Code Description: 151 - Asbestos-containing waste
RCRA Code: Not reported
Meth Code: D80 - Disposal, Land Fill
Quantity Tons: 5.0568
Waste Quantity: 6
Quantity Unit: Y
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

HWTS:

Name: MERITAGE HOMES OF NORTHERN CALIFORNIA INC
Address: 7281 LONE TREE WAY
Address 2: Not reported
City,State,Zip: BRENTWOOD, CA 94513
EPA ID: CAC002567472
Inactive Date: 01/07/2004
Create Date: 07/10/2003
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 1800 SUTTER ST #500
Mailing Address 2: Not reported
Mailing City,State,Zip: CONCORD, CA 94520
Owner Name: MERITAGE HOMES OF NORTHERN CALIFORNIA
Owner Address: 1800 SUTTER ST #500

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SKIPOLINI PROPERTY (Continued)

S112931201

Owner Address 2:	Not reported
Owner City,State,Zip:	CONCORD, CA 94520
Contact Name:	JOAN SYLVIA/MGR
Contact Address:	1800 SUTTER ST #500
Contact Address 2:	Not reported
City,State,Zip:	CONCORD, CA 94520
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	37.961609
Longitude:	-121.72594

Count: 8 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BRENTWOOD	S106707852	LYON WOODFIELD PROJECT - BRENTWOOD	BRENTWOOD		CPS-SLIC
BRENTWOOD	S106707851	DOW CHEMICAL COMPANY - MARSH CREEK	BRENTWOOD		CPS-SLIC
BRENTWOOD	S106707849	STATE ROUTE 4 BYPASS AUTHORITY	BRENTWOOD		CPS-SLIC
BRENTWOOD	S106230275	VENTURINI LEASE SITE (BRENTWOOD OI	DEER VALLEY RD & LONE TREE WAY		CPS-SLIC
BRENTWOOD	S106112407	OXY USA INC. (BRENTWOOD OIL & GAS	LONE TREE WAY & DEER VALLEY RD		CPS-SLIC
BRENTWOOD	S106842886	COWELL RANCH/VINEYARDS AT MARSH CR	MARSH CREEK RD/CONCORD AVE		CPS-SLIC
BRENTWOOD	S126982905	MARSH CANYON SANITARY LANDFILL	1/2 MILE S/O MARSH CREEK RD	94513	SWF/LF
BRENTWOOD	S126982938	COWELL RANCH/J.MARSH ST HIST PARK	W. SIDE MARSH CREEK 1.5 M SW W	94513	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2023	Source: EPA
Date Data Arrived at EDR: 02/03/2023	Telephone: N/A
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 04/03/2023
Number of Days to Update: 25	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2023	Source: EPA
Date Data Arrived at EDR: 02/02/2023	Telephone: N/A
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 04/03/2023
Number of Days to Update: 26	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/20/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/28/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMs by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2023	Source: EPA
Date Data Arrived at EDR: 02/02/2023	Telephone: 800-424-9346
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 04/03/2023
Number of Days to Update: 26	Next Scheduled EDR Contact: 07/24/2023
	Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/06/2023	Source: EPA
Date Data Arrived at EDR: 03/09/2023	Telephone: 800-424-9346
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/02/2022	Source: Department of the Navy
Date Data Arrived at EDR: 11/08/2022	Telephone: 843-820-7326
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 02/03/2023
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/27/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/16/2022	Telephone: 703-603-0695
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 02/21/2023
Number of Days to Update: 85	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/27/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/16/2022	Telephone: 703-603-0695
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 02/21/2023
Number of Days to Update: 85	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/12/2022

Source: National Response Center, United States Coast Guard

Date Data Arrived at EDR: 12/14/2022

Telephone: 202-267-2180

Date Made Active in Reports: 12/19/2022

Last EDR Contact: 03/21/2023

Number of Days to Update: 5

Next Scheduled EDR Contact: 07/03/2023

Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/23/2023

Source: Department of Toxic Substances Control

Date Data Arrived at EDR: 01/24/2023

Telephone: 916-323-3400

Date Made Active in Reports: 04/10/2023

Last EDR Contact: 04/25/2023

Number of Days to Update: 76

Next Scheduled EDR Contact: 08/07/2023

Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/23/2023

Source: Department of Toxic Substances Control

Date Data Arrived at EDR: 01/24/2023

Telephone: 916-323-3400

Date Made Active in Reports: 04/10/2023

Last EDR Contact: 04/25/2023

Number of Days to Update: 76

Next Scheduled EDR Contact: 08/07/2023

Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/06/2023

Source: Department of Resources Recycling and Recovery

Date Data Arrived at EDR: 02/07/2023

Telephone: 916-341-6320

Date Made Active in Reports: 04/26/2023

Last EDR Contact: 02/07/2023

Number of Days to Update: 78

Next Scheduled EDR Contact: 05/22/2023

Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: see region list
Date Made Active in Reports: 03/30/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 23	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 11/23/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/06/2022	Telephone: 415-972-3372
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/14/2022 Source: EPA Region 7
Date Data Arrived at EDR: 12/06/2022 Telephone: 913-551-7003
Date Made Active in Reports: 03/03/2023 Last EDR Contact: 04/20/2023
Number of Days to Update: 87 Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/23/2022 Source: EPA Region 8
Date Data Arrived at EDR: 12/06/2022 Telephone: 303-312-6271
Date Made Active in Reports: 03/03/2023 Last EDR Contact: 04/20/2023
Number of Days to Update: 87 Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/23/2022 Source: EPA Region 6
Date Data Arrived at EDR: 12/06/2022 Telephone: 214-665-6597
Date Made Active in Reports: 03/03/2023 Last EDR Contact: 04/20/2023
Number of Days to Update: 87 Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/26/2022 Source: EPA Region 4
Date Data Arrived at EDR: 12/06/2022 Telephone: 404-562-8677
Date Made Active in Reports: 03/03/2023 Last EDR Contact: 04/20/2023
Number of Days to Update: 87 Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/19/2022 Source: EPA Region 1
Date Data Arrived at EDR: 12/06/2022 Telephone: 617-918-1313
Date Made Active in Reports: 03/03/2023 Last EDR Contact: 04/20/2023
Number of Days to Update: 87 Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/14/2022 Source: EPA, Region 5
Date Data Arrived at EDR: 12/06/2022 Telephone: 312-886-7439
Date Made Active in Reports: 03/03/2023 Last EDR Contact: 04/20/2023
Number of Days to Update: 87 Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/23/2022 Source: EPA Region 10
Date Data Arrived at EDR: 12/06/2022 Telephone: 206-553-2857
Date Made Active in Reports: 04/19/2023 Last EDR Contact: 04/20/2023
Number of Days to Update: 134 Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004	Source: Region Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 11/18/2004	Telephone: 213-576-6600
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 07/01/2011
Number of Days to Update: 47	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005	Source: Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 04/05/2005	Telephone: 916-464-3291
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/02/2022	Source: SWRCB
Date Data Arrived at EDR: 12/02/2022	Telephone: 916-341-5851
Date Made Active in Reports: 02/22/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 11/28/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/02/2022	Telephone: 916-327-7844
Date Made Active in Reports: 02/23/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 03/06/2023	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 03/09/2023
Number of Days to Update: 69	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/23/2022	Source: EPA Region 6
Date Data Arrived at EDR: 12/06/2022	Telephone: 214-665-7591
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/14/2022	Source: EPA Region 5
Date Data Arrived at EDR: 12/06/2022	Telephone: 312-886-6136
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/19/2022	Source: EPA, Region 1
Date Data Arrived at EDR: 12/06/2022	Telephone: 617-918-1313
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 11/23/2022	Source: EPA Region 8
Date Data Arrived at EDR: 12/06/2022	Telephone: 303-312-6137
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 11/23/2022	Source: EPA Region 9
Date Data Arrived at EDR: 12/06/2022	Telephone: 415-972-3368
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/23/2022	Source: EPA Region 4
Date Data Arrived at EDR: 12/06/2022	Telephone: 404-562-9424
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/23/2022	Source: EPA Region 10
Date Data Arrived at EDR: 12/06/2022	Telephone: 206-553-2857
Date Made Active in Reports: 04/19/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 134	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/14/2022	Source: EPA Region 7
Date Data Arrived at EDR: 12/06/2022	Telephone: 913-551-7003
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 07/08/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/23/2023	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/24/2023	Telephone: 916-323-3400
Date Made Active in Reports: 04/10/2023	Last EDR Contact: 04/25/2023
Number of Days to Update: 76	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 03/17/2023
Number of Days to Update: 142	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/14/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/14/2022	Telephone: 916-323-7905
Date Made Active in Reports: 03/07/2023	Last EDR Contact: 03/21/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 04/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/13/2023	Telephone: 202-566-2777
Date Made Active in Reports: 04/19/2023	Last EDR Contact: 04/06/2023
Number of Days to Update: 6	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 04/19/2023
Number of Days to Update: 30	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/02/2022	Source: Department of Conservation
Date Data Arrived at EDR: 12/02/2022	Telephone: 916-323-3836
Date Made Active in Reports: 02/22/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 11/22/2022	Telephone: 916-341-6422
Date Made Active in Reports: 02/13/2023	Last EDR Contact: 02/15/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 04/19/2023
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 04/12/2023
Number of Days to Update: 137	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 04/27/2023
Number of Days to Update: 176	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 01/06/2023	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/02/2023	Telephone: 202-307-1000
Date Made Active in Reports: 02/10/2023	Last EDR Contact: 02/02/2023
Number of Days to Update: 8	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/23/2023	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/24/2023	Telephone: 916-323-3400
Date Made Active in Reports: 04/10/2023	Last EDR Contact: 04/25/2023
Number of Days to Update: 76	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/30/2022	Telephone: 916-255-6504
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 04/26/2023
Number of Days to Update: 71	Next Scheduled EDR Contact: 08/14/2023
	Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/05/2023	Source: CalEPA
Date Data Arrived at EDR: 01/06/2023	Telephone: 916-323-2514
Date Made Active in Reports: 01/11/2023	Last EDR Contact: 04/18/2023
Number of Days to Update: 5	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 01/06/2023	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/02/2023	Telephone: 202-307-1000
Date Made Active in Reports: 02/10/2023	Last EDR Contact: 02/02/2023
Number of Days to Update: 8	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/03/2023	Source: San Francisco County Department of Public Health
Date Data Arrived at EDR: 02/07/2023	Telephone: 415-252-3896
Date Made Active in Reports: 04/25/2023	Last EDR Contact: 04/26/2023
Number of Days to Update: 77	Next Scheduled EDR Contact: 08/14/2023
	Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 01/06/2023
Date Made Active in Reports: 01/11/2023
Number of Days to Update: 5

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/23/2023
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 03/23/2023
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 76

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/13/2022	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 12/14/2022	Telephone: 202-366-4555
Date Made Active in Reports: 03/10/2023	Last EDR Contact: 03/21/2023
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 08/02/2022	Source: Office of Emergency Services
Date Data Arrived at EDR: 10/17/2022	Telephone: 916-845-8400
Date Made Active in Reports: 01/04/2023	Last EDR Contact: 04/20/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Quality Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 23	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/01/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 91

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/11/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/02/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 01/30/2023
Number of Days to Update: 88	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 02/03/2023
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020	Source: EPA
Date Data Arrived at EDR: 06/14/2022	Telephone: 202-260-5521
Date Made Active in Reports: 03/24/2023	Last EDR Contact: 03/13/2023
Number of Days to Update: 283	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021	Source: EPA
Date Data Arrived at EDR: 11/01/2022	Telephone: 202-566-0250
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 02/16/2023
Number of Days to Update: 100	Next Scheduled EDR Contact: 05/29/2023
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/17/2023	Source: EPA
Date Data Arrived at EDR: 01/18/2023	Telephone: 202-564-4203
Date Made Active in Reports: 04/19/2023	Last EDR Contact: 04/18/2023
Number of Days to Update: 91	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/27/2022
Date Data Arrived at EDR: 11/01/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 14

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/03/2022
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 89

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 03/29/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/26/2022	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 11/22/2022	Telephone: 301-415-7169
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 04/13/2023
Number of Days to Update: 13	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020	Source: Department of Energy
Date Data Arrived at EDR: 11/30/2021	Telephone: 202-586-8719
Date Made Active in Reports: 02/22/2022	Last EDR Contact: 03/03/2023
Number of Days to Update: 84	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 02/27/2023
Number of Days to Update: 251	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 02/03/2023
Number of Days to Update: 96	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 03/23/2023
Number of Days to Update: 84	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 01/28/2020	Telephone: 202-366-4595
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 04/25/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 85

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/13/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 11/17/2022
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/22/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 03/01/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 23

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 02/24/2023
Number of Days to Update: 97	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/20/2022	Source: Department of Interior
Date Data Arrived at EDR: 12/20/2022	Telephone: 202-208-2609
Date Made Active in Reports: 03/10/2023	Last EDR Contact: 03/16/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/02/2023	Source: EPA
Date Data Arrived at EDR: 02/28/2023	Telephone: (415) 947-8000
Date Made Active in Reports: 03/24/2023	Last EDR Contact: 02/28/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 202-564-0527
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 02/24/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/04/2023	Telephone: 202-564-2280
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/31/2023
Number of Days to Update: 89	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/13/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 64

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 07/08/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 123

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020	Source: Department of Health & Human Services
Date Data Arrived at EDR: 03/17/2021	Telephone: 202-741-5770
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 04/20/2023
Number of Days to Update: 601	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 01/03/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 03/30/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 03/30/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/07/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 8	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 03/30/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facility's name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 03/30/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration's document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 03/30/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 01/02/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 04/27/2023
Number of Days to Update: 88	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/02/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/02/2022	Telephone: 866-480-1028
Date Made Active in Reports: 02/23/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 09/06/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/06/2022	Telephone: 916-341-5455
Date Made Active in Reports: 10/26/2022	Last EDR Contact: 03/07/2023
Number of Days to Update: 50	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/14/2022	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 12/14/2022	Telephone: 916-323-3400
Date Made Active in Reports: 03/07/2023	Last EDR Contact: 03/21/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 12/07/2021	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/09/2022	Telephone: 925-454-2361
Date Made Active in Reports: 05/17/2022	Last EDR Contact: 02/10/2023
Number of Days to Update: 8	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 09/01/2021	Telephone: 916-327-4498
Date Made Active in Reports: 11/19/2021	Last EDR Contact: 01/24/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/14/2022	Source: Antelope Valley Air Quality Management District
Date Data Arrived at EDR: 11/14/2022	Telephone: 661-723-8070
Date Made Active in Reports: 02/01/2023	Last EDR Contact: 02/23/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2022	Source: South Coast Air Quality Management District
Date Data Arrived at EDR: 11/30/2022	Telephone: 909-396-3211
Date Made Active in Reports: 02/14/2023	Last EDR Contact: 02/15/2023
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2020	Source: California Air Resources Board
Date Data Arrived at EDR: 06/13/2022	Telephone: 916-322-2990
Date Made Active in Reports: 08/30/2022	Last EDR Contact: 03/16/2023
Number of Days to Update: 78	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/10/2023
Date Data Arrived at EDR: 01/18/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/11/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/08/2022
Date Data Arrived at EDR: 11/23/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 82

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/03/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/10/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/01/2023
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/10/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/01/2023
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/03/2023
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/02/2022
Date Data Arrived at EDR: 12/02/2022
Date Made Active in Reports: 02/22/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 10/31/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/14/2023
Number of Days to Update: 77

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/03/2022
Date Data Arrived at EDR: 11/03/2022
Date Made Active in Reports: 01/25/2023
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/07/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/14/2023
Number of Days to Update: 77

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/07/2022
Date Data Arrived at EDR: 12/07/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Annually

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: Department of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/13/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/02/2022
Date Data Arrived at EDR: 12/02/2022
Date Made Active in Reports: 02/23/2023
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/05/2023
Date Data Arrived at EDR: 01/06/2023
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 4

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/18/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/05/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/26/2022
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/13/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 03/07/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/07/2023	Telephone: 202-566-0250
Date Made Active in Reports: 03/24/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011	Source: EPA, Office of Water
Date Data Arrived at EDR: 08/05/2011	Telephone: 202-564-2496
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 03/30/2023
Number of Days to Update: 55	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: No Update Planned

MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 08/23/2022	Source: USGS
Date Data Arrived at EDR: 11/22/2022	Telephone: 703-648-6533
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 02/24/2023
Number of Days to Update: 98	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014	Source: EPA
Date Data Arrived at EDR: 02/05/2015	Telephone: 202-564-2497
Date Made Active in Reports: 03/06/2015	Last EDR Contact: 03/30/2023
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/13/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 196	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2022
Date Data Arrived at EDR: 12/28/2022
Date Made Active in Reports: 03/17/2023
Number of Days to Update: 79

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 01/31/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 76

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 12/15/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 6

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

COLUSA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 12/28/2022
Date Data Arrived at EDR: 01/24/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 76

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 05/04/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

GLENN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 01/13/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 01/30/2023
Date Data Arrived at EDR: 02/01/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/30/2023
Date Data Arrived at EDR: 02/01/2023
Date Made Active in Reports: 04/21/2023
Number of Days to Update: 79

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 11/04/2022
Date Data Arrived at EDR: 11/07/2022
Date Made Active in Reports: 01/25/2023
Number of Days to Update: 79

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/10/2023
Date Made Active in Reports: 03/23/2023
Number of Days to Update: 72

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/11/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/05/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 11/01/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/07/2023
Number of Days to Update: 83

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/24/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 11/01/2022	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 12/14/2022	Telephone: 213-978-3800
Date Made Active in Reports: 03/07/2023	Last EDR Contact: 03/24/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021	Source: Community Health Services
Date Data Arrived at EDR: 07/09/2021	Telephone: 323-890-7806
Date Made Active in Reports: 09/29/2021	Last EDR Contact: 04/18/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 04/05/2023
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/24/2023
	Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 04/12/2023
Number of Days to Update: 65	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/18/2022	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/19/2022	Telephone: 310-618-2973
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 04/12/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 02/09/2023
Number of Days to Update: 72	Next Scheduled EDR Contact: 05/29/2023
	Data Release Frequency: Varies

MARIN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

NAPA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 01/23/2023
Date Data Arrived at EDR: 01/25/2023
Date Made Active in Reports: 04/10/2023
Number of Days to Update: 75

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/19/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/24/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 10/28/2022
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/24/2022
Date Data Arrived at EDR: 08/01/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/26/2022
Date Data Arrived at EDR: 08/29/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 78

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/13/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/18/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 01/18/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SAN BENITO: CUPA Facility List Cupa facility list

Date of Government Version: 10/27/2022
Date Data Arrived at EDR: 10/28/2022
Date Made Active in Reports: 01/18/2023
Number of Days to Update: 82

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/18/2022
Date Data Arrived at EDR: 11/21/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/26/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/14/2023
Number of Days to Update: 77

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/27/2021
Date Data Arrived at EDR: 03/04/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 88

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010	Source: San Diego County Department of Environmental Health
Date Data Arrived at EDR: 06/15/2010	Telephone: 619-338-2371
Date Made Active in Reports: 07/09/2010	Last EDR Contact: 02/23/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2023	Source: San Francisco County Department of Environmental Health
Date Data Arrived at EDR: 02/07/2023	Telephone: 415-252-3896
Date Made Active in Reports: 04/26/2023	Last EDR Contact: 04/26/2023
Number of Days to Update: 78	Next Scheduled EDR Contact: 08/14/2023
	Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 04/26/2023
Number of Days to Update: 10	Next Scheduled EDR Contact: 08/14/2023
	Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/03/2022	Source: Department of Public Health
Date Data Arrived at EDR: 11/07/2022	Telephone: 415-252-3920
Date Made Active in Reports: 01/24/2023	Last EDR Contact: 04/26/2023
Number of Days to Update: 78	Next Scheduled EDR Contact: 08/14/2023
	Data Release Frequency: Quarterly

SAN FRANCISCO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing

a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 10/11/2022	Source: San Francisco Planning
Date Data Arrived at EDR: 10/14/2022	Telephone: 628-652-7483
Date Made Active in Reports: 01/04/2023	Last EDR Contact: 04/13/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 07/31/2023
	Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018	Source: Environmental Health Department
Date Data Arrived at EDR: 06/26/2018	Telephone: N/A
Date Made Active in Reports: 07/11/2018	Last EDR Contact: 03/09/2023
Number of Days to Update: 15	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 11/08/2022
Date Data Arrived at EDR: 11/09/2022
Date Made Active in Reports: 02/01/2023
Number of Days to Update: 64

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/10/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/02/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 10/28/2022
Date Data Arrived at EDR: 11/01/2022
Date Made Active in Reports: 01/20/2023
Number of Days to Update: 80

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List Cupa Facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/28/2021
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/09/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2022
Date Data Arrived at EDR: 08/25/2022
Date Made Active in Reports: 11/14/2022
Number of Days to Update: 81

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 11/17/2022
Date Data Arrived at EDR: 11/21/2022
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 81

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 01/13/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

TULARE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 08/14/2023
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/12/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2022
Date Data Arrived at EDR: 01/26/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 83

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/17/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/02/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2022
Date Data Arrived at EDR: 01/26/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 83

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/17/2023
Next Scheduled EDR Contact: 07/31/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/28/2022	Source: Environmental Health Division
Date Data Arrived at EDR: 12/02/2022	Telephone: 805-654-2813
Date Made Active in Reports: 02/23/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/19/2022	Source: Yolo County Department of Health
Date Data Arrived at EDR: 12/27/2022	Telephone: 530-666-8646
Date Made Active in Reports: 03/17/2023	Last EDR Contact: 03/22/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 01/26/2023	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 01/27/2023	Telephone: 530-749-7523
Date Made Active in Reports: 04/19/2023	Last EDR Contact: 04/19/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/07/2023
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/16/2022	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 11/16/2022	Telephone: 860-424-3375
Date Made Active in Reports: 02/06/2023	Last EDR Contact: 02/10/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 03/30/2023
Number of Days to Update: 36	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/27/2023
Next Scheduled EDR Contact: 08/07/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/06/2023
Next Scheduled EDR Contact: 07/24/2023
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/13/2022
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/06/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MCCOY PROPERTY
1901 LONE OAK ROAD
BRENTWOOD, CA 94513

TARGET PROPERTY COORDINATES

Latitude (North):	37.95275 - 37° 57' 9.90"
Longitude (West):	121.703992 - 121° 42' 14.37"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	613864.2
UTM Y (Meters):	4201159.0
Elevation:	71 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12008688 BRENTWOOD, CA
Version Date:	2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

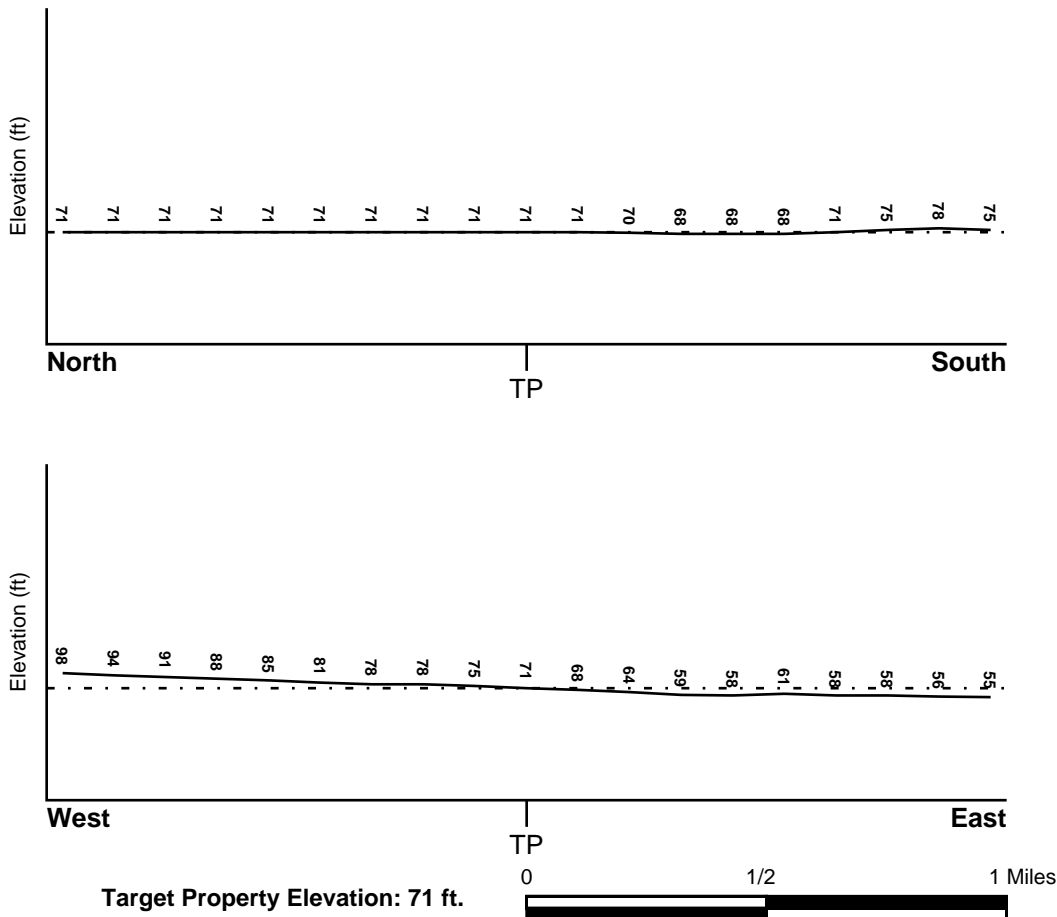
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06013C0354F	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06013C0360F	FEMA FIRM Flood data
06013C0353F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
BRENTWOOD	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

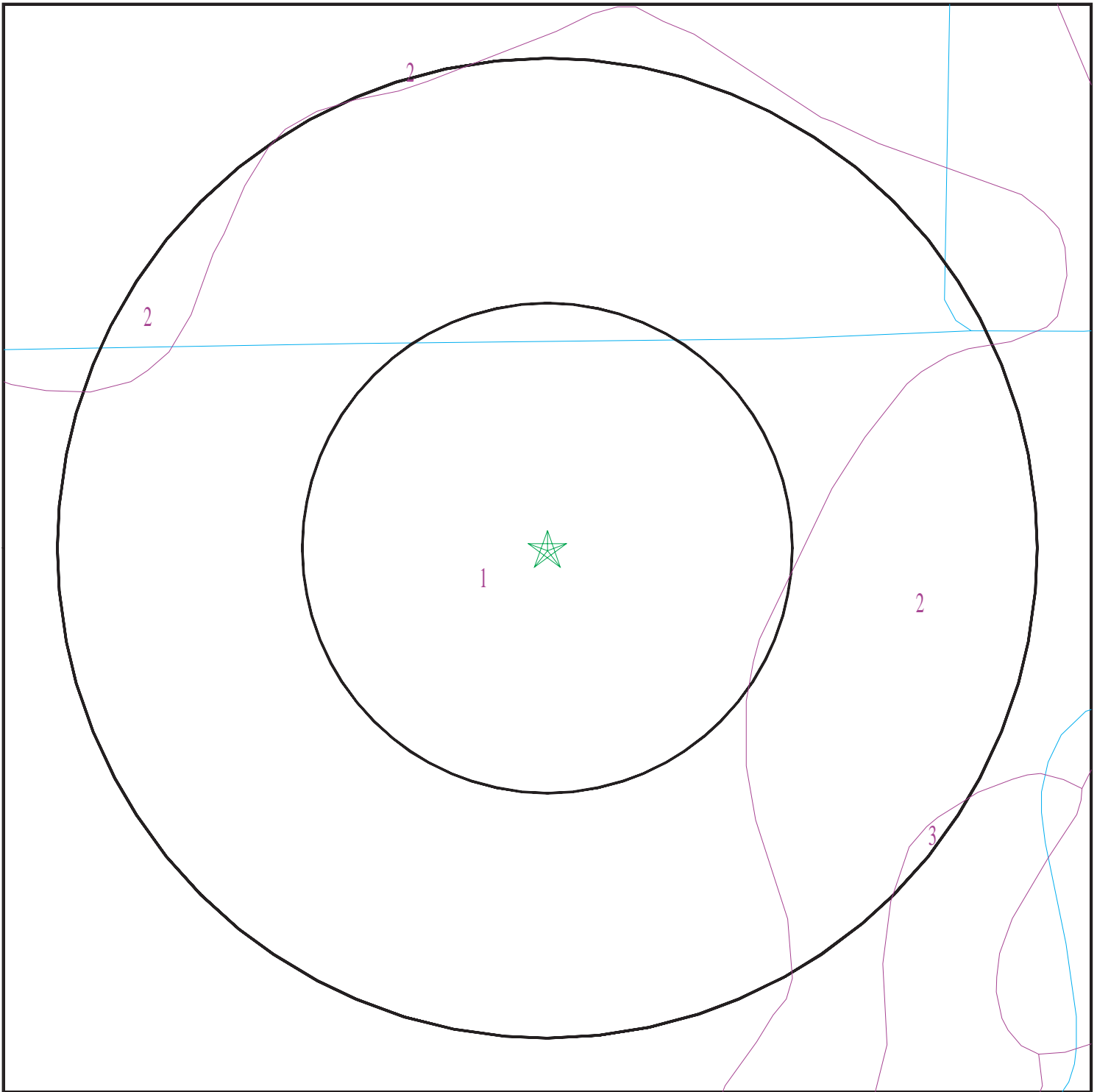
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (<i>decoded above as Era, System & Series</i>)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7323104.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: McCoy Property
ADDRESS: 1901 Lone Oak Road
Brentwood CA 94513
LAT/LONG: 37.95275 / 121.703992

CLIENT: Engeo
CONTACT: Cody Johnson
INQUIRY #: 7323104.2s
DATE: April 28, 2023 7:18 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: CAPAY

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	35 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
2	35 inches	51 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
3	51 inches	72 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: RINCON

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
3	29 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: SORRENTO

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
2	18 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS40000186246	1/8 - 1/4 Mile SSE
3	USGS40000186270	1/4 - 1/2 Mile NNE
6	USGS40000186229	1/4 - 1/2 Mile South
A7	USGS40000186272	1/2 - 1 Mile NE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A10	USGS40000186275	1/2 - 1 Mile NE
F34	USGS40000186305	1/2 - 1 Mile NNW
66	USGS40000186199	1/2 - 1 Mile SSW
77	USGS40000186196	1/2 - 1 Mile SSW
79	USGS40000186286	1/2 - 1 Mile WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	79	1/4 - 1/2 Mile SW
4	81	1/4 - 1/2 Mile East
5	80	1/4 - 1/2 Mile NNW
B8	CADDW0000009804	1/2 - 1 Mile ENE
9	CADDW0000001258	1/2 - 1 Mile NNE
11	64	1/2 - 1 Mile NNE
B12	CADWR0000034186	1/2 - 1 Mile ENE
B13	CADWR0000015465	1/2 - 1 Mile ENE
B14	78	1/2 - 1 Mile ENE
15	63	1/2 - 1 Mile NE
16	CADDW0000012791	1/2 - 1 Mile ENE
17	CADWR0000024725	1/2 - 1 Mile NNW
18	77	1/2 - 1 Mile NNE
19	61	1/2 - 1 Mile NW
C20	CADWR9000038024	1/2 - 1 Mile NE
C21	CADWR9000038025	1/2 - 1 Mile NE
C22	CADWR9000038026	1/2 - 1 Mile NE
23	62	1/2 - 1 Mile NE
D24	CADDW0000006438	1/2 - 1 Mile ESE
D25	CADDW0000003392	1/2 - 1 Mile ESE
D26	CADDW0000004827	1/2 - 1 Mile ESE
D27	CADDW0000010956	1/2 - 1 Mile ESE
C28	CADDW0000014636	1/2 - 1 Mile NE
E29	CADDW0000006026	1/2 - 1 Mile ENE
E30	CAUSGSN00007765	1/2 - 1 Mile ENE
E31	CAUSGS000001116	1/2 - 1 Mile ENE
C32	CADDW0000017399	1/2 - 1 Mile NE
F33	CAUSGSN00014586	1/2 - 1 Mile NNW
G35	CAEDF0000041294	1/2 - 1 Mile SE
G36	CAEDF0000082573	1/2 - 1 Mile SSE
H37	CAEDF0000105227	1/2 - 1 Mile SSE
H38	CAEDF0000010252	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
39	60	1/2 - 1 Mile NNW
H40	CAEDF0000059320	1/2 - 1 Mile SSE
H41	CAEDF0000063393	1/2 - 1 Mile SSE
H42	CAEDF0000103477	1/2 - 1 Mile SSE
G43	CAEDF0000052985	1/2 - 1 Mile SE
H44	CAEDF0000045917	1/2 - 1 Mile SSE
H45	CAEDF0000126541	1/2 - 1 Mile SSE
H46	CAEDF0000128149	1/2 - 1 Mile SSE
H47	CAEDF0000126486	1/2 - 1 Mile SSE
H48	CAEDF0000106091	1/2 - 1 Mile SSE
49	CADDW0000002335	1/2 - 1 Mile ENE
H50	CAEDF0000110370	1/2 - 1 Mile SSE
H51	CAEDF0000009644	1/2 - 1 Mile SSE
H52	CAEDF0000072852	1/2 - 1 Mile SSE
H53	CAEDF0000081717	1/2 - 1 Mile SSE
H54	CAEDF0000063117	1/2 - 1 Mile SSE
H55	CAEDF0000103222	1/2 - 1 Mile SSE
H56	CAEDF0000136128	1/2 - 1 Mile SSE
H57	CAEDF0000021930	1/2 - 1 Mile SSE
H58	CAEDF0000009639	1/2 - 1 Mile SSE
H59	CAEDF0000034298	1/2 - 1 Mile SSE
H60	CAEDF0000017778	1/2 - 1 Mile SSE
H61	CAEDF0000054974	1/2 - 1 Mile SSE
H62	CAEDF0000054587	1/2 - 1 Mile SSE
H63	CAEDF0000021267	1/2 - 1 Mile SSE
64	CADDW0000005311	1/2 - 1 Mile East
H65	CAEDF0000038432	1/2 - 1 Mile SSE
H67	CAEDF0000078955	1/2 - 1 Mile SSE
68	CAEDF0000044617	1/2 - 1 Mile SSE
H69	CAEDF0000142646	1/2 - 1 Mile SSE
H70	CAEDF0000050958	1/2 - 1 Mile SSE
H71	CAEDF0000133157	1/2 - 1 Mile SSE
H72	CAEDF0000110817	1/2 - 1 Mile SSE
H73	CAEDF0000133339	1/2 - 1 Mile SSE
H74	CAEDF0000120920	1/2 - 1 Mile SSE
H75	CAEDF0000075036	1/2 - 1 Mile SSE
76	CAEDF0000001871	1/2 - 1 Mile SE
78	CADDW0000019173	1/2 - 1 Mile ENE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

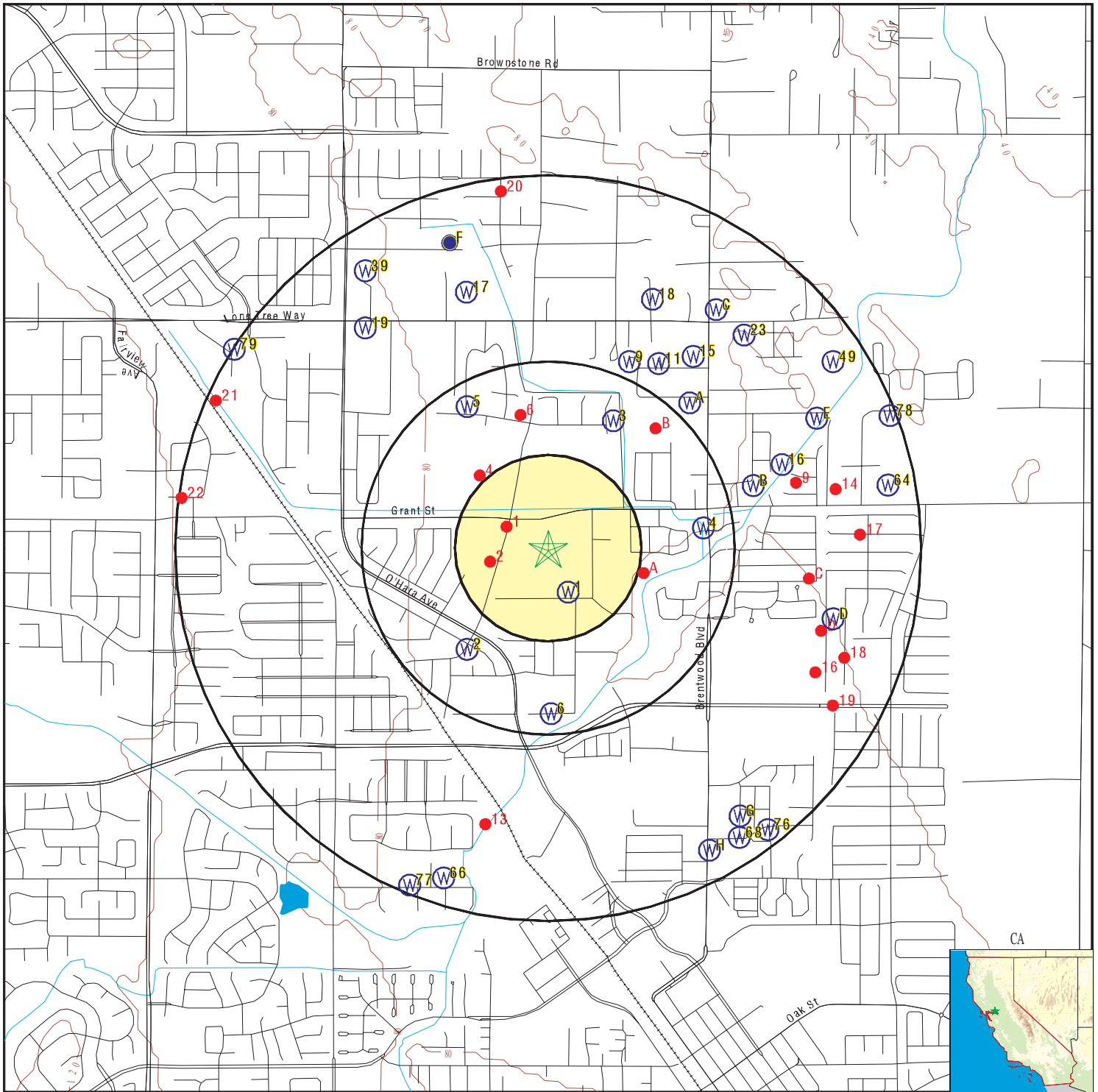
MAP ID	WELL ID	LOCATION FROM TP
1	CAOG15000004962	1/8 - 1/4 Mile WNW
2	CAOG15000010547	1/8 - 1/4 Mile WSW
A3	CAOG15000198659	1/8 - 1/4 Mile ESE
4	CAOG15000012706	1/4 - 1/2 Mile NW
A5	CAOG15000198655	1/4 - 1/2 Mile ESE
6	CAOG15000198656	1/4 - 1/2 Mile NNW
B7	CAOG15000002175	1/4 - 1/2 Mile NE
B8	CAOG15000198654	1/4 - 1/2 Mile NE
9	CAOG15000198653	1/2 - 1 Mile ENE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

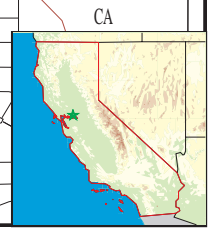
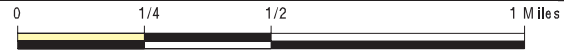
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
C10	CAOG15000198664	1/2 - 1 Mile East
C11	CAOG15000198661	1/2 - 1 Mile East
D12	CAOG15000198658	1/2 - 1 Mile ESE
13	CAOG15000004960	1/2 - 1 Mile SSW
14	CAOG15000198660	1/2 - 1 Mile ENE
D15	CAOG15000198665	1/2 - 1 Mile ESE
16	CAOG15000198657	1/2 - 1 Mile ESE
17	CAOG15000198667	1/2 - 1 Mile East
18	CAOG15000198666	1/2 - 1 Mile ESE
19	CAOG15000198662	1/2 - 1 Mile ESE
20	CAOG15000009461	1/2 - 1 Mile North
21	CAOG15000011851	1/2 - 1 Mile WNW
22	CAOG15000011874	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 7323104.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood CA 94513
 LAT/LONG: 37.95275 / 121.703992

CLIENT: Engeo
 CONTACT: Cody Johnson
 INQUIRY #: 7323104.2s
 DATE: April 28, 2023 7:18 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
SSE
1/8 - 1/4 Mile
Lower

FED USGS USGS40000186246

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18040003
Monitor Location:	001N002E12G001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	110
Aquifer:	Central Valley aquifer system	Well Hole Depth:	160
Formation Type:	Not Reported		
Construction Date:	19730716		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1973-07-16
Feet below surface:	28.00	Feet to sea level:	Not Reported
Note:	Not Reported		

2
SW
1/4 - 1/2 Mile
Higher

CA WELLS 79

Seq:	79	Prim sta c:	01N/03E-06N02 M
Frds no:	0710004007	County:	07
District:	04	User id:	ENG
System no:	0710004	Water type:	G
Source nam:	WELL 07	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375656.0	Longitude:	1214225.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	0710004	System nam:	City Of Brentwood
Hqname:	Not Reported	Address:	708 THIRD STREET
City:	BRENTWOOD	State:	Not Reported
Zip:	94513	Zip ext:	Not Reported
Pop serv:	8255	Connection:	2167
Area serve:	BRENTWOOD		

Sample date:	24-AUG-17	Finding:	5.8
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		

Sample date:	24-AUG-17	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		

Sample date:	24-AUG-17	Finding:	1.3
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		

Sample date:	24-AUG-17	Finding:	890.
--------------	-----------	----------	------

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Chemical: Dir:	TOTAL DISSOLVED SOLIDS 0.	Report units:	MG/L
Sample date: Chemical: Dir:	24-AUG-17 SELENIUM 5.	Finding: Report units:	9.5 UG/L
Sample date: Chemical: Dir:	24-AUG-17 VANADIUM 3.	Finding: Report units:	8.7 UG/L
Sample date: Chemical: Dir:	24-AUG-17 BORON 100.	Finding: Report units:	1500. UG/L
Sample date: Chemical: Dir:	24-AUG-17 ARSENIC 2.	Finding: Report units:	2.4 UG/L
Sample date: Chemical: Dir:	24-AUG-17 FLUORIDE (F) (NATURAL-SOURCE) 0.1	Finding: Report units:	0.34 MG/L
Sample date: Chemical: Dir:	24-AUG-17 SULFATE 0.5	Finding: Report units:	220. MG/L
Sample date: Chemical: Dir:	24-AUG-17 CHLORIDE 0.	Finding: Report units:	180. MG/L
Sample date: Chemical: Dir:	24-AUG-17 POTASSIUM 0.	Finding: Report units:	3. MG/L
Sample date: Chemical: Dir:	24-AUG-17 SODIUM 0.	Finding: Report units:	160. MG/L
Sample date: Chemical: Dir:	24-AUG-17 MAGNESIUM 0.	Finding: Report units:	37. MG/L
Sample date: Chemical: Dir:	24-AUG-17 CALCIUM 0.	Finding: Report units:	80. MG/L
Sample date: Chemical: Dir:	24-AUG-17 HARDNESS (TOTAL) AS CaCO3 0.	Finding: Report units:	350. MG/L
Sample date: Chemical: Dir:	24-AUG-17 NITRATE (AS N) 0.4	Finding: Report units:	3.4 MG/L
Sample date: Chemical: Dir:	24-AUG-17 BICARBONATE ALKALINITY 0.	Finding: Report units:	250. MG/L
Sample date: Chemical: Dir:	24-AUG-17 ALKALINITY (TOTAL) AS CaCO3 0.	Finding: Report units:	210. MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	24-AUG-17	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	24-AUG-17	Finding:	1400.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	24-AUG-17	Finding:	1.1
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	1.8
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	1.2
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	4.9
Chemical:	GROSS BETA	Report units:	PCI/L
Dir:	4.		
Sample date:	24-AUG-17	Finding:	3.4
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	24-AUG-17	Finding:	2.
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1.1
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1300.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	31-MAY-16	Finding:	3.2
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	0.16
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	31-MAY-16	Finding:	1.2
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	820.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1.3
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	31-MAY-16	Finding:	0.21
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	9.
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	31-MAY-16	Finding:	7.5
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	31-MAY-16	Finding:	1600.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	31-MAY-16	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	31-MAY-16	Finding:	220.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	31-MAY-16	Finding:	170.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	3.3
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	170.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	36.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	78.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	340.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	3.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	240.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	31-MAY-16	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1.4
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1400.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	14-APR-15	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	330.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	76.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	35.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	160.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	2.9
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	190.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	240.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	14-APR-15	Finding:	0.33
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	14-APR-15	Finding:	1400.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	14-APR-15	Finding:	9.1
Chemical:	VANADIUM	Report units:	UG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	3.		
Sample date:	14-APR-15	Finding:	5.7
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	14-APR-15	Finding:	0.24
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	2.3
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	900.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1.3
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	6.9e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	14-APR-15	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	3000.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-APR-15	Finding:	1.4
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	2.2
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	2700.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	17-JUN-14	Finding:	0.5
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	2.2
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	1.7
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	1400.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	17-JUN-14	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	17-JUN-14	Finding:	180.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	210.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	320.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	73.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	34.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	180.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	3.4
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	200.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	220.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	17-JUN-14	Finding:	0.33
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	17-JUN-14	Finding:	1400.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	17-JUN-14	Finding:	7.8
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	17-JUN-14	Finding:	860.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	0.89
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	17-JUN-14	Finding:	6900.
Chemical:	CARBON DIOXIDE	Report units:	UG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	17-JUN-14	Finding:	6.7e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	17-JUN-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	17-JUN-14	Finding:	0.8
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	900.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	0.13
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	29-MAY-13	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	29-MAY-13	Finding:	2900.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	29-MAY-13	Finding:	1400.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	29-MAY-13	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	29-MAY-13	Finding:	180.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	210.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	340.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	78.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	36.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	180.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	29-MAY-13	Finding:	3.2
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	180.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	230.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	29-MAY-13	Finding:	0.31
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	27-JUN-12	Finding:	1200.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	27-JUN-12	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	27-JUN-12	Finding:	180.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	220.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	370.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	82.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	39.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	220.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	3.2
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	290.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	250.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	27-JUN-12	Finding:	0.38
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.1		
Sample date:	27-JUN-12	Finding:	2.5
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	27-JUN-12	Finding:	9.7
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	27-JUN-12	Finding:	1100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	27-JUN-12	Finding:	5.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	27-JUN-12	Finding:	0.13
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	27-JUN-12	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	27-JUN-12	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		

3

NNE
1/4 - 1/2 Mile
Lower

FED USGS USGS40000186270

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E01R002M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19780528	Well Depth:	159
Well Depth Units:	ft	Well Hole Depth:	164
Well Hole Depth Units:	ft		

4

East
1/4 - 1/2 Mile
Lower

CA WELLS 81

Seq:	81	Prim sta c:	01N/03E-07D01 M
Frds no:	0707578001	County:	07
District:	37	User id:	07C
System no:	0707578	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375713.0	Longitude:	1214143.0
Precision:	3	Status:	AR

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0707578	System nam:	Davis Camp
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

**5
NNW
1/4 - 1/2 Mile
Higher**

CA WELLS 80

Seq:	80	Prim sta c:	01N/03E-06N03 M
Frds no:	0710004008	County:	07
District:	04	User id:	ENG
System no:	0710004	Water type:	G
Source nam:	WELL 08	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375730.0	Longitude:	1214225.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0710004	System nam:	City Of Brentwood
Hqname:	Not Reported	Address:	708 THIRD STREET
City:	BRENTWOOD	State:	Not Reported
Zip:	94513	Zip ext:	Not Reported
Pop serv:	8255	Connection:	2167
Area serve:	BRENTWOOD		
Sample date:	07-SEP-17	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	07-SEP-17	Finding:	1.9
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	07-SEP-17	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	07-SEP-17	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	07-SEP-17	Finding:	2.
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	07-SEP-17	Finding:	0.79
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-SEP-17	Finding:	390.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Chemical: Dir:	HARDNESS (TOTAL) AS CaCO ₃ 0.	Report units:	MG/L
Sample date: Chemical: Dir:	07-SEP-17 CALCIUM 0.	Finding: Report units:	89. MG/L
Sample date: Chemical: Dir:	07-SEP-17 MAGNESIUM 0.	Finding: Report units:	41. MG/L
Sample date: Chemical: Dir:	07-SEP-17 SODIUM 0.	Finding: Report units:	200. MG/L
Sample date: Chemical: Dir:	07-SEP-17 POTASSIUM 0.	Finding: Report units:	3.3 MG/L
Sample date: Chemical: Dir:	07-SEP-17 CHLORIDE 0.	Finding: Report units:	300. MG/L
Sample date: Chemical: Dir:	07-SEP-17 SULFATE 0.5	Finding: Report units:	200. MG/L
Sample date: Chemical: Dir:	07-SEP-17 FLUORIDE (F) (NATURAL-SOURCE) 0.1	Finding: Report units:	0.27 MG/L
Sample date: Chemical: Dir:	07-SEP-17 BORON 100.	Finding: Report units:	1600. UG/L
Sample date: Chemical: Dir:	07-SEP-17 VANADIUM 3.	Finding: Report units:	6.4 UG/L
Sample date: Chemical: Dir:	07-SEP-17 SELENIUM 5.	Finding: Report units:	7.1 UG/L
Sample date: Chemical: Dir:	07-SEP-17 GROSS ALPHA COUNTING ERROR 0.	Finding: Report units:	0.35 PCI/L
Sample date: Chemical: Dir:	07-SEP-17 GROSS BETA COUNTING ERROR 0.	Finding: Report units:	0.61 PCI/L
Sample date: Chemical: Dir:	07-SEP-17 TOTAL DISSOLVED SOLIDS 0.	Finding: Report units:	1000. MG/L
Sample date: Chemical: Dir:	07-SEP-17 LANGELIER INDEX @ 60 C 0.	Finding: Report units:	1.4 Not Reported
Sample date: Chemical: Dir:	07-SEP-17 AGGRSSIVE INDEX (CORROSIVITY) 0.	Finding: Report units:	13. Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	07-SEP-17	Finding:	0.79
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-SEP-17	Finding:	0.15
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	07-SEP-17	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1.3
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	190.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	230.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	0.84
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	430.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	97.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	45.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	220.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	3.7
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	340.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	220.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	31-MAY-16	Finding:	0.24
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.1		
Sample date:	31-MAY-16	Finding:	1700.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	31-MAY-16	Finding:	6.
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	31-MAY-16	Finding:	4.4
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	31-MAY-16	Finding:	0.25
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1.4
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1.2
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	0.11
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	31-MAY-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	0.84
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	1.6
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	14-APR-15	Finding:	1.9
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	14-APR-15	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	420.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	94.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	44.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	190.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	3.5
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	300.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	210.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	14-APR-15	Finding:	0.25
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	14-APR-15	Finding:	1500.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	14-APR-15	Finding:	6.6
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	14-APR-15	Finding:	0.33
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	2.
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1.4
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	3.5
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	2.		
Sample date:	14-APR-15	Finding:	8.5e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	14-APR-15	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	780.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-APR-15	Finding:	1.3
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	17-JUN-14	Finding:	0.9
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	0.5
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	2.4
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	1.7
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	17-JUN-14	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	17-JUN-14	Finding:	180.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	220.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	370.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	84.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	17-JUN-14	Finding:	39.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	180.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	3.8
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	280.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	200.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	17-JUN-14	Finding:	0.25
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	17-JUN-14	Finding:	1400.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	17-JUN-14	Finding:	5.8
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	17-JUN-14	Finding:	8.8
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	17-JUN-14	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	1.
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	17-JUN-14	Finding:	3.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	17-JUN-14	Finding:	5700.
Chemical:	CARBON DIOXIDE	Report units:	UG/L
Dir:	0.		
Sample date:	17-JUN-14	Finding:	8.1e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	17-JUN-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	17-JUN-14	Finding:	790.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.4		
Sample date:	29-MAY-13	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	29-MAY-13	Finding:	5.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	29-MAY-13	Finding:	10.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	29-MAY-13	Finding:	5.8e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	29-MAY-13	Finding:	4.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	29-MAY-13	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	0.26
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	29-MAY-13	Finding:	220.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	29-MAY-13	Finding:	280.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	3.8
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	190.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	46.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	97.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	430.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	240.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	29-MAY-13	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	1100.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	23-JAN-13	Finding:	6.5
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	23-JAN-13	Finding:	6.8
Chemical:	SELENIUM	Report units:	UG/L
Dir:	5.		
Sample date:	23-JAN-13	Finding:	960.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	3.2
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	23-JAN-13	Finding:	1500.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	23-JAN-13	Finding:	2.6
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	23-JAN-13	Finding:	0.22
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	23-JAN-13	Finding:	200.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	23-JAN-13	Finding:	260.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	3.6
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	170.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	46.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	95.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	430.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.	Finding:	250.
Sample date:	23-JAN-13	Report units:	MG/L
Chemical:	BICARBONATE ALKALINITY		
Dir:	0.		
Sample date:	23-JAN-13	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	23-JAN-13	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	23-JAN-13	Finding:	5.
Chemical:	COLOR	Report units:	UNITS
Dir:	0.		
Sample date:	23-JAN-13	Finding:	730.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	23-JAN-13	Finding:	7300.
Chemical:	CARBON DIOXIDE	Report units:	UG/L
Dir:	0.		
Sample date:	23-JAN-13	Finding:	0.11
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	23-JAN-13	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		

6

**South
1/4 - 1/2 Mile
Lower**

FED USGS

USGS40000186229

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18040003
Monitor Location:	001N002E12K001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	105
Aquifer:	Central Valley aquifer system	Well Hole Depth:	105
Formation Type:	Not Reported		
Construction Date:	19660212		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A7
NE
1/2 - 1 Mile
Higher

FED USGS USGS40000186272

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E01R001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19780528	Well Depth:	152
Well Depth Units:	ft	Well Hole Depth:	180
Well Hole Depth Units:	ft		

B8
ENE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000009804

Well ID:	0710004-006	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 6	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0710004-006&store_num=		
GeoTracker Data:	Not Reported		

9
NNE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000001258

Well ID:	0706107-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL HEAD	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0706107-001&store_num=		
GeoTracker Data:	Not Reported		

A10
NE
1/2 - 1 Mile
Higher

FED USGS USGS40000186275

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E01J002M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Construction Date:	19780528	Well Depth:	134
Well Depth Units:	ft	Well Hole Depth:	136
Well Hole Depth Units:	ft		

11
NNE
1/2 - 1 Mile
Lower

CA WELLS 64

Seq:	64	Prim sta c:	01N/02E-01J05 M
Frds no:	0706001001	County:	07
District:	37	User id:	07C
System no:	0706001	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375736.0	Longitude:	1214151.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0706001	System nam:	Chakedis Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

B12
ENE
1/2 - 1 Mile
Lower

CA WELLS CADWR0000034186

Well ID:	01N03E06N002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01N03E06N002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01N03E06N002M&store_num=		
GeoTracker Data:	Not Reported		

B13
ENE
1/2 - 1 Mile
Lower

CA WELLS CADWR0000015465

Well ID:	01N03E06N001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01N03E06N001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01N03E06N001M&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B14
ENE
1/2 - 1 Mile
Lower

CA WELLS 78

Seq:	78	Prim sta c:	01N/03E-06N01 M
Frds no:	0710004006	County:	07
District:	04	User id:	ENG
System no:	0710004	Water type:	G
Source nam:	WELL 06	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375718.0	Longitude:	1214132.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	0710004	System nam:	City Of Brentwood
Hqname:	Not Reported	Address:	708 THIRD STREET
City:	BRENTWOOD	State:	Not Reported
Zip:	94513	Zip ext:	Not Reported
Pop serv:	8255	Connection:	2167
Area serve:	BRENTWOOD		

Sample date:	21-FEB-18	Finding:	5.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	13-DEC-17	Finding:	6.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	12-DEC-17	Finding:	237.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		

Sample date:	24-AUG-17	Finding:	480.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		

Sample date:	24-AUG-17	Finding:	5.7
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		

Sample date:	24-AUG-17	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		

Sample date:	24-AUG-17	Finding:	1.4
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		

Sample date:	24-AUG-17	Finding:	1100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		

Sample date:	24-AUG-17	Finding:	6.9
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	24-AUG-17	Finding:	1.7
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	5.6
Chemical:	GROSS BETA	Report units:	PCI/L
Dir:	4.		
Sample date:	24-AUG-17	Finding:	1.3
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	1.3
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	1.2
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	24-AUG-17	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	24-AUG-17	Finding:	220.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	270.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	5.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	24-AUG-17	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	51.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	180.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	4.1
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	220.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	24-AUG-17	Finding:	290.
Chemical:	SULFATE	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.5		
Sample date:	24-AUG-17	Finding:	0.35
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	24-AUG-17	Finding:	2.6
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	24-AUG-17	Finding:	1300.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	24-AUG-17	Finding:	8.4
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	16-AUG-17	Finding:	6.1
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	16-AUG-17	Finding:	6.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	10-MAY-17	Finding:	5.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	25-JAN-17	Finding:	2.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	07-DEC-16	Finding:	5.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-SEP-16	Finding:	5.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	1400.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	31-MAY-16	Finding:	7.2
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	31-MAY-16	Finding:	5.5
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	31-MAY-16	Finding:	0.24
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	4.5
Chemical:	GROSS BETA	Report units:	PCI/L
Dir:	4.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	31-MAY-16	Finding:	1.2
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1.3
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	5.7
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	1.5
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	0.99
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	31-MAY-16	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	31-MAY-16	Finding:	210.
Chemical:	ALKALINITY (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	260.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	5.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAY-16	Finding:	490.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	52.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	180.
Chemical:	SODIUM	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	31-MAY-16	Finding:	4.1
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	220.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	31-MAY-16	Finding:	300.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	31-MAY-16	Finding:	0.33
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	31-MAR-16	Finding:	5.5
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	31-MAR-16	Finding:	5.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	18-NOV-15	Finding:	9.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	26-AUG-15	Finding:	24.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	13-MAY-15	Finding:	23.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-APR-15	Finding:	460.
Chemical:	HARDNESS (TOTAL) AS CaCO3	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	100.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	51.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	180.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	3.9
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	230.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	14-APR-15	Finding:	300.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	14-APR-15	Finding:	0.35
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	14-APR-15	Finding:	1300.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	14-APR-15	Finding:	7.9
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	14-APR-15	Finding:	9.6
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	14-APR-15	Finding:	0.28
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	6.2
Chemical:	GROSS BETA	Report units:	PCI/L
Dir:	4.		
Sample date:	14-APR-15	Finding:	1.4
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1.4
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	14-APR-15	Finding:	6.2e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	14-APR-15	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	14-APR-15	Finding:	5300.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	14-APR-15	Finding:	1.3
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1.2
Chemical:	GROSS BETA MDA95	Report units:	PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	14-APR-15	Finding:	260.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	220.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	14-APR-15	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	14-APR-15	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	19-JUN-14	Finding:	6.9
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dir:	3.		
Sample date:	19-JUN-14	Finding:	5100.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	19-JUN-14	Finding:	0.6
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	2.1
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	1.8
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	19-JUN-14	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	19-JUN-14	Finding:	190.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	230.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	460.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	100.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	19-JUN-14	Finding:	50.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	170.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	3.8
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	220.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	290.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	19-JUN-14	Finding:	0.34
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	19-JUN-14	Finding:	2.4
Chemical:	ARSENIC	Report units:	UG/L
Dir:	2.		
Sample date:	19-JUN-14	Finding:	1300.
Chemical:	BORON	Report units:	UG/L
Dir:	100.		
Sample date:	19-JUN-14	Finding:	8.6
Chemical:	VANADIUM	Report units:	UG/L
Dir:	3.		
Sample date:	19-JUN-14	Finding:	1100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	1.2
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dir:	0.		
Sample date:	19-JUN-14	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dir:	2.		
Sample date:	19-JUN-14	Finding:	6000.
Chemical:	CARBON DIOXIDE	Report units:	UG/L
Dir:	0.		
Sample date:	19-JUN-14	Finding:	6.8e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		
Sample date:	19-JUN-14	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	19-JUN-14	Finding:	0.9
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.		
Sample date:	29-MAY-13	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		
Sample date:	29-MAY-13	Finding:	5300.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	29-MAY-13	Finding:	210.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	490.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	110.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	53.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	190.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	4.
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	230.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	300.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	29-MAY-13	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	29-MAY-13	Finding:	1100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dir:	0.		
Sample date:	29-MAY-13	Finding:	23.
Chemical:	NITRATE (AS NO ₃)	Report units:	MG/L
Dir:	2.		
Sample date:	29-MAY-13	Finding:	0.12
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dir:	0.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	29-MAY-13	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	29-MAY-13	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	16-MAY-12	Finding:	4100.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dir:	0.4		
Sample date:	16-MAY-12	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dir:	0.		
Sample date:	16-MAY-12	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	2.2
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	420.
Chemical:	HARDNESS (TOTAL) AS CaCO ₃	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	92.
Chemical:	CALCIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	46.
Chemical:	MAGNESIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	170.
Chemical:	SODIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	3.7
Chemical:	POTASSIUM	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	230.
Chemical:	CHLORIDE	Report units:	MG/L
Dir:	0.		
Sample date:	16-MAY-12	Finding:	280.
Chemical:	SULFATE	Report units:	MG/L
Dir:	0.5		
Sample date:	16-MAY-12	Finding:	0.36
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dir:	0.1		
Sample date:	16-MAY-12	Finding:	980.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.	Finding:	0.12
Sample date:	16-MAY-12	Report units:	NTU
Chemical:	TURBIDITY, LABORATORY		
Dir:	0.1		
Sample date:	16-MAY-12	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dir:	0.		
Sample date:	16-MAY-12	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dir:	0.		

**15
NE
1/2 - 1 Mile
Higher**

CA WELLS 63

Seq:	63	Prim sta c:	01N/02E-01J04 M
Frds no:	0707520001	County:	07
District:	37	User id:	07C
System no:	0707520	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375737.0	Longitude:	1214145.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0707520	System nam:	Dominguez Small Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

**16
ENE
1/2 - 1 Mile
Lower**

CA WELLS CADDW0000012791

Well ID:	0710004-007	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 7	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0710004-007&store_num=		
GeoTracker Data:	Not Reported		

**17
NNW
1/2 - 1 Mile
Higher**

CA WELLS CADWR0000024725

Well ID:	01N02E01F001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	01N02E01F001M	GAMA PFAS Testing:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01N02E01F001M&store_num=
 GeoTracker Data: Not Reported

**18
NNE
1/2 - 1 Mile
Lower**

CA WELLS 77

Seq:	77	Prim sta c:	01N/03E-06E02 M
Frds no:	0707510001	County:	07
District:	37	User id:	07C
System no:	0707510	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375745.0	Longitude:	1214152.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0707510	System nam:	Altes Residential Home Care
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

**19
NW
1/2 - 1 Mile
Higher**

CA WELLS 61

Seq:	61	Prim sta c:	01N/02E-01E03 M
Frds no:	0706023001	County:	07
District:	37	User id:	07C
System no:	0706023	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375741.0	Longitude:	1214243.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0706023	System nam:	Muller Units
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C20
NE
1/2 - 1 Mile
Higher

CA WELLS CADWR9000038024

State Well #:	01N03E06E999M	Station ID:	48664
Well Name:	#14 MW-324	Basin Name:	East Contra Costa
Well Use:	Observation		
Well Type:	Part of a nested/multi-completion well		
Well Depth:	324	Well Completion Rpt #:	Not Reported

C21
NE
1/2 - 1 Mile
Higher

CA WELLS CADWR9000038025

State Well #:	01N03E06E998M	Station ID:	48665
Well Name:	#14 MW-240	Basin Name:	East Contra Costa
Well Use:	Observation		
Well Type:	Part of a nested/multi-completion well		
Well Depth:	240	Well Completion Rpt #:	Not Reported

C22
NE
1/2 - 1 Mile
Higher

CA WELLS CADWR9000038026

State Well #:	01N03E06E997M	Station ID:	48666
Well Name:	#14 MW-154	Basin Name:	East Contra Costa
Well Use:	Observation		
Well Type:	Part of a nested/multi-completion well		
Well Depth:	154	Well Completion Rpt #:	Not Reported

23
NE
1/2 - 1 Mile
Lower

CA WELLS 62

Seq:	62	Prim sta c:	01N/02E-01J03 M
Frds no:	0707524001	County:	07
District:	37	User id:	07C
System no:	0707524	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375740.0	Longitude:	1214136.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0707524	System nam:	Short Stop #151
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pop serv: 0 Connection: 0
 Area serve: Not Reported

D24
ESE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000006438

Well ID: 0707578-004 Well Type: MUNICIPAL
 Source: Department of Health Services
 Other Name: CHLORINATION - SOUTH WELL GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0707578-004&store_num=
 GeoTracker Data: Not Reported

D25
ESE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000003392

Well ID: 0707578-002 Well Type: MUNICIPAL
 Source: Department of Health Services
 Other Name: EAST WELL (SOUTH) GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0707578-002&store_num=
 GeoTracker Data: Not Reported

D26
ESE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000004827

Well ID: 0707578-003 Well Type: MUNICIPAL
 Source: Department of Health Services
 Other Name: CHLORINATION - WEST WELL GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0707578-003&store_num=
 GeoTracker Data: Not Reported

D27
ESE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000010956

Well ID: 0707578-001 Well Type: MUNICIPAL
 Source: Department of Health Services
 Other Name: WEST WELL (NORTH) GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0707578-001&store_num=
 GeoTracker Data: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C28
NE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000014636

Well ID:	0710004-014	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 14	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0710004-014&store_num=		
GeoTracker Data:	Not Reported		

E29
ENE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000006026

Well ID:	0710004-008	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 8	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0710004-008&store_num=		
GeoTracker Data:	Not Reported		

E30
ENE
1/2 - 1 Mile
Lower

CA WELLS CAUSGSN00007765

Well ID:	USGS-375700121410001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-375700121410001	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-375700121410001&store_num=		
GeoTracker Data:	Not Reported		

E31
ENE
1/2 - 1 Mile
Lower

CA WELLS CAUSGS000001116

C32
NE
1/2 - 1 Mile
Higher

CA WELLS CADDW0000017399

Well ID:	2702373-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=2702373-001&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

F33
NNW
1/2 - 1 Mile
Higher

CA WELLS CAUSGSN00014586

Well ID:	USGS-375753121422801	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-375753121422801	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-375753121422801&store_num=		
GeoTracker Data:	Not Reported		

F34
NNW
1/2 - 1 Mile
Higher

FED USGS USGS40000186305

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E01F001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium of the Coast Range, Younger (Pleistocene-Holocene)		
Aquifer Type:	Not Reported	Construction Date:	19780418
Well Depth:	133	Well Depth Units:	ft
Well Hole Depth:	133	Well Hole Depth Units:	ft

G35
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000041294

Well ID:	T0601343310-MW-16	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-16
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-16&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-16		

G36
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000082573

Well ID:	T0601300802-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H37
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000105227

Well ID:	T0601300802-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-11		

H38
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000010252

Well ID:	T0601343310-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-10		

39
NNW
1/2 - 1 Mile
Higher

CA WELLS 60

Seq:	60	Prim sta c:	01N/02E-01E02 M
Frds no:	0707538001	County:	07
District:	37	User id:	07C
System no:	0707538	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375749.0	Longitude:	1214243.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0707538	System nam:	Kutch-Raggedy A & A Preschool
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H40
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000059320

Well ID:	T0601300802-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-4		

H41
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000063393

Well ID:	T0601300802-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-5		

H42
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000103477

Well ID:	T0601300802-MW-16D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-16D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-16D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-16D		

G43
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000052985

Well ID:	T0601343310-MW-17	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-17
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-17&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-17		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H44
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000045917

Well ID:	T0601343310-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-9		

H45
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000126541

Well ID:	T0601300802-MW-10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-10		

H46
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000128149

Well ID:	T0601300802-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-3		

H47
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000126486

Well ID:	T0601300802-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H48
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000106091

Well ID:	T0601300802-MW-8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-8		

49
ENE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000002335

Well ID:	0706048-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL HEAD	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0706048-001&store_num=		
GeoTracker Data:	Not Reported		

H50
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000110370

Well ID:	T0601300802-MW-15D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-15D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-15D&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-15D		

H51
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000009644

Well ID:	T0601343310-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H52
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000072852

Well ID:	T0601343310-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW4		

H53
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000081717

Well ID:	T0601343310-MW1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW1		

H54
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000063117

Well ID:	T0601300802-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-2		

H55
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000103222

Well ID:	T0601343310-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H56
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000136128

Well ID:	T0601300802-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-12		

H57
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000021930

Well ID:	T0601343310-EW2	Well Type:	MONITORING
Source:	EDF	Other Name:	EW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=EW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=EW2		

H58
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000009639

Well ID:	T0601300802-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-1		

H59
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000034298

Well ID:	T0601343310-EW3	Well Type:	MONITORING
Source:	EDF	Other Name:	EW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=EW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=EW3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H60
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000017778

Well ID:	T0601343310-MW3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW3		

H61
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000054974

Well ID:	T0601343310-MW5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW5		

H62
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000054587

Well ID:	T0601343310-MW-6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-6		

H63
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000021267

Well ID:	T0601343310-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

64
East
1/2 - 1 Mile
Lower

CA WELLS CADDW0000005311

Well ID:	0710004-024	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 9	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0710004-024&store_num=		
GeoTracker Data:	Not Reported		

H65
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000038432

Well ID:	T0601300802-MW-13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-13		

66
SSW
1/2 - 1 Mile
Higher

FED USGS USGS40000186199

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E12N001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19780401	Well Depth:	76
Well Depth Units:	ft	Well Hole Depth:	80
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1978-04-01
Feet below surface:	30.00	Feet to sea level:	Not Reported
Note:	Not Reported		

H67
SSE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000078955

Well ID:	T0601300802-MW-9D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9D
GAMA PFAS Testing:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-9D&store_num=
 GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-9D

68
SSE
 1/2 - 1 Mile
 Lower

CA WELLS CAEDF0000044617

Well ID: T0601343310-MW-13 Well Type: MONITORING
 Source: EDF Other Name: MW-13
 GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-13&store_num=
 GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-13

H69
SSE
 1/2 - 1 Mile
 Lower

CA WELLS CAEDF0000142646

Well ID: T0601343310-EW1 Well Type: MONITORING
 Source: EDF Other Name: EW1
 GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=EW1&store_num=
 GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=EW1

H70
SSE
 1/2 - 1 Mile
 Lower

CA WELLS CAEDF0000050958

Well ID: T0601343310-MW-8 Well Type: MONITORING
 Source: EDF Other Name: MW-8
 GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-8&store_num=
 GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-8

H71
SSE
 1/2 - 1 Mile
 Lower

CA WELLS CAEDF0000133157

Well ID: T0601300802-MW-17D Well Type: MONITORING
 Source: EDF Other Name: MW-17D
 GAMA PFAS Testing: Not Reported
 Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-17D&store_num=

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-17D

**H72
SSE
1/2 - 1 Mile
Lower**

CA WELLS CAEDF0000110817

Well ID: T0601300802-MW-14 Well Type: MONITORING
Source: EDF Other Name: MW-14
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601300802&assigned_name=MW-14&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601300802&assigned_name=MW-14

**H73
SSE
1/2 - 1 Mile
Lower**

CA WELLS CAEDF0000133339

Well ID: T0601343310-MW-4 Well Type: MONITORING
Source: EDF Other Name: MW-4
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-4&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-4

**H74
SSE
1/2 - 1 Mile
Lower**

CA WELLS CAEDF0000120920

Well ID: T0601343310-MW-12 Well Type: MONITORING
Source: EDF Other Name: MW-12
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-12&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-12

**H75
SSE
1/2 - 1 Mile
Lower**

CA WELLS CAEDF0000075036

Well ID: T0601343310-MW-11 Well Type: MONITORING
Source: EDF Other Name: MW-11
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-11&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-11

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

76
SE
1/2 - 1 Mile
Lower

CA WELLS CAEDF0000001871

Well ID:	T0601343310-MW-18	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-18
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0601343310&assigned_name=MW-18&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0601343310&assigned_name=MW-18		

77
SSW
1/2 - 1 Mile
Higher

FED USGS USGS40000186196

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E13D001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19770108	Well Depth:	75
Well Depth Units:	ft	Well Hole Depth:	87
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1977-01-08
Feet below surface:	22.00	Feet to sea level:	Not Reported
Note:	Not Reported		

78
ENE
1/2 - 1 Mile
Lower

CA WELLS CADDW0000019173

Well ID:	0710004-026	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 15	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=0710004-026&store_num=		
GeoTracker Data:	Not Reported		

79
WNW
1/2 - 1 Mile
Higher

FED USGS USGS40000186286

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E02K001M	Type:	Well

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720519	Well Depth:	92
Well Depth Units:	ft	Well Hole Depth:	190
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:	1	Level reading date:	1972-05-19
Feet below surface:	46.00	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1

WNW
1/8 - 1/4 Mile

OIL_GAS CAOG15000004962

API #:	0401320359	Well #:	1
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Disco Inferno 1	Lease Name:	Disco Inferno
Operator ID:	P4733	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	01/16/2001

2

WSW
1/8 - 1/4 Mile

OIL_GAS CAOG15000010547

API #:	0401320230	Well #:	12-1
Well Status:	Plugged	Well Type:	Dry Hole
Well Design:	S & S Farms 12-1	Lease Name:	S & S Farms
Operator ID:	R0625	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	04/26/1984

A3

ESE
1/8 - 1/4 Mile

OIL_GAS CAOG15000198659

API #:	0401320097	Well #:	2
Well Status:	Plugged	Well Type:	Gas
Well Design:	Marsh Creek Unit 2	Lease Name:	Marsh Creek Unit
Operator ID:	C7800	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	10/27/1973

4

NW
1/4 - 1/2 Mile

OIL_GAS CAOG15000012706

API #:	0401300251	Well #:	3-1
Well Status:	Plugged	Well Type:	Dry Hole
Well Design:	Prewett 3-1	Lease Name:	Prewett
Operator ID:	S3100	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	03/06/1963

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

A5
ESE
1/4 - 1/2 Mile

OIL_GAS **CAOG15000198655**

API #:	0401320087	Well #:	1
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Marsh Creek Unit 1	Lease Name:	Marsh Creek Unit
Operator ID:	C7800	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	10/06/1972

6
NNW
1/4 - 1/2 Mile

OIL_GAS **CAOG15000198656**

API #:	0401320239	Well #:	1-1
Well Status:	Plugged	Well Type:	Gas
Well Design:	Prewett-Lamport 1-1	Lease Name:	Prewett-Lamport
Operator ID:	V1000	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	09/10/1984

B7
NE
1/4 - 1/2 Mile

OIL_GAS **CAOG15000002175**

API #:	0401320092	Well #:	1
Well Status:	Plugged	Well Type:	Dry Hole
Well Design:	Marsh Creek Unit B 1	Lease Name:	Marsh Creek Unit B
Operator ID:	C7800	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	12/10/1972

B8
NE
1/4 - 1/2 Mile

OIL_GAS **CAOG15000198654**

API #:	0401320205	Well #:	1
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	NGC-Cesa 1	Lease Name:	NGC-Cesa
Operator ID:	C0885	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	04/09/1983

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

9

ENE

1/2 - 1 Mile

OIL_GAS

CAOG15000198653

API #:	0401320223	Well #:	1
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	NGC-Kysh 1	Lease Name:	NGC-Kysh
Operator ID:	W1700	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	03/01/1984

C10

East

1/2 - 1 Mile

OIL_GAS

CAOG15000198664

API #:	0401320232	Well #:	4
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Marsh Creek Unit 4	Lease Name:	Marsh Creek Unit
Operator ID:	L0260	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	07/07/1984

C11

East

1/2 - 1 Mile

OIL_GAS

CAOG15000198661

API #:	0401320220	Well #:	3
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Marsh Creek Unit 3	Lease Name:	Marsh Creek Unit
Operator ID:	C7800	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	05/11/1984

D12

ESE

1/2 - 1 Mile

OIL_GAS

CAOG15000198658

API #:	0401320198	Well #:	2
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Marsh Creek Unit 2	Lease Name:	Marsh Creek Unit
Operator ID:	V1150	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	04/11/1983

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

13
SSW
1/2 - 1 Mile

OIL_GAS CAOG15000004960

API #:	0401320167	Well #:	1
Well Status:	Plugged	Well Type:	Dry Hole
Well Design:	Dianda 1	Lease Name:	Dianda
Operator ID:	01645	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	11/17/1981

14
ENE
1/2 - 1 Mile

OIL_GAS CAOG15000198660

API #:	0401320208	Well #:	3
Well Status:	Plugged	Well Type:	Gas
Well Design:	NGC-Nunn 3	Lease Name:	NGC-Nunn
Operator ID:	W1700	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	05/11/1983

D15
ESE
1/2 - 1 Mile

OIL_GAS CAOG15000198665

API #:	0401320195	Well #:	7-1
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Stolich 7-1	Lease Name:	Stolich
Operator ID:	A3650	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	10/29/1982

16
ESE
1/2 - 1 Mile

OIL_GAS CAOG15000198657

API #:	0401320338	Well #:	1-7
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Sciortino 1-7	Lease Name:	Sciortino
Operator ID:	D1805	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	11/06/1996

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

17
East
1/2 - 1 Mile

OIL_GAS CAOG15000198667

API #:	0401320224	Well #:	7-4
Well Status:	Plugged	Well Type:	Gas
Well Design:	Stolich 7-4	Lease Name:	Stolich
Operator ID:	A3650	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	02/24/1984

18
ESE
1/2 - 1 Mile

OIL_GAS CAOG15000198666

API #:	0401320206	Well #:	7-2
Well Status:	Plugged	Well Type:	Dry Gas
Well Design:	Stolich 7-2	Lease Name:	Stolich
Operator ID:	A3650	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	04/11/1983

19
ESE
1/2 - 1 Mile

OIL_GAS CAOG15000198662

API #:	0401320204	Well #:	35X-7
Well Status:	Plugged	Well Type:	Gas
Well Design:	Stolich 35X-7	Lease Name:	Stolich
Operator ID:	P4733	Field Name:	Oakley, South, Gas
Area Name:	Any Area	Place:	Brentwood
GIS Source:	GPS	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	04/27/1983

20
North
1/2 - 1 Mile

OIL_GAS CAOG15000009461

API #:	0401300250	Well #:	1-1
Well Status:	Plugged	Well Type:	Dry Hole
Well Design:	Cunha 1-1	Lease Name:	Cunha
Operator ID:	S3100	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	09/18/1963

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

21
WNW
1/2 - 1 Mile

OIL_GAS CAOG15000011851

API #:	0401320181	Well #:	2-1
Well Status:	Plugged	Well Type:	Dry Hole
Well Design:	Fairview 2-1	Lease Name:	Fairview
Operator ID:	V1000	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	08/14/1981

22
West
1/2 - 1 Mile

OIL_GAS CAOG15000011874

API #:	0401320288	Well #:	2-1
Well Status:	Plugged	Well Type:	Dry Hole
Well Design:	Shaffer 2-1	Lease Name:	Shaffer
Operator ID:	T1715	Field Name:	Any Field
Area Name:	Any Area	Place:	Brentwood
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	Y	Spud Date:	10/21/1989

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94513	5	0

Federal EPA Radon Zone for CONTRA COSTA County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for CONTRA COSTA COUNTY, CA

Number of sites tested: 55

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.760 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.300 pCi/L	100%	0%	0%
Basement	0.525 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.



DRAFT

APPENDIX B

CHICAGO TITLE COMPANY

Preliminary Title Report



Issuing Policies of Chicago Title Insurance Company

Order No.: 36303481-363-LB-KD

Title Officer: Kevin Davis

TO:

Escrow Officer: Laurie Balding-Smith

Shea Homes Limited Partnership
2630 Shea Center Drive
Livermore, CA 94551-5064

Email: BaldingL@ctt.com
1676 N. California Blvd., Suite 117
Walnut Creek, CA 94596
(925) 288-8300
(925) 287-8007

ATTN: **.Matthew J. Henry, VP of Land Acquisition**
YOUR REFERENCE:

PROPERTY ADDRESS: A Portion of 1901 Lone Oak Road, Brentwood, CA

PRELIMINARY REPORT

*In response to the application for a policy of title insurance referenced herein, **Chicago Title Company** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.*

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

*The policy(s) of title insurance to be issued hereunder will be policy(s) of **Chicago Title Insurance Company**, a Florida Corporation.*

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

Chicago Title Company

By: 

Authorized Signature



By: 
Michael J. Nolan
President

ATTEST: 
Marjorie Nemzura
Secretary



PRELIMINARY REPORT

EFFECTIVE DATE: **April 4, 2023 at 7:30 a.m.**

ORDER NO.: **36303481-363-LB-KD**

The form of policy or policies of title insurance contemplated by this report is:

CLTA Standard Coverage Policy (04-08-14)
ALTA Extended Loan Policy (7-1-21)

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

A Fee

2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS [VESTED IN:](#)

Gloria Jean McCoy, a widow and Gloria Jean McCoy Living Trust dated June 11, 1998, as their interests appear of record

3. THE LAND REFERRED TO IN THIS REPORT IS DESCRIBED AS FOLLOWS:

See Exhibit A attached hereto and made a part hereof.

EXHIBIT A
LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF BRENTWOOD, IN THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

Portion of Lot 206, as designated on the Map entitled, "Subdivision Number Five Brentwood Irrigated Farms Amended", which Map was filed in the office of the Recorder of the County of Contra Costa, State of California, on August 4, 1920 in [Volume 17 of Maps, at Page 372](#), containing 10.0009 acres, more or less, described as follows:

Beginning on the East line of said Lot 206, distant thereon South 745.7 feet from the Northeast corner thereof; thence from said point of beginning South 89° 46' West, 1886.4 feet to the line between Lots 205 and 206, being in the center line of East Contra Costa Irrigation Company's main lateral No. 5 North, distant thereon South 17° 35' West, 783.2 feet from the North line of said Lot 206; thence along said center line of said lateral, North 17° 35' East, 371.96 feet; thence North 89° 46' East, 1174.03 feet to the East line of said Lot 206' thence South, 354.12 feet to the point of beginning.

[APN: 016-040-004-0](#)

EXCEPTIONS

AT THE DATE HEREOF, ITEMS TO BE CONSIDERED AND EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN SAID POLICY FORM WOULD BE AS FOLLOWS:

1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2023-2024.
2. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.
3. Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.
4. Matters contained in that certain document

Entitled: Indenture and Agreement
 Dated: September 24, 1917
 Executed by: The Balfour-Guthrie Investment Company, a California corporation and East Contra Costa Irrigation Company, a California corporation
 Recording Date: September 25, 1917
 Recording No: 7737, [Book 297, Page 257](#), of Deeds

Reference is hereby made to said document for full particulars.

5. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document;

Reserved by: The Balfour-Guthrie Investment Company, a California corporation
 Purpose: Roads and canals
 Recording Date: May 20, 1922
 Recording No: 3907, [Book 412, Page 279](#), of Deeds

The exact location and extent of said easement is not disclosed of record.

6. Easement or lesser servitude, if any, as may exist for water line/canal purposes over the Westerly portion of premises lying within the area designated as "Lateral No. 5 North" on the Map of Subdivision Number Five of Brentwood Irrigated Farms Amended, filed August 4, 1920, [Book 17 of Maps, Page 372](#), Contra Costa County Records.
7. An unrecorded oil and gas lease for the term therein provided, with certain covenants, conditions and provisions, together with easements, if any, as set forth therein, disclosed by document

Entitled: Oil, Gas and Mineral Lease (Short Form)
 Dated: November 16, 1972
 Lessor: George Thomas McCoy and Gloria Jean McCoy, husband and wife
 Lessee: Continental Oil Company, A Delaware corporation
 Recording Date: December 1, 1972
[Recording No. 72-113160](#), Book 6811, Page 522, of Official Records

No assurance is made as to the present ownership of the leasehold created by said lease, nor as to other matters affecting the rights or interests of the lessor or lessee in said lease.

**EXCEPTIONS
(Continued)**

8. Premises lies within a Redevelopment Area as disclosed by the Notice of Adoption of Amendments to the Merged Brentwood and North Brentwood Redevelopment Plan, recorded July 15, 2002, [Instrument No. 2002-245118, Official Records](#).

9. Matters contained in that certain document

Entitled: Agreement Relinquishing Rights to Water Service
Dated: July 7, 2015
Executed by: Gloria Jean McCoy and East Contra Costa Irrigation District, a public entity
Recording Date: August 13, 2015
[Recording No: 2015-168773, Official Records](#)

Reference is hereby made to said document for full particulars.

10. Any invalidity or defect in the title of the vestees in the event that the trust referred to herein is invalid or fails to grant sufficient powers to the trustee(s) or in the event there is a lack of compliance with the terms and provisions of the trust instrument.

If title is to be insured in the trustee(s) of a trust, (or if their act is to be insured), this Company will require a Trust Certification pursuant to California Probate Code Section 18100.5.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

11. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.

12. The Company will require that an Owner's Affidavit be completed by the party(s) named below before the issuance of any policy of title insurance.

Party(s): Vestee(s) herein

The Company reserves the right to add additional items or make further requirements after review of the requested Affidavit.

END OF EXCEPTIONS

NOTES

1. None of the items shown in this report will cause the Company to decline to attach ALTA Endorsement Form 9 to an Extended Coverage Loan Policy, when issued.
2. Note: The Company is not aware of any matters which would cause it to decline to attach CLTA Endorsement Form 116 indicating that there is located on said Land a Single Family Residence, known as A Portion of 1901 Lone Oak Road, Brentwood, CA, to an Extended Coverage Loan Policy.
3. Note: The name(s) of the proposed insured(s) furnished with this application for title insurance is/are:

Name(s) furnished: Shea Homes Limited Partnership

If these name(s) are incorrect, incomplete or misspelled, please notify the Company.
4. Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.
5. Note: Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts were:

<u>Tax Identification No.:</u>	<u>016-040-004-0</u>
Fiscal Year:	2022-2023
1st Installment:	\$972.79
2nd Installment:	\$972.79
Exemption:	\$7,000.00
Land:	\$94,688.00
Improvements:	\$65,112.00
Code Area:	10106
Bill No.:	018484
6. The application for title insurance was placed by reference to only a street address or tax identification number. The proposed Insured must confirm that the legal description in this report covers the parcel(s) of Land requested to be insured. If the legal description is incorrect, the proposed Insured must notify the Company and/or the settlement company in order to prevent errors and to be certain that the legal description for the intended parcel(s) of Land will appear on any documents to be recorded in connection with this transaction and on the policy of title insurance.
7. Note: If a county recorder, title insurance company, escrow company, real estate broker, real estate agent or association provides a copy of a declaration, governing document or deed to any person, California law requires that the document provided shall include a statement regarding any unlawful restrictions. Said statement is to be in at least 14-point bold face type and may be stamped on the first page of any document provided or included as a cover page attached to the requested document. Should a party to this transaction request a copy of any document reported herein that fits this category, the statement is to be included in the manner described.
8. Note: Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of a Company agent, an authorized employee of the insured lender, or by using Bancserv or other Company-approved third-party service. If the above requirement cannot be met, please call the Company at the number provided in this report.
9. Note: The policy of title insurance will include an arbitration provision. The Company or the insured may demand arbitration. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Please ask your escrow or title officer for a sample copy of the policy to be issued if you wish to review the arbitration provisions and any other provisions pertaining to your Title Insurance coverage.

**NOTES
(Continued)**

10. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.
11. Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.
12. Due to the special requirements of SB 50 (California Public Resources Code Section 8560 et seq.), any transaction that includes the conveyance of title by an agency of the United States must be approved in advance by the Company's State Counsel, Regional Counsel, or one of their designees.

END OF NOTES

Kevin Davis/jf

Wire Fraud Alert

This Notice is not intended to provide legal or professional advice. If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. **DO NOT** use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the phone number of relevant parties to the transaction as soon as an escrow account is opened.** **DO NOT** send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do **NOT** reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
<http://www.fbi.gov>

Internet Crime Complaint Center:
<http://www.ic3.gov>



Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

FNF Underwritten Title Company

- CTC – Chicago Title company
- CLTC – Commonwealth Land Title Company
- FNTC – Fidelity National Title Company of California
- FNTCCA - Fidelity National Title Company of California
- TICOR – Ticor Title Company of California
- LTC – Lawyer’s Title Company
- SLTC – ServiceLink Title Company

Underwritten by FNF Underwriters

- CTIC – Chicago Title Insurance Company
- CLTIC - Commonwealth Land Title Insurance Company
- FNTIC – Fidelity National Title Insurance Company
- FNTIC - Fidelity National Title Insurance Company
- CTIC – Chicago Title Insurance Company
- CLTIC – Commonwealth Land Title Insurance Company
- CTIC – Chicago Title Insurance Company

Available Discounts

DISASTER LOANS (CTIC, CLTIC, FNTIC)

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within twenty-four (24) months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be fifty percent (50%) of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC, FNTIC)

On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be fifty percent (50%) to seventy percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be forty (40%) to fifty percent (50%) of the appropriate title insurance rate, depending on the type of coverage selected.

FIDELITY NATIONAL FINANCIAL, INC. PRIVACY NOTICE

Effective January 1, 2023

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, “FNF,” “our,” or “we”) respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary’s website and this Privacy Notice does not apply.

Collection of Personal Information

FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver’s license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an “FNF Website”) from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a “cookie” may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer’s hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to “Do Not Track” features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates’, and others’ products and services, jointly or independently.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to affiliated or nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;

- to affiliated or nonaffiliated third parties with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

Choices With Your Information

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the “California Privacy” link on our website (<https://fnf.com/pages/californiaprivacy.aspx>) or call (888) 413-1748.

For Nevada Residents: We are providing this notice pursuant to state law. You may be placed on our internal Do Not Call List by calling FNF Privacy at (888) 714-2710 or by contacting us via the information set forth at the end of this Privacy Notice. For further information concerning Nevada’s telephone solicitation law, you may contact: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: aginquiries@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

For Virginia Residents: For additional information about your Virginia privacy rights, please email privacy@fnf.com or call (888) 714-2710.

Information From Children

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF’s headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the “Service Websites”). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender’s privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender’s privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice’s effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice.

Accessing and Correcting Information; Contact Us

If you have questions or would like to correct your Personal Information, visit FNF's [Privacy Inquiry Website](#) or contact us by phone at (888) 714-2710, by email at privacy@fnf.com, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

ATTACHMENT ONE

CALIFORNIA LAND TITLE ASSOCIATION STANDARD COVERAGE POLICY – 1990 (11-09-18)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART II

(Variable exceptions such as taxes, easements, CC&R's, etc., are inserted here)

CALIFORNIA LAND TITLE ASSOCIATION STANDARD COVERAGE OWNER'S POLICY (02-04-22)

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
 - i. the occupancy, use, or enjoyment of the Land;
 - ii. the character, dimensions, or location of any improvement on the Land;
 - iii. the subdivision of land; or
 - iv. environmental remediation or protection.
- b. any governmental forfeiture, police, regulatory, or national security power.
- c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b. Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.

3. Any defect, lien, encumbrance, adverse claim, or other matter:
 - a. created, suffered, assumed, or agreed to by the Insured Claimant;
 - b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - c. resulting in no loss or damage to the Insured Claimant;
 - d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
 - e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
 - a. fraudulent conveyance or fraudulent transfer;
 - b. voidable transfer under the Uniform Voidable Transactions Act; or
 - c. preferential transfer:
 - i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
 - ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

PART I

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

PART II

(Variable exceptions such as taxes, easements, CC&R's, etc., are inserted here)

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (07-01-2021)

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy and We will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
 - i. the occupancy, use, or enjoyment of the Land;
 - ii. the character, dimensions, or location of any improvement on the Land;
 - iii. the subdivision of land; or
 - iv. environmental remediation or protection.
- b. any governmental forfeiture, police, or regulatory, or national security power.
- c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b. Exclusion 1 does not modify or limit the coverage provided under Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23, or 27.
2. Any power to take the Land by condemnation. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 17.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
 - a. created, suffered, assumed, or agreed to by You;
 - b. not Known to Us, not recorded in the Public Records at the Date of Policy, but Known to You and not disclosed in writing to Us by You prior to the date You became an Insured under this policy;

- c. resulting in no loss or damage to You;
 - d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 5, 8.f., 25, 26, 27, 28, or 32); or
 - e. resulting in loss or damage that would not have been sustained if You paid consideration sufficient to qualify You as a bona fide purchaser of the Title at the Date of Policy.
4. Lack of a right:
 - a. to any land outside the area specifically described and referred to in Item 3 of Schedule A; and
 - b. in any street, road, avenue, alley, lane, right-of-way, body of water, or waterway that abut the Land.
 Exclusion 4 does not modify or limit the coverage provided under Covered Risk 11 or 21.
 5. The failure of Your existing structures, or any portion of Your existing structures, to have been constructed before, on, or after the Date of Policy in accordance with applicable building codes. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 14 or 15.
 6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transfer of the Title to You is a:
 - a. fraudulent conveyance or fraudulent transfer;
 - b. voidable transfer under the Uniform Voidable Transactions Act; or
 - c. preferential transfer:
 - i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
 - ii. for any other reason not stated in Covered Risk 30.
 7. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
 8. Negligence by a person or an entity exercising a right to extract or develop oil, gas, minerals, groundwater, or any other subsurface substance.
 9. Any lien on Your Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 9 does not modify or limit the coverage provided under Covered Risk 8.a. or 27.
 10. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$5,000.00

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.
 This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.
 This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$5,000.00

ALTA OWNER'S POLICY (07-01-2021)

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
 - i. the occupancy, use, or enjoyment of the Land;
 - ii. the character, dimensions, or location of any improvement on the Land;
 - iii. the subdivision of land; or
 - iv. environmental remediation or protection.
 - b. any governmental forfeiture, police, regulatory, or national security power.
 - c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b. Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
 - a. created, suffered, assumed, or agreed to by the Insured Claimant;
 - b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - c. resulting in no loss or damage to the Insured Claimant;
 - d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
 - e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
 - a. fraudulent conveyance or fraudulent transfer;
 - b. voidable transfer under the Uniform Voidable Transactions Act; or
 - c. preferential transfer:
 - i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
 - ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
 6. Any lien on the Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
 7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

NOTE: The 2021 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant,

exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
 - (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

EXCEPTIONS FROM COVERAGE

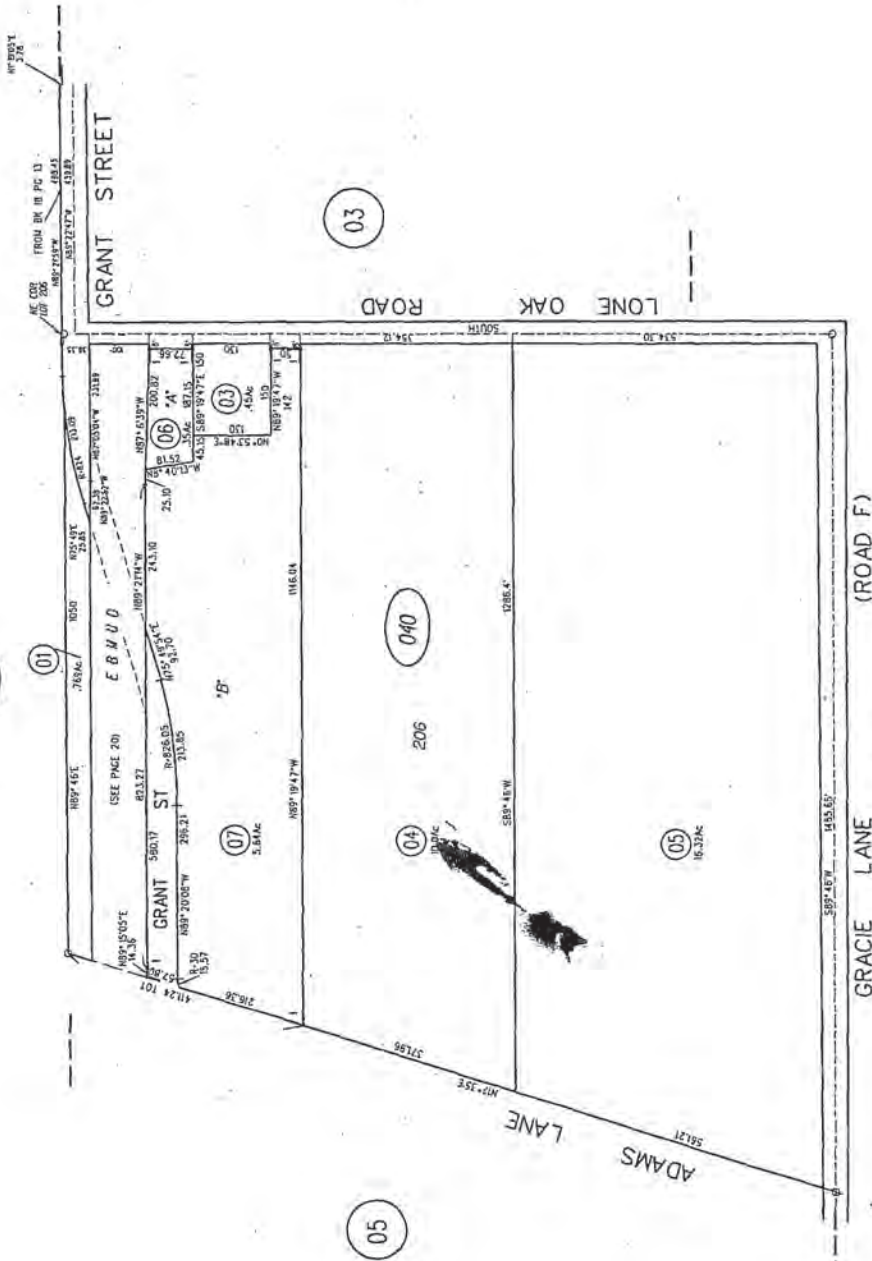
This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

NOTE: The 2006 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed below as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

LOT 206 BRENTWOOD IRRIGATED FARM-SUB NO 5 US 17-372 8/17/1920
 1-191PM40 10/18/2004

PB
18



040
040
8/15/08

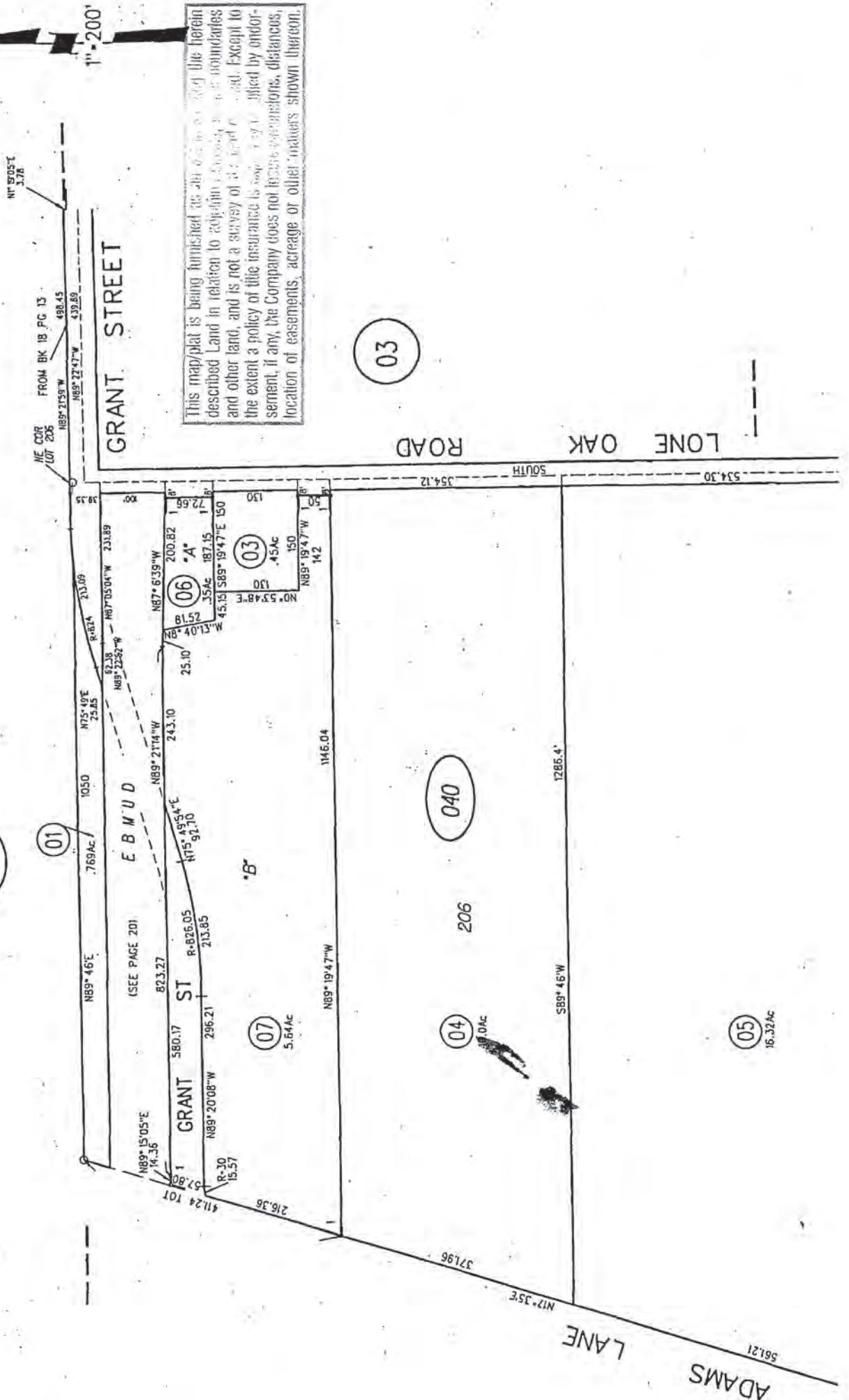
FM 474
ASSESSOR'S MAP
BOOK 16 PAGE 4
CONTRA COSTA COUNTY, CALIF.

This map/plat is being furnished as an aid to locating the herein described Land in relation to adjacent parcels, and boundaries and other land, and is not a survey of the land shown, except to the extent a policy of title insurance is in effect. It does not constitute a location of easements, acreage or other matters shown thereon.

NOTE: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR ERRORS OR OMISSIONS. THE INFORMATION DELINEATED HEREON, ASSESSOR'S PARCELS, MAY NOT COMPLY WITH LOCAL LOT SPLIT OR BUILDING SITE ORDINANCES.

LOT 206 BRENTWOOD IRRIGATED FARM-SUB NO 5 MB 17-372 8/4/1920
 1-191PM40 11/18/2004

PB
 18





DRAFT

APPENDIX C

ENVIRONMENTAL DATA RESOURCES, INC.

Historical Topographic Map Report

McCoy Property
1901 Lone Oak Road
Brentwood, CA 94513

Inquiry Number: 7323104.4

April 28, 2023

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/28/23

Site Name:

McCoy Property
1901 Lone Oak Road
Brentwood, CA 94513
EDR Inquiry # 7323104.4

Client Name:

Engeo
6399 San Ignacio Avenue
San Jose, CA 95119
Contact: Cody Johnson



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Engeo were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	22989.000.001	Latitude:	37.95275 37° 57' 10" North
Project:	McCoy Property	Longitude:	-121.703992 -121° 42' 14" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	613861.40
		UTM Y Meters:	4201364.61
		Elevation:	71.00' above sea level

Maps Provided:

2018	1916
2015	1914
2012	
1978	
1968	
1954	
1943	
1940	

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT. Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Brentwood
2018
7.5-minute, 24000

2015 Source Sheets



Brentwood
2015
7.5-minute, 24000

2012 Source Sheets



Brentwood
2012
7.5-minute, 24000

1978 Source Sheets

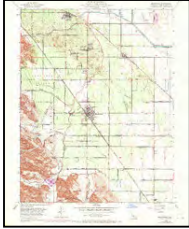


Brentwood
1978
7.5-minute, 24000
Aerial Photo Revised 1974

Topo Sheet Key

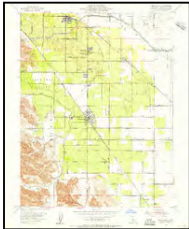
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1968 Source Sheets



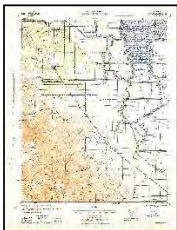
Brentwood
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1954 Source Sheets



Brentwood
1954
7.5-minute, 24000
Aerial Photo Revised 1949

1943 Source Sheets



BYRON
1943
15-minute, 62500

1940 Source Sheets

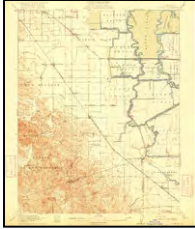


Byron
1940
15-minute, 62500
Aerial Photo Revised 1940

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1916 Source Sheets

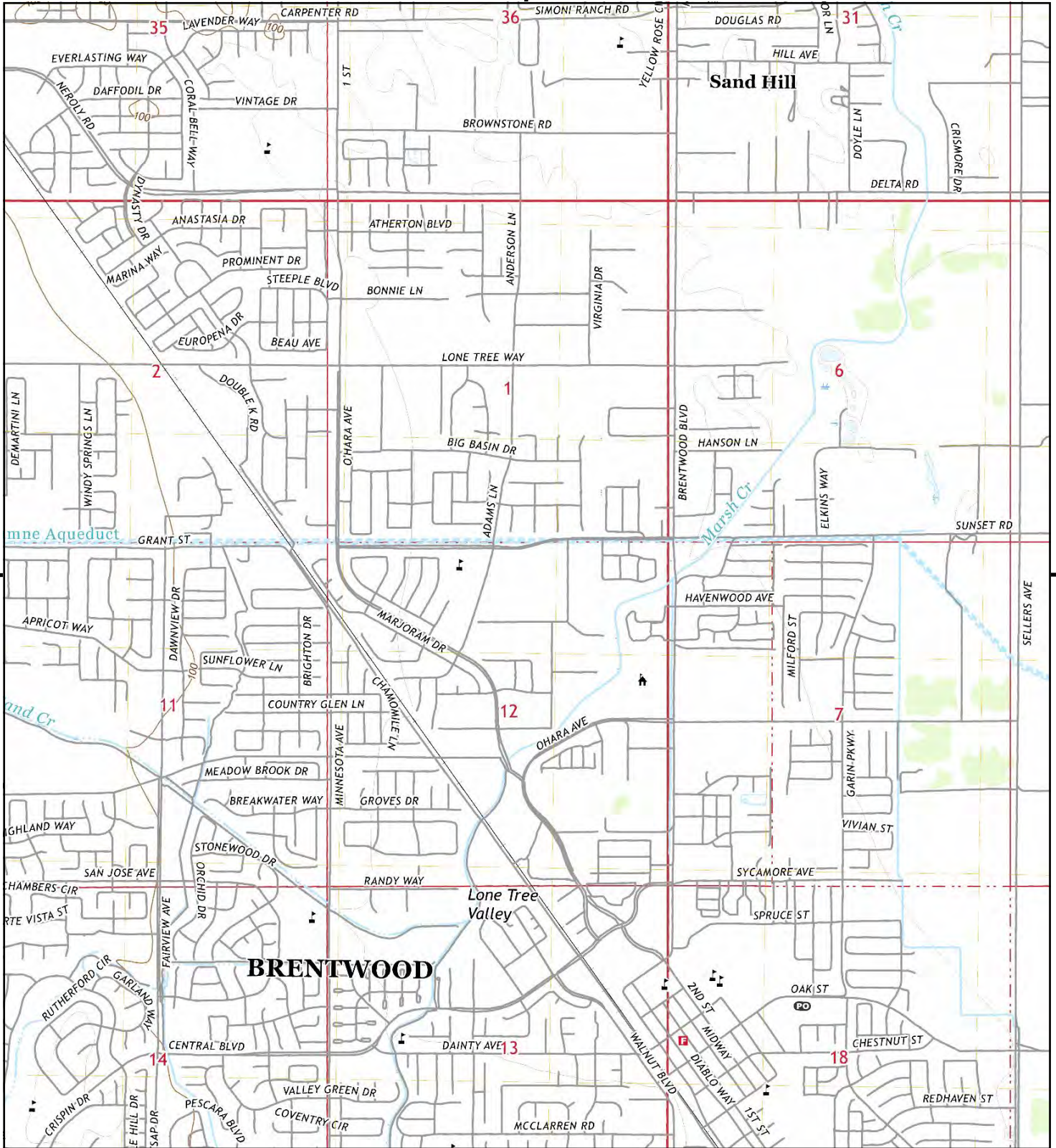


Byron
1916
15-minute, 62500

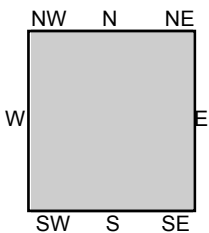
1914 Source Sheets



Brentwood
1914
7.5-minute, 31680



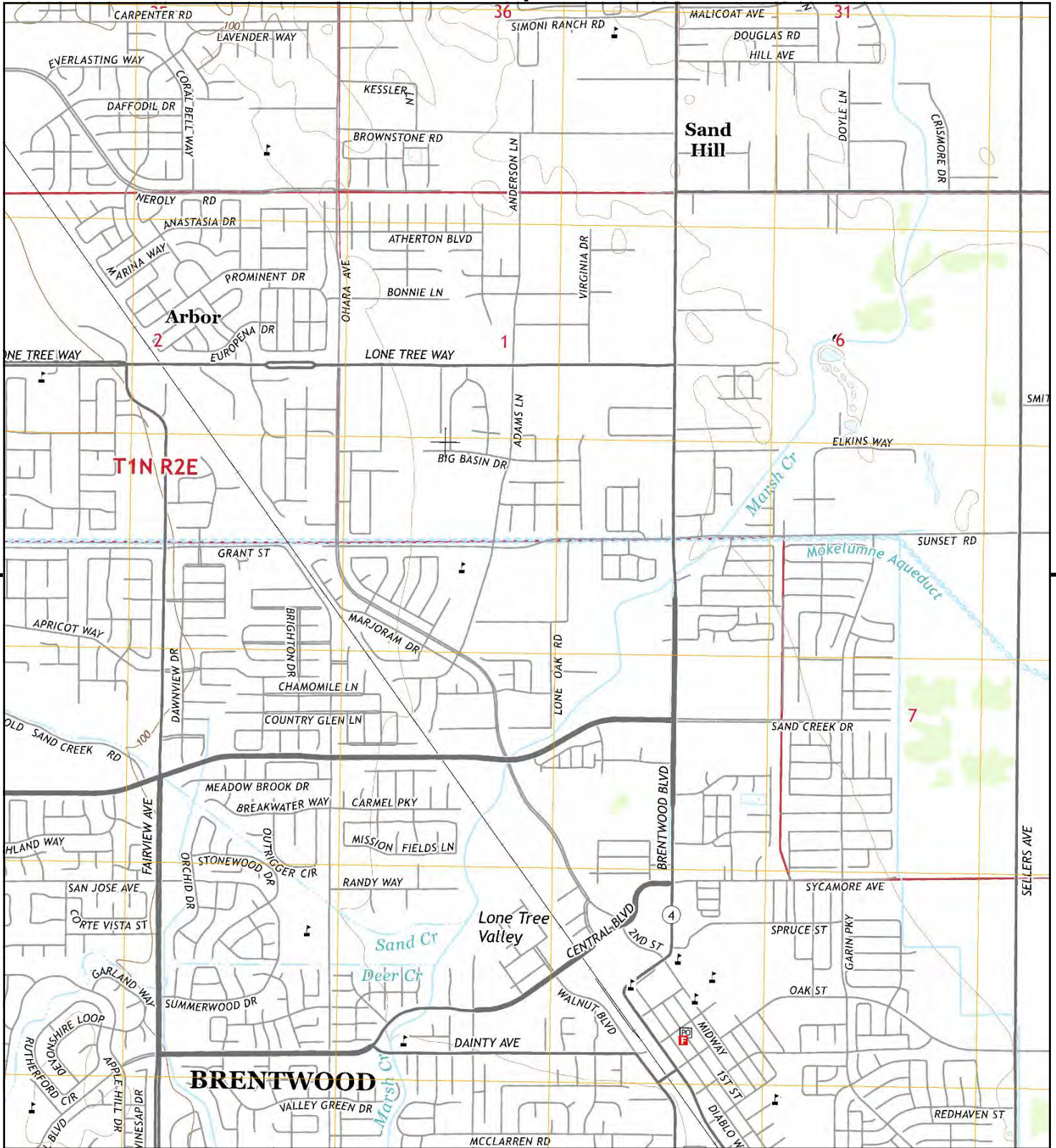
This report includes information from the following map sheet(s).



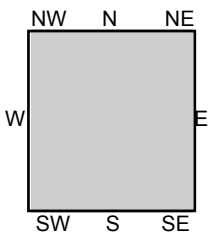
TP, Brentwood, 2018, 7.5-minute

SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo





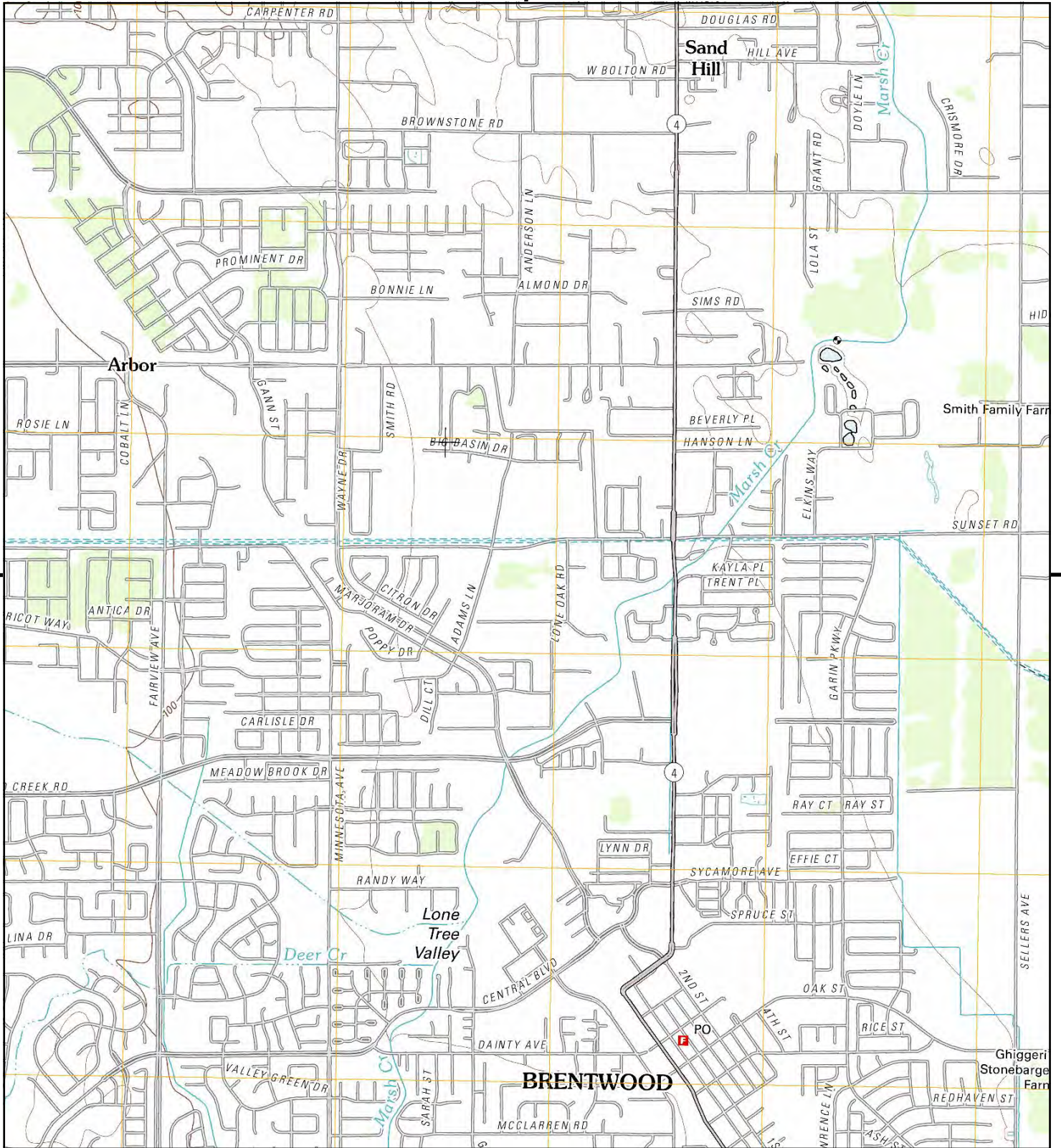
This report includes information from the following map sheet(s).



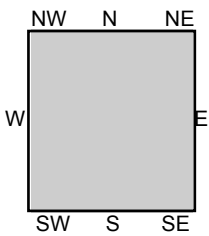
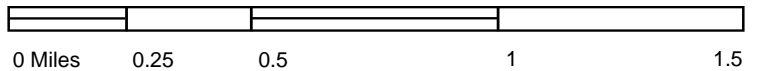
TP, Brentwood, 2015, 7.5-minute

SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo





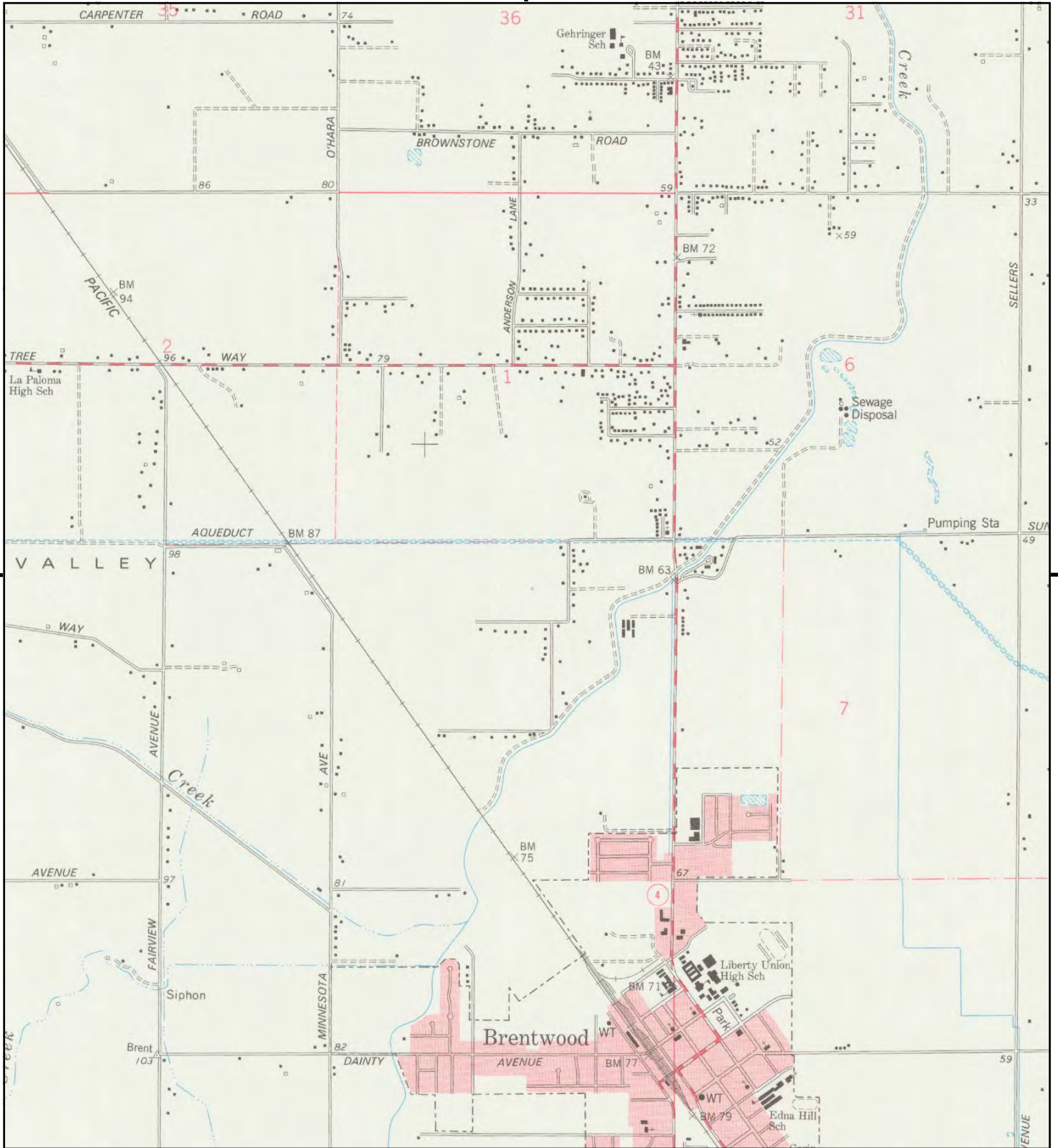
This report includes information from the following map sheet(s).



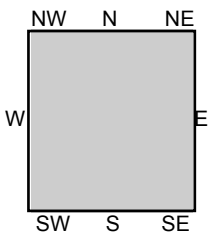
TP, Brentwood, 2012, 7.5-minute

SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo





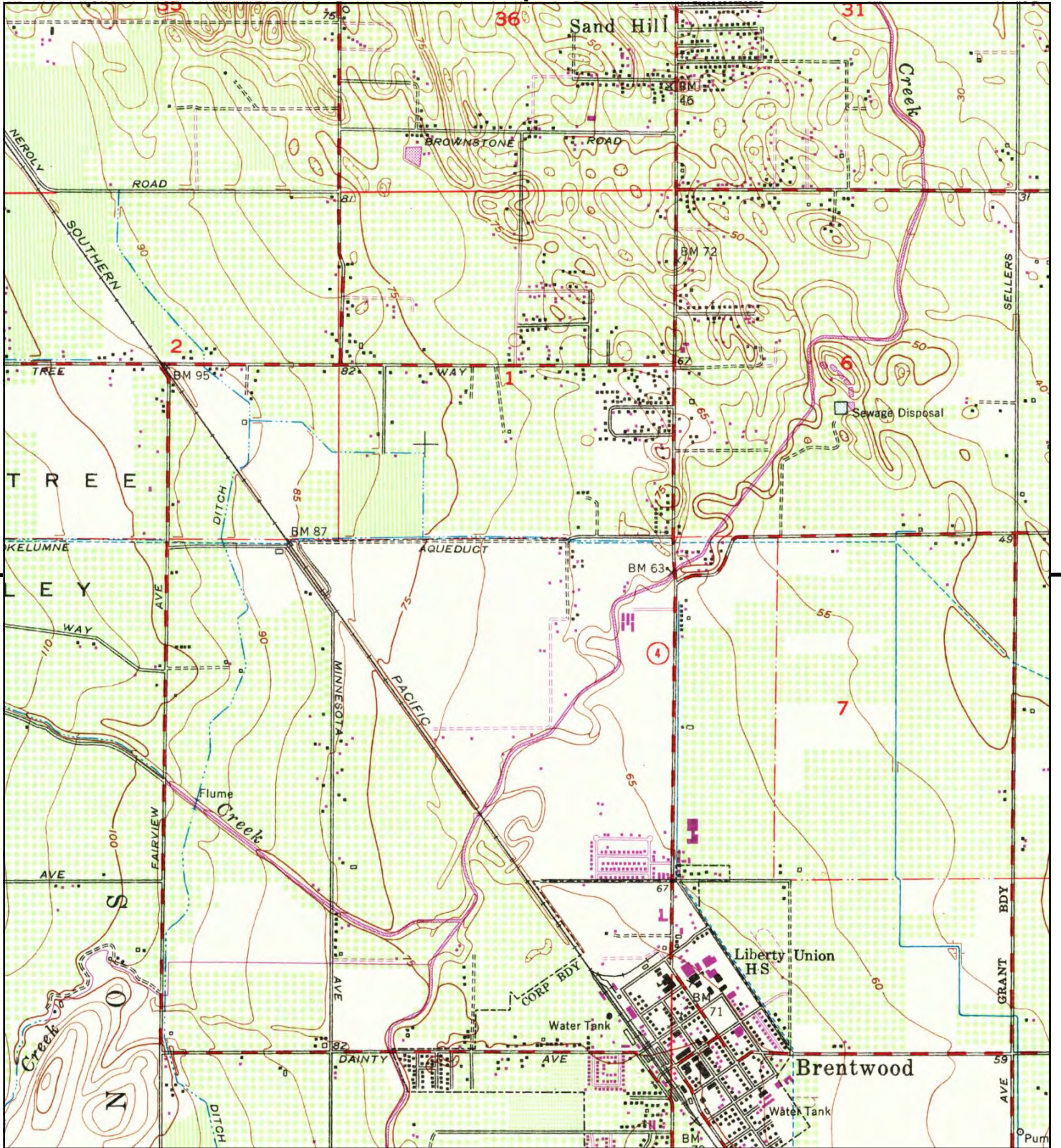
This report includes information from the following map sheet(s).



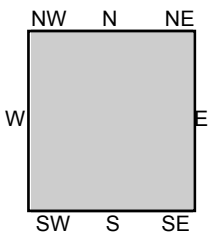
TP, Brentwood, 1978, 7.5-minute

SITE NAME: McCoy Property
ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
CLIENT: Engeo





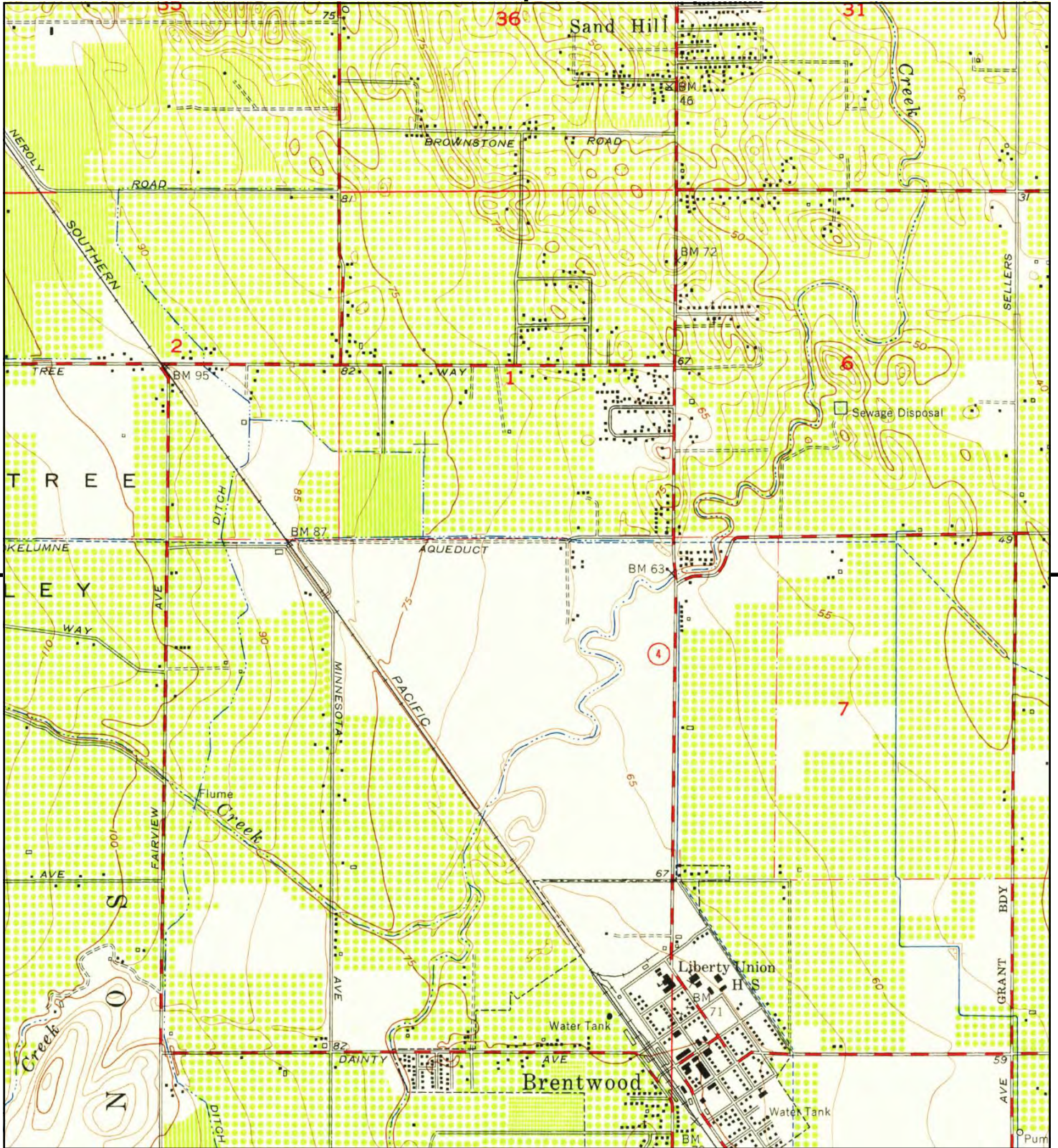
This report includes information from the following map sheet(s).



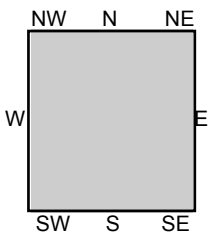
TP, Brentwood, 1968, 7.5-minute

SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo





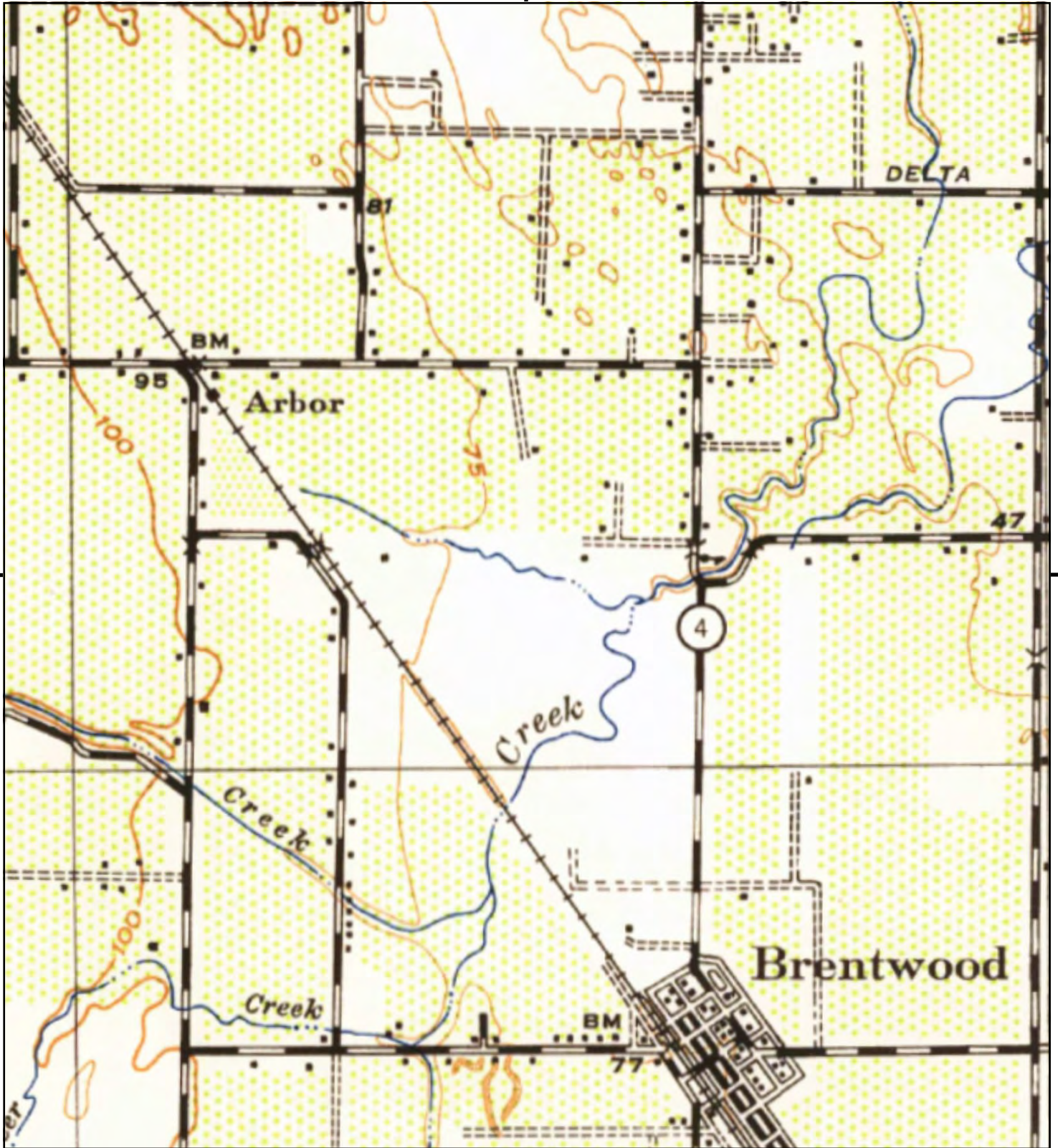
This report includes information from the following map sheet(s).



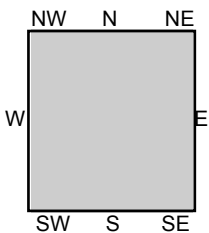
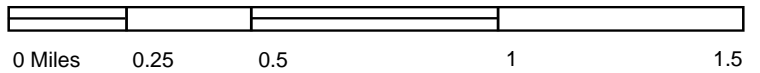
TP, Brentwood, 1954, 7.5-minute

SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo





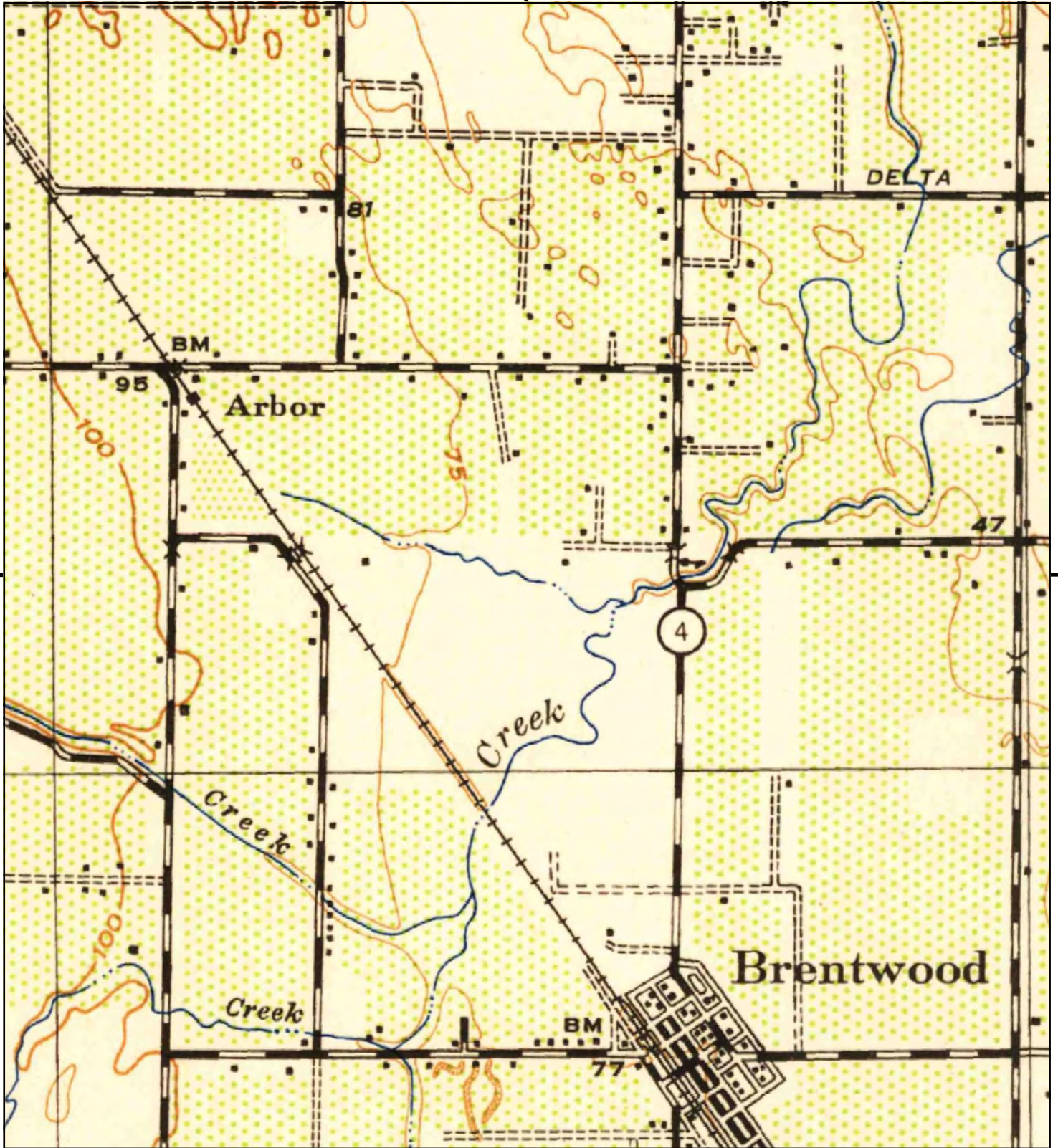
This report includes information from the following map sheet(s).



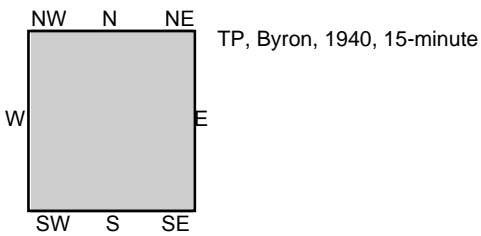
TP, BYRON, 1943, 15-minute

SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo



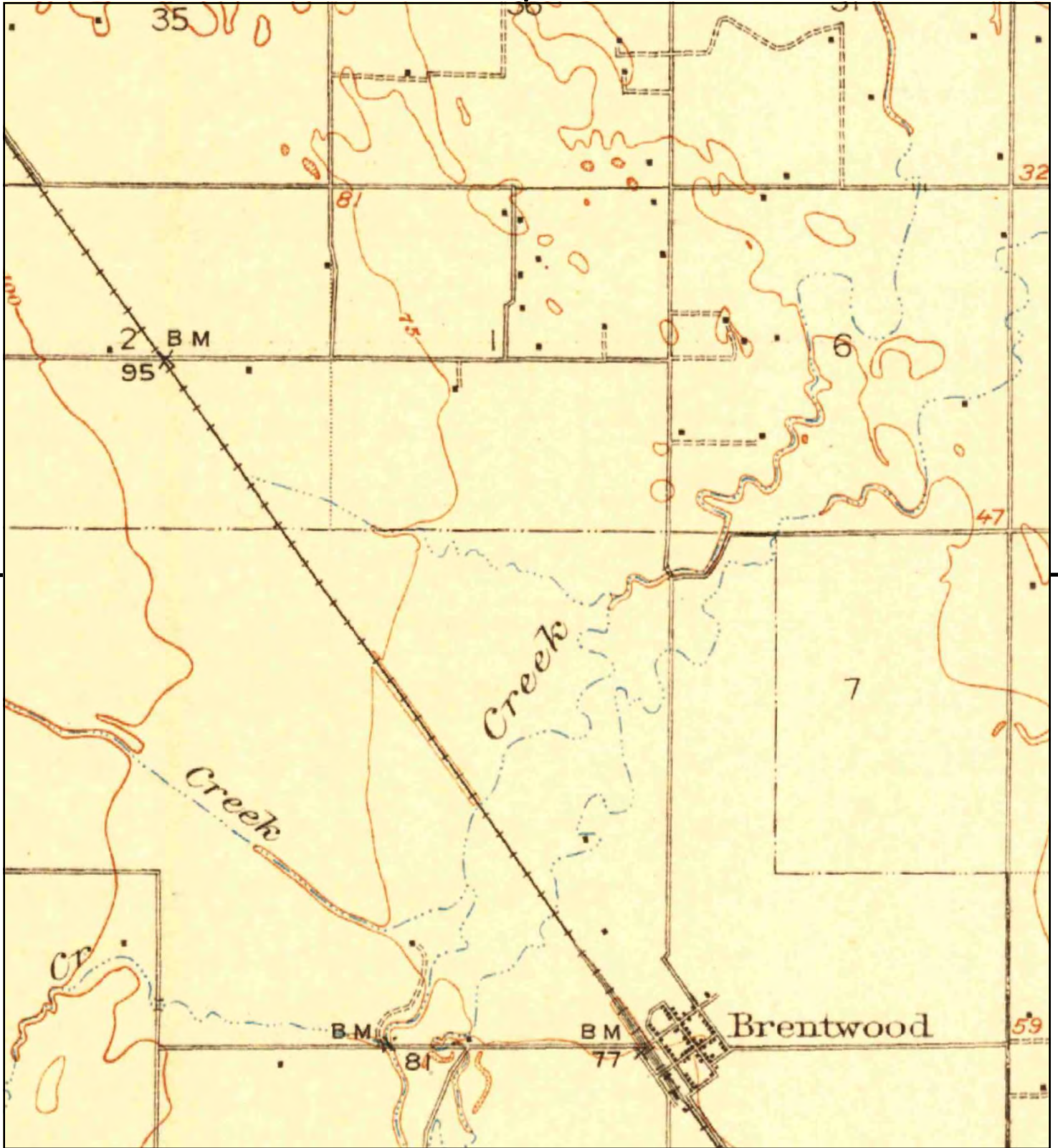


This report includes information from the following map sheet(s).

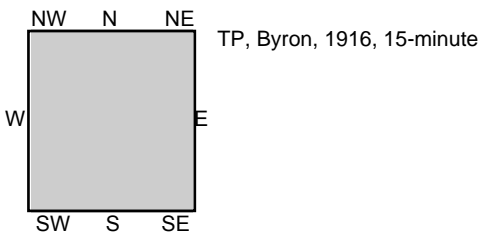


SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo



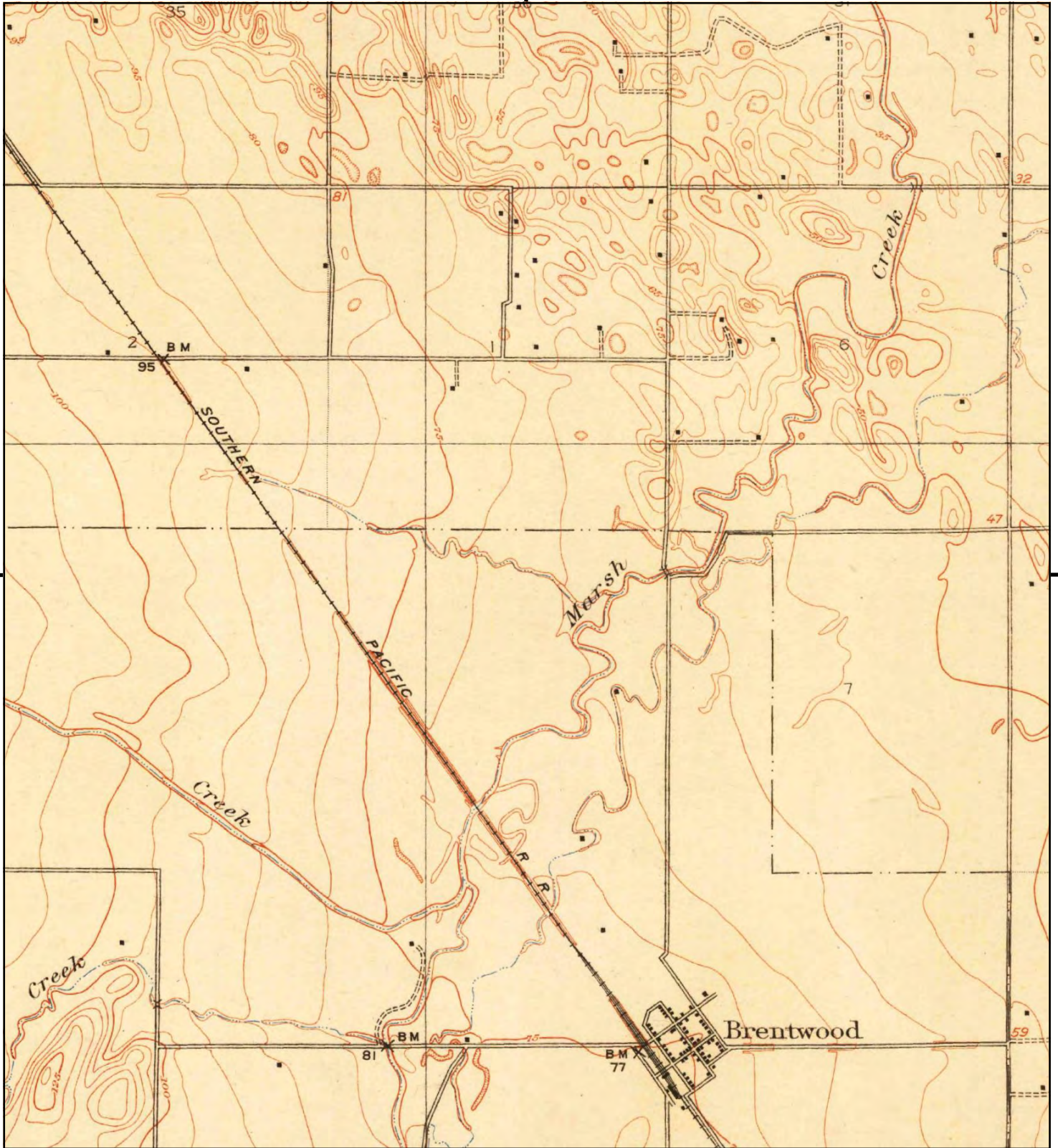


This report includes information from the following map sheet(s).

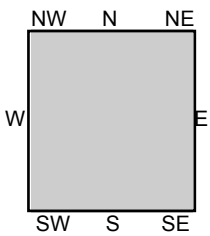


SITE NAME: McCoy Property
ADDRESS: 1901 Lone Oak Road
Brentwood, CA 94513
CLIENT: Engeo





This report includes information from the following map sheet(s).



TP, Brentwood, 1914, 7.5-minute

SITE NAME: McCoy Property
 ADDRESS: 1901 Lone Oak Road
 Brentwood, CA 94513
 CLIENT: Engeo





DRAFT

APPENDIX D

ENVIRONMENTAL DATA RESOURCES, INC.

Aerial Photo Decade Package



McCoy Property

1901 Lone Oak Road

Brentwood, CA 94513

Inquiry Number: 7323104.8

April 28, 2023

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/28/23

Site Name:

McCoy Property
1901 Lone Oak Road
Brentwood, CA 94513
EDR Inquiry # 7323104.8

Client Name:

Engeo
6399 San Ignacio Avenue
San Jose, CA 95119
Contact: Cody Johnson



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2020	1"=500'	Flight Year: 2020	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Flight Date: August 22, 1998	USDA
1993	1"=500'	Acquisition Date: June 16, 1993	USGS/DOQQ
1984	1"=500'	Flight Date: June 29, 1984	USDA
1982	1"=500'	Flight Date: July 05, 1982	USDA
1979	1"=500'	Flight Date: August 16, 1979	USDA
1972	1"=500'	Flight Date: July 06, 1972	USDA
1966	1"=500'	Flight Date: May 16, 1966	USDA
1963	1"=500'	Flight Date: July 15, 1963	EDR Proprietary Aerial Viewpoint
1959	1"=500'	Flight Date: April 11, 1959	USDA
1949	1"=500'	Flight Date: October 13, 1949	USGS
1939	1"=500'	Flight Date: June 28, 1939	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT.

ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT.

Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.



INQUIRY #: 7323104.8

YEAR: 2020

— = 500'





INQUIRY #: 7323104.8

YEAR: 2016

— = 500'





INQUIRY #: 7323104.8

YEAR: 2012

— = 500'





INQUIRY #: 7323104.8

YEAR: 2009

— = 500'





INQUIRY #: 7323104.8

YEAR: 2006

— = 500'





INQUIRY #: 7323104.8

YEAR: 1998

— = 500'





INQUIRY # 7323104.8

YEAR: 1993

— = 500'





INQUIRY #: 7323104.8

YEAR: 1984

— = 500'





INQUIRY #: 7323104.8

YEAR: 1982

— = 500'





INQUIRY # 7323104.8

YEAR: 1979

— = 500'





INQUIRY #: 7323104.8

YEAR: 1972

— = 500'





INQUIRY #: 7323104.8

YEAR: 1966

— = 500'





INQUIRY #: 7323104.8

YEAR: 1963

— = 500'





INQUIRY # 7323104.8

YEAR: 1959

— = 500'





INQUIRY #: 7323104.8

YEAR: 1949

— = 500'





INQUIRY #: 7323104.8

YEAR: 1939

— = 500'





DRAFT

APPENDIX E

ENVIRONMENTAL DATA RESOURCES, INC.

Sanborn Map Report

McCoy Property
1901 Lone Oak Road
Brentwood, CA 94513

Inquiry Number: 7323104.3

April 28, 2023

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/28/23

Site Name:

McCoy Property
1901 Lone Oak Road
Brentwood, CA 94513
EDR Inquiry # 7323104.3

Client Name:

Engeo
6399 San Ignacio Avenue
San Jose, CA 95119
Contact: Cody Johnson



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Engeo were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # F46B-4236-896C
PO # 22989.000.001
Project McCoy Property

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: F46B-4236-896C

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Engeo (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT. Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.



DRAFT

APPENDIX F

ENVIRONMENTAL DATA RESOURCES, INC.

City Directory

McCoy Property

1901 Lone Oak Road
Brentwood, CA 94513

Inquiry Number: 7323104.5
May 03, 2023

The EDR-City Directory Image Report

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. **NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT.** Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, LLC. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, LLC, or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information
2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information
1990	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1985	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1980	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1975	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

1901 Lone Oak Road
Brentwood, CA 94513

Year CD Image Source

LONE OAK RD

2020	pg A2	EDR Digital Archive	
2017	pg A4	Cole Information	
2014	pg A5	Cole Information	
2010	pg A6	Cole Information	
2005	pg A7	Cole Information	
2000	pg A8	Cole Information	
1995	pg A9	Cole Information	
1992	pg A10	Cole Information	
1990	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1985	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1980	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1975	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

LONE OAK RD 2020

1540	CHARLENE MILLER JOHN MILLER STEPHEN MILLER
1560	KETURAH EBERHARDT REBECCA PAKULSKI RYAN PAKULSKI
1565	CORNEL TODOR SINZIANA TODOR
1598	TIFFANY ZAMORA
1601	LORI TONKIN
1605	ROMAN VILLANDRY
1635	DELORES DUKE DUKE HALE
1681	CYNDI GALEY JERRY GALEY LUCINDA GALEY
1700	MICHELLE CHELARU VALI CHELARU
1721	CHARLES COLEY ELWOOD JENSEN ERIC COLEY GERALDINE COLEY JEAN COLEY JERI COLEY JUDY JENSEN
1740	BARBARA CLEMONS GEORGE CLEMONS
1742	CONNIE CLEMONS KYLE CLEMONS
1746	DANA GUENETTE THOMAS GUENETTE TYLER GUENETTE
1750	CYRINA SMITH
1800	HARPAUL SANDHU HARVINDER SANDHU JASON TATE
1820	BONNIBEL LANE FRANKLIN LANE ROBERT LANE
1860	JEFFREY ALLSBROOK SUSAN ALLSBROOK
1900	AMBER DAVIES SEAN DAVIES
1914	PAT VANDENBROEK
1916	PATRICIA BROEK REBECCA KELLAM
1920	LELAND HANCOCK
1931	DALE KAUPANGER LORI KAUPANGER
1954	MARK DUKE

LONE OAK RD 2020 (Cont'd)

1971	JILL DUKE
	RW INTERIORS
	TRACE DUKE
1980	JAMES MCCLELLAN
	JIM MCCLELLAN TERMITE CONTROL

LONE OAK RD 2017

1560	PAKULSKI, RYAN M
1565	TODOR, CORNEL L
1601	LORI LEES FAMILY DOG TRAINING SMITH, KAREY
1700	BELL, CYNTHIA
1701	ALBRIGHT, MADELYN
1740	CLEMONS, GEORGE E
1742	CLEMONS, KYLE J
1746	GUENETTE, TOM J
1750	SMITH, NATHAN D
1800	TATE, JASON A
1820	LANE, DANNY
1860	ALLSBROOK, JEFFREY C
1901	MCCOY, GLORIA J
1914	PETERSON, SANDRA
1916	KELLAM, JOHN C
1931	KAUPANGER, DALE R
1960	DUKE, HALE K
1970	BOWMAN, DEAN A
1971	DUKE, MARK H
1980	MCCLELLAN JAMES I & KELLY GONZALEZ MCCLELLAN, JAMES I

LONE OAK RD 2014

1510 OCCUPANT UNKNOWN,
1540 MILLER, JERRY E
1560 EBERHARDT, RICK L
1601 IRRIGATION SYSTEM SERVICE
LORI LEES FAMILY DOG TRAINING
SMITH, KAREY
1640 TONKIN, RON J
1681 OCCUPANT UNKNOWN,
1700 BELL, CYNTHIA
1701 ALBRIGHT, MADELYN
1721 OCCUPANT UNKNOWN,
1740 CLEMONS, GEORGE E
1742 CLEMONS, KYLE J
1746 GUENETTE, TOM J
1750 SMITH, NATHAN D
1800 TATE, JASON A
1820 LANE, BONNIBEL A
1860 ALLSBROOK, JEFFREY C
FIBER OPTICS SOLUTIONS INC
1900 BOYD, R
1901 MCCOY, GLORIA J
1910 OROZCO, NELSON
1914 PETERSON, SANDRA
1916 KELLAM, REBECCA L
1920 OCCUPANT UNKNOWN,
1931 KAUPANGER, DALE R
1960 OCCUPANT UNKNOWN,
1970 OCCUPANT UNKNOWN,
1971 DUKE, MARK H
1980 JIM MCCLELLAN TERMITE CONTROL
MCCLELLAN JAMES I & KELLY GONZALEZ
MCCLELLAN, JAMES I

LONE OAK RD 2010

1510 KEYS, PAUL R
1540 MILLER, JERRY E
1560 EBERHARDT, RICK
1598 OCCUPANT UNKNOWN,
TRISTAR LANDSCAPE SVC
1601 LORI LEES FAMILY DOG TRAINING
TONKIN, RON J
1640 OCCUPANT UNKNOWN,
1681 GALEY, JERRY L
1701 ALBRIGHT, MADELINE M
1721 JENSEN, ELWOOD L
1740 CLEMONS, GEORGE E
1742 CLEMONS, KYLE J
1746 GUENETTE, TOM J
1750 SMITH, NATHAN D
1800 CLEMONS, HAZEL E
1820 LANE, BONNIBEL L
1860 ALLSBROOK, JEFFREY C
FIBER OPTICS SOLUTIONS INC
1900 BOYD, EUGENE R
1901 MCCOY, GLORIA J
1910 OCCUPANT UNKNOWN,
1914 BROEK, PATRICIA V
1916 DIMAS, SONIA
1920 FOUNTAIN, AARON E
1931 KAUPANGER, DALE R
1970 WILLIAMS, ANDREW B
1971 DUKE, MARK
1980 MCCLELLAN, JAMES I

LONE OAK RD 2005

1510 KEYS, PAUL R
1540 MILLER, JERRY E
1560 EBERHARDT, RICK
1598 DELTA DAWGS BASEBALL CLUB
ZAMORA, JOHN A
1601 TONKIN, RON
1640 KATRONES, TIMMOTHY S
1681 GALEY, JERRY L
1700 ALLEN, HUBER E
1701 ALBRIGHT, MADELINE M
1721 JENSEN, ELWOOD L
1740 CLEMONS, GEORGE E
1742 CLEMONS, KYLE J
1746 GUENETTE, TOM J
1750 SMITH, NATHAN D
1800 CLEMONS, HAZEL E
1820 LANE, FRANK P
1860 ALLSBROOK, JEFFREY C
FIBER OPTICS SOLUTIONS INC
1900 BOYD, EUGENE R
1901 MCCOY, GLORIA J
1910 OCCUPANT UNKNOWN,
1914 PETERSON, SANDRA
1916 FOSTER, JULIE
1931 KAUPANGER, DALE R
1971 MEDEROS, DON J
1980 JIM MCCLELLAN HOME IMPROVEMENT
MCCLELLAN, JAMES I

LONE OAK RD 2000

1510 OCCUPANT UNKNOWN,
1540 MINGES, FRANCES
1560 JACOBSON, J
1598 OCCUPANT UNKNOWN,
1601 TURLEY, VERNON E
1640 OCCUPANT UNKNOWN,
1681 GALEY, JERRY
1700 ALLEN, HUBER E
1701 OCCUPANT UNKNOWN,
1721 JENSEN, ELWOOD
1740 CLEMONS, GEORGE
1742 CLEMONS, KYLE
1750 SMITH, NATHAN D
1800 CLEMONS, EARL J
1820 GREENHILL, DAVID L
1860 ALLSBROOK, JEFFREY C
1900 BOYD, EUGENE
1901 MCCOY, GLORIA J
1910 OCCUPANT UNKNOWN,
1914 GREGORY, TERRY
1916 OCCUPANT UNKNOWN,
1920 SETTEMBRINO, JOHN
1931 KAUPANGER, DALE R
1960 THOMAS, MARC A
1971 GOODNER, DORIS A
1980 MCCLELLAN, JAMES I

LONE OAK RD 1995

1510 KEYS, PAUL R
1540 MILLER, JERRY
1560 JACOBSON, J
1640 MAYHORN, J H
1681 SEJTA, PETER
1701 ALBRIGHT, ERNEST W
1721 JENSEN, ELWOOD
1740 CLEMONS, GEORGE
1750 WHITE, HOWARD R
1820 LANE, C M
1900 ROBERTS, MAUDIE
1914 SCARFO, MICHAEL
1980 MCCLELLAN, JAMES I

LONE OAK RD 1992

1510 KEYS, PAUL R
1540 MILLER, JERRY
1560 JACOBSON, J
1640 MAYHORN, J H
1681 GALEY, JERRY
1701 ALBRIGHT, ERNEST W
1721 JENSEN, ELWOOD
1740 CLEMONS, GEORGE
1750 WHITE, HOWARD R
1900 BOYD, EUGENE
1920 RIVERA, INEZ
1931 KAUPANGER, DALE
1960 RAMIREZ, MARTIN



DRAFT

APPENDIX G

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRES (2)

**ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
FOR CLIENT**

To evaluate the potential for possible environmentally related impacts and site contamination the following information is requested. This questionnaire is to be completed by the user of the phase one environmental site assessment, or their authorized representative.

PART I

1. Property address and Assessor's Parcel Number (APN):

1901 Lone Oak Road Brentwood, CA

APN #016-040-04

2. Current property owner (name, address, voice/fax number):

Gloria McCoy
1901 Lone Oak Rd, Brentwood, CA
Phone number not available

3. Date current property owner assumed title of property:

May of 1981 as sole owner by virtue of death of spouse.
Prior to that property was granted September of 1954 to the couple.

4. Current property development/improvements:

One single family house on the SE corner, One barn located behind the house. ECCID irrigation pipeline on the western boundary. No other structures or improvements

5. Past property use, development/improvements:

Farming

6. Neighboring property uses:

Farming, residential, school, church, park.

PART II

1. Are you aware of any environmental cleanup liens against the *property* that are filed under federal, tribal, local or state law? Yes No

2. Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state or local law? Yes No

3. Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the *property* or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? Yes No

4. If a property transaction is occurring in conjunction with this environmental assessment, does the purchase price of this *property* reasonably reflect the fair market value of the *property*? Yes No

5. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*? Yes No N/A

6. Are you aware of any commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,
 - (a) do you know of specific chemicals that are present or once were present at the *property*?
 - (b) do you know of spills or other chemical releases that have taken place at the *property*?
 - (c) do you know of any environmental cleanups that have taken place at the *property*? Yes No

7. Based on your knowledge and experience related to the *property* are there any obvious indicators that point to the presence or likely presence of contamination at the *property*? Yes No

If a "Yes" response was provided to any of the above questions, please provide details below:

e roosed urcase rce s condenal bu reasonabl relecs e r

I certify that the information herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): David Best

Signature: _____



Date: 5/2/2023

**ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
FOR KEY SITE MANAGER**

To evaluate the potential for possible environmentally related impacts and site contamination the following information is requested. This questionnaire is to be preferably completed by the current property owner, or owner representative, leasing agent, or other person having good knowledge of the uses and physical characteristics of the property (Key Site Manager).

PART I

1. Property Address/Location and Assessor's Parcel Number (APN):

1901 Lone Oak Road Brentwood, CA

APN #016-040-04

2. Current property owner (name, address, voice/fax number):

Gloria McCoy
1901 Lone Oak Rd, Brentwood, CA
Phone number not available

3. Date current property owner assumed title of property:

May of 1981 as sole owner by virtue of death of spouse.
Prior to that property was granted September of 1954 to the couple.

4. Current property development/improvements:

One single family house on the SE corner, One barn located behind the house. ECCID irrigation pipeline on the western boundary. No other structures or improvements

5. Past property use, development/improvements:

Farming

6. Neighboring property uses:

Farming, residential, school, church, park.

PART II - The following questions should be answered to the best of your knowledge.

- | | | |
|---|--|---|
| 1. Is/has the <i>property</i> or any adjoining property used/been used for industrial purposes? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 2. Has the <i>property</i> or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 3. Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal in volume or 50 gal in the aggregate, stored on or used at the <i>property</i> or at the facility? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 4. Has undocumented soil been brought onto the property at any time? If yes, estimated quantity is _____ cubic yards. | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 5. Has soil been brought onto the property that originated from a contaminated site or that is of an unknown origin? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 6. Are there currently, or have there been previously, any pits, ponds, or lagoons located on the <i>property</i> in connection with waste treatment or waste disposal? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 7. Is there currently, or has there been previously, any stained soil on the <i>property</i> ? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 8. Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the <i>property</i> ? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 9. Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the <i>property</i> or adjacent to any structure located on the <i>property</i> ? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 10. Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 11. Are there any domestic, irrigation or monitoring wells on the property? | <input checked="" type="checkbox"/>
Yes | <input type="checkbox"/>
No |
| 12. If the <i>property</i> is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 13. Have you been informed of the past or current existence of <i>hazardous substances</i> or <i>petroleum products</i> or environmental violations with respect to the <i>property</i> or any facility located on the <i>property</i> ? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 14. Have there been any <i>environmental site assessments</i> of the <i>property</i> or facility that indicated the presence of <i>hazardous substances</i> or <i>petroleum products</i> on, or contamination of, the <i>property</i> or recommended further assessment of the <i>property</i> ? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 15. Have there been any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any <i>hazardous substance</i> or <i>petroleum products</i> involving the <i>property</i> ? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 16. Has there been any past agricultural use of the <i>property</i> , such as orchards or seed crop cultivation? | <input checked="" type="checkbox"/>
Yes | <input type="checkbox"/>
No |
| 17. Have any <i>hazardous substances</i> or <i>petroleum products</i> , unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the <i>property</i> ? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |
| 18. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs? | <input type="checkbox"/>
Yes | <input checked="" type="checkbox"/>
No |

If a "Yes" response was provided to any of the above questions, please provide details below:

Previous use was farming. There is an irrigation standpipe on the southwest corner of the property for access to East Contra Costa Irrigation District water which was used in the past to irrigate farm land. There is a domestic water well at the back corner of the residential home that either feeds the house currently, or did in the past. Farming activities used irrigation water from ECCID.

This section was completed by the prospective purchaser and not somebody who has intricate knowledge of the property.

I certify that the information herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): David Best

Signature:



Date: 5/2/2023



DRAFT

APPENDIX H

CALIFORNIA LABORATORY SERVICES

Laboratory Analytical Reports



CALIFORNIA LABORATORY SERVICES

Committed. Responsive. Flexible.

May 16, 2023

CLS Work Order #: 23E0422

COC #:

Cody Johnson
ENGEO-Lathrop
17278 Golden Valley Parkway
Lathrop, CA 95330

Project Name: 1901 Lone Oak

Enclosed are the results of analyses for samples received by the laboratory on 05/04/23 17:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Technical Director

CA SWRCB ELAP Accreditation/Registration number 1233

13 E of 22

CHAIN OF CUSTODY RECORD

PROJECT NUMBER 22989.000.D01		PROJECT NAME 1901 Lone Oak				
SAMPLED BY: (SIGNATURE/PRINT) Cody Johnson						
PROJECT MANAGER: (SIGNATURE/PRINT) Cody Johnson						
ROUTING: E-MAIL cjohnson@engeo.com						

SAMPLE NUMBER	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	CONTAINER SIZE	PRESERVATIVE	OCPIs (8081)	lead/arsenic (6020)	REMARKS REQUIRED DETECTION LIMITS
S1	5/2/2023	12:00	Soil	1	4oz jar	--			
S2	5/2/2023	12:10	Soil	1	4oz jar	--	X		
S3	5/2/2023	12:20	Soil	1	4oz jar	--			
S4	5/2/2023	12:30	Soil	1	4oz jar	--			
S5	5/2/2023	12:40	Soil	1	4oz jar	--			
S6	5/2/2023	12:50	Soil	1	4oz jar	--	X		
S7	5/2/2023	13:00	Soil	1	4oz jar	--			
S8	5/2/2023	13:10	Soil	1	4oz jar	--			
S9	5/2/2023	13:20	Soil	1	4oz jar	--			
S10	5/2/2023	13:30	Soil	1	4oz jar	--	X		
S11	5/2/2023	13:40	Soil	1	4oz jar	--			
S12	5/2/2023	13:50	Soil	1	4oz jar	--			
S13	5/2/2023	14:00	Soil	1	4oz jar	--			
S14	5/2/2023	14:10	Soil	1	4oz jar	--	X		
S15	5/2/2023	14:20	Soil	1	4oz jar	--			
S16	5/2/2023	14:30	Soil	1	4oz jar	--			
S17	5/2/2023	14:40	Soil	1	4oz jar	--			
S18	5/2/2023	14:50	Soil	1	4oz jar	--	X		
S19	5/2/2023	15:00	Soil	1	4oz jar	--			
S20	5/2/2023	15:10	Soil	1	4oz jar	--			

RELINQUISHED BY: (SIGNATURE) 	DATE/TIME 5/4 17:00	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE/TIME 5/4 14:30	RECEIVED FOR LABORATORY BY: (SIGNATURE) 	DATE/TIME	REMARKS Standard TAT	

ENGEO

INCORPORATED

2010 CROW CANYON PLACE SUITE 250
SAN RAMON, CALIFORNIA 94583
(925) 866-9000 FAX (925) 866-0199
WWW.ENGEO.COM

3.1 / 3.0



ENGEO-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	-------------------------------------

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S1 (23E0422-01) Soil Sampled: 05/02/23 12:00 Received: 05/04/23 17:00									
Arsenic	9.8	1.0	mg/kg	10	2303815	05/08/23	05/09/23	EPA 6020	
Lead	14	1.2	"	"	"	"	"	"	
S5 (23E0422-06) Soil Sampled: 05/02/23 12:40 Received: 05/04/23 17:00									
Arsenic	9.3	1.0	mg/kg	10	2303815	05/08/23	05/09/23	EPA 6020	
Lead	15	1.2	"	"	"	"	"	"	
S9 (23E0422-11) Soil Sampled: 05/02/23 13:20 Received: 05/04/23 17:00									
Arsenic	9.4	1.0	mg/kg	10	2303815	05/08/23	05/09/23	EPA 6020	
Lead	15	1.2	"	"	"	"	"	"	
S13 (23E0422-16) Soil Sampled: 05/02/23 14:00 Received: 05/04/23 17:00									
Arsenic	8.5	1.0	mg/kg	10	2303815	05/08/23	05/09/23	EPA 6020	
Lead	14	1.2	"	"	"	"	"	"	
S17 (23E0422-21) Soil Sampled: 05/02/23 14:40 Received: 05/04/23 17:00									
Arsenic	7.9	1.0	mg/kg	10	2303815	05/08/23	05/09/23	EPA 6020	
Lead	13	1.2	"	"	"	"	"	"	



ENGE0-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	-------------------------------------

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S1 - S4 COMP (23E0422-05) Soil Sampled: 05/02/23 12:00 Received: 05/04/23 17:00									
4,4'-DDD	ND	3.3	µg/kg	1	2303725	05/05/23	05/08/23	EPA 8081A	
4,4'-DDE	ND	3.3	"	"	"	"	"	"	
4,4'-DDT	ND	3.3	"	"	"	"	"	"	
Aldrin	ND	1.0	"	"	"	"	"	"	
alpha-BHC	ND	1.7	"	"	"	"	"	"	
beta-BHC	ND	1.7	"	"	"	"	"	"	
Chlordane-technical	ND	3.3	"	"	"	"	"	"	
delta-BHC	ND	1.7	"	"	"	"	"	"	
Dieldrin	ND	1.0	"	"	"	"	"	"	
Endosulfan I	ND	1.7	"	"	"	"	"	"	
Endosulfan II	ND	3.3	"	"	"	"	"	"	
Endosulfan sulfate	ND	3.3	"	"	"	"	"	"	
Endrin	ND	3.3	"	"	"	"	"	"	
Endrin aldehyde	ND	3.3	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	1.7	"	"	"	"	"	"	
Heptachlor	ND	1.7	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.7	"	"	"	"	"	"	
Methoxychlor	ND	17	"	"	"	"	"	"	
Mirex*	ND	3.3	"	"	"	"	"	"	
Toxaphene*	ND	20	"	"	"	"	"	"	

Surrogate: Decachlorobiphenyl 80 % 52-141 " " " "

Surrogate: Tetrachloro-meta-xylene 51 % 46-139 " " " "

S5 - S8 COMP (23E0422-10) Soil Sampled: 05/02/23 12:40 Received: 05/04/23 17:00									
4,4'-DDD	ND	3.3	µg/kg	1	2303725	05/05/23	05/08/23	EPA 8081A	
4,4'-DDE	ND	3.3	"	"	"	"	"	"	
4,4'-DDT	ND	3.3	"	"	"	"	"	"	
Aldrin	ND	1.0	"	"	"	"	"	"	
alpha-BHC	ND	1.7	"	"	"	"	"	"	
beta-BHC	ND	1.7	"	"	"	"	"	"	



ENGEO-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	-------------------------------------

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S5 - S8 COMP (23E0422-10) Soil Sampled: 05/02/23 12:40 Received: 05/04/23 17:00									
Chlordane-technical	ND	3.3	µg/kg	1	2303725	"	05/08/23	EPA 8081A	
delta-BHC	ND	1.7	"	"	"	"	"	"	
Dieldrin	ND	1.0	"	"	"	"	"	"	
Endosulfan I	ND	1.7	"	"	"	"	"	"	
Endosulfan II	ND	3.3	"	"	"	"	"	"	
Endosulfan sulfate	ND	3.3	"	"	"	"	"	"	
Endrin	ND	3.3	"	"	"	"	"	"	
Endrin aldehyde	ND	3.3	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	1.7	"	"	"	"	"	"	
Heptachlor	ND	1.7	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.7	"	"	"	"	"	"	
Methoxychlor	ND	17	"	"	"	"	"	"	
Mirex*	ND	3.3	"	"	"	"	"	"	
Toxaphene*	ND	20	"	"	"	"	"	"	

Surrogate: Decachlorobiphenyl 86 % 52-141 " " " "

Surrogate: Tetrachloro-meta-xylene 86 % 46-139 " " " "

S9 - S12 COMP (23E0422-15) Soil Sampled: 05/02/23 13:20 Received: 05/04/23 17:00									
4,4'-DDD	ND	3.3	µg/kg	1	2303725	05/05/23	05/08/23	EPA 8081A	
4,4'-DDE	ND	3.3	"	"	"	"	"	"	
4,4'-DDT	ND	3.3	"	"	"	"	"	"	
Aldrin	ND	1.0	"	"	"	"	"	"	
alpha-BHC	ND	1.7	"	"	"	"	"	"	
beta-BHC	ND	1.7	"	"	"	"	"	"	
Chlordane-technical	ND	3.3	"	"	"	"	"	"	
delta-BHC	ND	1.7	"	"	"	"	"	"	
Dieldrin	ND	1.0	"	"	"	"	"	"	
Endosulfan I	ND	1.7	"	"	"	"	"	"	
Endosulfan II	ND	3.3	"	"	"	"	"	"	
Endosulfan sulfate	ND	3.3	"	"	"	"	"	"	



ENGE0-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	-------------------------------------

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S9 - S12 COMP (23E0422-15) Soil Sampled: 05/02/23 13:20 Received: 05/04/23 17:00									
Endrin	ND	3.3	µg/kg	1	2303725	"	05/08/23	EPA 8081A	
Endrin aldehyde	ND	3.3	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	1.7	"	"	"	"	"	"	
Heptachlor	ND	1.7	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.7	"	"	"	"	"	"	
Methoxychlor	ND	17	"	"	"	"	"	"	
Mirex*	ND	3.3	"	"	"	"	"	"	
Toxaphene*	ND	20	"	"	"	"	"	"	

Surrogate: Decachlorobiphenyl 84 % 52-141 " " " "

Surrogate: Tetrachloro-meta-xylene 55 % 46-139 " " " "

S13 - S16 COMP (23E0422-20) Soil Sampled: 05/02/23 14:00 Received: 05/04/23 17:00									
4,4'-DDD	ND	3.3	µg/kg	1	2303725	05/05/23	05/08/23	EPA 8081A	
4,4'-DDE	ND	3.3	"	"	"	"	"	"	
4,4'-DDT	ND	3.3	"	"	"	"	"	"	
Aldrin	ND	1.0	"	"	"	"	"	"	
alpha-BHC	ND	1.7	"	"	"	"	"	"	
beta-BHC	ND	1.7	"	"	"	"	"	"	
Chlordane-technical	ND	3.3	"	"	"	"	"	"	
delta-BHC	ND	1.7	"	"	"	"	"	"	
Dieldrin	ND	1.0	"	"	"	"	"	"	
Endosulfan I	ND	1.7	"	"	"	"	"	"	
Endosulfan II	ND	3.3	"	"	"	"	"	"	
Endosulfan sulfate	ND	3.3	"	"	"	"	"	"	
Endrin	ND	3.3	"	"	"	"	"	"	
Endrin aldehyde	ND	3.3	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	1.7	"	"	"	"	"	"	
Heptachlor	ND	1.7	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.7	"	"	"	"	"	"	
Methoxychlor	ND	17	"	"	"	"	"	"	



ENGEO-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	--

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

S13 - S16 COMP (23E0422-20) Soil Sampled: 05/02/23 14:00 Received: 05/04/23 17:00

Mirex*	ND	3.3	µg/kg	1	2303725	"	05/08/23	EPA 8081A	
Toxaphene*	ND	20	"	"	"	"	"	"	

<i>Surrogate: Decachlorobiphenyl</i>		81 %		52-141	"	"	"	"	
<i>Surrogate: Tetrachloro-meta-xylene</i>		64 %		46-139	"	"	"	"	

S17 - S20 COMP (23E0422-25) Soil Sampled: 05/02/23 14:40 Received: 05/04/23 17:00

4,4'-DDD	ND	3.3	µg/kg	1	2303725	05/05/23	05/08/23	EPA 8081A	
4,4'-DDE	3.7	3.3	"	"	"	"	"	"	
4,4'-DDT	ND	3.3	"	"	"	"	"	"	
Aldrin	ND	1.0	"	"	"	"	"	"	
alpha-BHC	ND	1.7	"	"	"	"	"	"	
beta-BHC	ND	1.7	"	"	"	"	"	"	
Chlordane-technical	ND	3.3	"	"	"	"	"	"	
delta-BHC	ND	1.7	"	"	"	"	"	"	
Dieldrin	ND	1.0	"	"	"	"	"	"	
Endosulfan I	ND	1.7	"	"	"	"	"	"	
Endosulfan II	ND	3.3	"	"	"	"	"	"	
Endosulfan sulfate	ND	3.3	"	"	"	"	"	"	
Endrin	ND	3.3	"	"	"	"	"	"	
Endrin aldehyde	ND	3.3	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	1.7	"	"	"	"	"	"	
Heptachlor	ND	1.7	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.7	"	"	"	"	"	"	
Methoxychlor	ND	17	"	"	"	"	"	"	
Mirex*	ND	3.3	"	"	"	"	"	"	
Toxaphene*	ND	20	"	"	"	"	"	"	

<i>Surrogate: Decachlorobiphenyl</i>		69 %		52-141	"	"	"	"	
<i>Surrogate: Tetrachloro-meta-xylene</i>		48 %		46-139	"	"	"	"	



ENGEO-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	-------------------------------------

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2303815 - EPA 3050B										
Blank (2303815-BLK1)										
					Prepared: 05/08/23 Analyzed: 05/09/23					
Lead	ND	0.12	mg/kg							
Arsenic	ND	0.10	"							
LCS (2303815-BS1)										
					Prepared: 05/08/23 Analyzed: 05/09/23					
Lead	10.4	0.12	mg/kg	10.0	104	113	75-125			
Arsenic	10.0	0.10	"	10.0	100	114	75-125			
Matrix Spike (2303815-MS1)										
					Source: 23E0422-01 Prepared: 05/08/23 Analyzed: 05/09/23					
Lead	25.6	1.2	mg/kg	10.0	14.4	113	75-125			
Arsenic	21.1	1.0	"	10.0	9.77	114	75-125			
Matrix Spike Dup (2303815-MSD1)										
					Source: 23E0422-01 Prepared: 05/08/23 Analyzed: 05/09/23					
Lead	27.6	1.2	mg/kg	10.0	14.4	132	75-125	7.32	30	QM-7
Arsenic	21.7	1.0	"	10.0	9.77	119	75-125	2	30	



ENGE0-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	-------------------------------------

Organochlorine Pesticides by EPA Method 8081A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 2303725 - LUFT-DHS GCNV

Blank (2303725-BLK1)

Prepared & Analyzed: 05/04/23

Aldrin	ND	1.0	µg/kg							
alpha-BHC	ND	1.7	"							
beta-BHC	ND	1.7	"							
gamma-BHC (Lindane)	ND	1.7	"							
delta-BHC	ND	1.7	"							
Chlordane-technical	ND	3.3	"							
4,4'-DDD	ND	3.3	"							
4,4'-DDE	ND	3.3	"							
4,4'-DDT	ND	3.3	"							
Dieldrin	ND	1.0	"							
Endosulfan I	ND	1.7	"							
Endosulfan II	ND	3.3	"							
Endosulfan sulfate	ND	3.3	"							
Endrin	ND	3.3	"							
Endrin aldehyde	ND	3.3	"							
Heptachlor	ND	1.7	"							
Heptachlor epoxide	ND	1.7	"							
Methoxychlor	ND	17	"							
Mirex*	ND	3.3	"							
Toxaphene*	ND	20	"							

Surrogate: Tetrachloro-meta-xylene	7.92		"	8.33		95	46-139
Surrogate: Decachlorobiphenyl	9.66		"	8.33		116	52-141

LCS (2303725-BS1)

Prepared & Analyzed: 05/04/23

Aldrin	19.1	1.0	µg/kg	16.7		114	47-132
gamma-BHC (Lindane)	19.3	1.7	"	16.7		116	56-133
4,4'-DDT	20.1	3.3	"	16.7		121	46-137
Dieldrin	18.0	1.0	"	16.7		108	44-143
Endrin	18.1	3.3	"	16.7		108	30-147
Heptachlor	19.3	1.7	"	16.7		116	33-148

Surrogate: Tetrachloro-meta-xylene	8.43		"	8.33		101	46-139
------------------------------------	------	--	---	------	--	-----	--------



ENGEO-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	--

Organochlorine Pesticides by EPA Method 8081A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 2303725 - LUFT-DHS GCNV

LCS (2303725-BS1)

Prepared & Analyzed: 05/04/23

<i>Surrogate: Decachlorobiphenyl</i>	9.78		µg/kg	8.33		117	52-141			
--------------------------------------	------	--	-------	------	--	-----	--------	--	--	--

LCS Dup (2303725-BSD1)

Prepared & Analyzed: 05/04/23

Aldrin	19.5	1.0	µg/kg	16.7		117	47-132	2	30	
gamma-BHC (Lindane)	19.7	1.7	"	16.7		118	56-133	2	30	
4,4'-DDT	20.0	3.3	"	16.7		120	46-137	0.5	30	
Dieldrin	19.7	1.0	"	16.7		118	44-143	9	30	
Endrin	18.0	3.3	"	16.7		108	30-147	0.5	30	
Heptachlor	19.7	1.7	"	16.7		118	33-148	2	30	

<i>Surrogate: Tetrachloro-meta-xylene</i>	8.89		"	8.33		107	46-139			
---	------	--	---	------	--	-----	--------	--	--	--

<i>Surrogate: Decachlorobiphenyl</i>	10.2		"	8.33		122	52-141			
--------------------------------------	------	--	---	------	--	-----	--------	--	--	--

Matrix Spike (2303725-MS1)

Source: 23E0023-01

Prepared & Analyzed: 05/04/23

Aldrin	16.1	1.0	µg/kg	16.7	ND	97	47-138			
gamma-BHC (Lindane)	16.7	1.7	"	16.7	ND	100	38-144			
4,4'-DDT	22.7	3.3	"	16.7	ND	136	41-157			
Dieldrin	18.5	1.0	"	16.7	ND	111	46-155			
Endrin	18.4	3.3	"	16.7	ND	110	34-149			
Heptachlor	14.6	1.7	"	16.7	ND	88	36-155			

<i>Surrogate: Tetrachloro-meta-xylene</i>	13.6		"	20.8		65	46-139			
---	------	--	---	------	--	----	--------	--	--	--

<i>Surrogate: Decachlorobiphenyl</i>	20.8		"	20.8		100	52-141			
--------------------------------------	------	--	---	------	--	-----	--------	--	--	--

Matrix Spike Dup (2303725-MSD1)

Source: 23E0023-01

Prepared & Analyzed: 05/04/23

Aldrin	12.5	1.0	µg/kg	16.7	ND	75	47-138	26	35	
gamma-BHC (Lindane)	13.5	1.7	"	16.7	ND	81	38-144	21	35	
4,4'-DDT	18.9	3.3	"	16.7	ND	114	41-157	18	35	
Dieldrin	15.3	1.0	"	16.7	ND	92	46-155	19	35	
Endrin	15.3	3.3	"	16.7	ND	92	34-149	18	35	
Heptachlor	11.5	1.7	"	16.7	ND	69	36-155	24	35	

<i>Surrogate: Tetrachloro-meta-xylene</i>	11.6		"	20.8		55	46-139			
---	------	--	---	------	--	----	--------	--	--	--

<i>Surrogate: Decachlorobiphenyl</i>	18.3		"	20.8		88	52-141			
--------------------------------------	------	--	---	------	--	----	--------	--	--	--



ENGEO-Lathrop 17278 Golden Valley Parkway Lathrop, CA 95330	Project: 1901 Lone Oak Project Number: 22989.000.001 Project Manager: Cody Johnson	CLS Work Order #: 23E0422 COC #:
---	--	--

Notes and Definitions

- QM-7 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS and/or LCSD recovery.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- * The laboratory does not hold CA-ELAP accreditation for this analyte or method. Accreditation may not be available from CA-ELAP for this analyte or method.



DRAFT

APPENDIX I

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

SHAWN MUNGER, CHG Principal

EDUCATION

BS Geology University of California,
Davis 1985

EXPERIENCE

Years with ENGEO: 36

REGISTRATIONS & CERTIFICATIONS

Certified Hydrogeologist, CA 413

Professional Geologist, CA 5810

HAZWOPER 40 Hour Training, CA
100830513934

HAZWOPER 8 Hour Training, CA
180720576014

SPECIALIZATIONS

- Environmental Assessments and Remediation
- Environmental Restoration
- Water Quality Studies
- Water Wells/Hydrogeology

Since 1985, Shawn has been managing groundwater supply evaluations, hydrogeologic studies, chemical assessments, Phase I and II Site Assessments, UST site investigations, risk-based corrective action (RBCA), VOC remediation, and agricultural impact evaluations. He serves as Principal-in-Charge or Project Manager with extensive expertise in environmental and hazardous materials projects involving groundwater, hydrology, contaminant fate and transport, and complex remediation programs. A renowned expert in his field, Shawn has successfully solved many difficult environmental challenges to achieve desired project outcomes.

SELECT PROJECT EXPERIENCE

Heritage Fields, Great Park Neighborhoods—Irvine, CA

Principal in Charge. Shawn provided principal oversight of the preparation of over 50 phase I and Phase II Environmental Site Assessments for the former El Toro Marine Corps Air Station (MCAS). The site is currently under development as a large-scale mixed-use development including several schools, residential subdivisions, recreational facilities and commercial development. Shawn also provided consultation regarding environmental site characterization and remediation at the site.

Hanover Cannery Park Project No. 14-473—San Jose, CA

Principal in Charge. Shawn provided principal oversight and review of the Phase I ESA, and soil, groundwater, and soil gas sampling. The historical use of the site resulted in chlorinated solvent impacts to groundwater and soil gas. Results were communicated to the client as well as the oversight regulatory agency to come with the proposed remediation. The project consists of redeveloping an approximately 9-acre commercial/industrial property listed on the California Regional Water Quality Control Board's GeoTracker database as an open site assessment cleanup program site. Elevated concentrations of VOCs (specifically PCE and TCE) have been previously detected in soil, groundwater, and soil gas at the property.

Mission Village—Valencia, CA

Principal in Charge. Shawn provided principal oversight of multiple phase I/II environmental site assessments and site remediation. The project site consists of a large scale, residential and mixed-use subdivision, which was a former oil/gas production field, with more than 40 abandoned oil/gas wells.

Vita Pakt—Covina, CA

Principal in Charge. Shawn provided principal oversight of phase I/II environmental site assessments and risk evaluations. The approximately 5.9-acre site formerly operated as fruit processing and dehydration business (ceased operation by 2016) and is planned to be redeveloped into residential housing. Subsurface soil gas impacts were identified in association with past operations.

Innovation at Warm Springs—Fremont, CA

Principal in Charge. Shawn provided oversight of the preparation of Phase I and II ESAs, along with a Preliminary Endangerment Assessment (PEA) for a new elementary school site. The approximately 109-acre site is currently occupied by a parking lot, warehouse buildings, agricultural fields, and UPRR railroad tracks. The southern portion of the Property was a part of the former auto manufacturing and distribution facility jointly owned by Toyota and General Motors. The northern portion of the Property has been used for agricultural purposes since at least the late 1930s. Additionally, railroad tracks are present along the eastern boundary of the Property.

Former gasoline ASTs existed on the Property, along with a pump station and fuel dispensers, which were removed in 2010. The former car wash area also had a wastewater recovery system, which included oil/water separators, clarifiers, and interceptor tanks. One UST was located in the southeast portion of the agricultural fields, which was removed in 2004. Four 10,000-gallon diesel and gasoline USTs were formerly located in the southwestern portion of the Property in the haul-away parking lot area. Mixed-use redevelopment is planned for the Property. A phase II ESA was recommended for the Site, including soil and groundwater sampling.

277 Fairchild 228/236 Evandale Ave—Mountain View, CA

Principal in Charge. Shawn provided oversight of soil, groundwater and soil gas characterizations, risk evaluations and Response Action Plan preparation under USEPA oversight. The site is within the Middlefield-Ellis-Whisman (MEW) Superfund site, contaminated with chlorinated solvents from legacy semiconductor plant operations. On-going remedial activities included soil vapor extraction, groundwater treatment using bioaugmentation, and groundwater/soil gas monitoring. The proposed site development consists of detached single-family homes and townhomes.

The Rivers—West Sacramento, CA

Principal in Charge. Shawn provided oversight of during the preparation of a Removal Action Workplan (RAW) in coordination with CAL-EPA DTSC. The property is a proposed charter school site. ENGEO performed environmental site characterization work to address residual pesticide contamination due to historic termiticide applications. A Removal Action Workplan was developed under the oversight of CAL-EPA to excavate and remove the pesticide impacted soils. Remedial activities were completed in 2018 and DTSC issued a “no further action” letter.

Sparklizing Cleaners and Laundry—Fremont, CA

Group Leader, Principal in Charge, Project Manager. Shawn provided principal review and data analysis for this former dry cleaning facility, which had released tetrachloroethylene (PCE) to site soil and groundwater.

The project site consists of a dry-cleaning facility located within a commercial/retail center. Dry-cleaning operations have been conducted at the facility since 1974 and have resulted in chlorinated solvent impacts to soil and groundwater beneath the site. As a result, the CRWQCB opened a Spills, Leaks, Investigations, and Cleanups (SLIC) case and the site was referred to the Alameda County Water District (ACWD) for lead agency oversight. A series of soil and

groundwater investigations identified a source area beneath the drycleaner suite and an adjoining retail suite. ENGEO prepared a Corrective Action Plan (CAP) and coordinated the in-situ chemical oxidation program, which consisted of injecting 35,000 gallons of potassium permanganate to the subsurface to oxidize chlorinated solvents. The project is currently in the post remediation monitoring phase.

Pleasant Hill BART Station—Walnut Creek, CA

Principal in Charge. Shawn provided oversight, data analysis and consultation during the preparation of a Phase II Environmental Site Assessment. The property is an existing BART station that encompasses 20 acres, including the platform/station area, electrical facilities, a parking garage and additional paved parking areas.

Westshore—Richmond, CA

Project Manager. Shawn conducted Phase I and II Site Assessments, risk evaluations and prepared a soil management plan. The property was a former automotive manufacturing plant proposed for a multi-unit condominium development, including a 6-story podium structure to include five residential floors with 269 units and one parking floor.

Rancho Miramonte—Chino, CA

Principal in Charge. Shawn performed Principal review of ENGEO's environmental documents for this large former dairy facility, proposed for a large-scale detached single-family residential subdivision. Issues with the site included former leaking USTs, nitrate impacts from manure disposal, and surface water impairments. The project was approved for development by the County Environmental Health Department.

Hercules Property—Hercules, CA

Project Manager. Shawn provided oversight of a Phase I Environmental Site Assessment, site asbestos survey, site characterization, and demolition observation/contaminant assessment. The project area consists of ±167 acres located near and along the southeastern shore of San Pablo Bay in Hercules. The property was once a portion of a 1300-acre manufacturing facility that was operated by DuPont from 1879 to 1913 and Hercules Incorporated from 1913 to 1979. The planned development includes single/multi-family residential development with some commercial components.

Highlands Ranch—Pittsburgh, CA

Principal in Charge. Shawn provided oversight, data analysis, and collaboration with RWQCB personnel. The project site consists of a 140-acre portion of the former Chevron Los Medanos Tank Farm located in Pittsburg, California. The site was historically occupied by 24 crude oil tanks and four wax ponds. Remediation of the crude oil tank and wax pond locations was conducted according to a remedial action plan (RAP) and oversight was provided by the CRWQCB. Remediation was performed over a period of four months and consisted of excavating approximately 110,000 cubic yards of impacted soil and placing the material in windrows for ex-situ bioremediation.



DRAFT

Appendix F

Environmental Noise Study

3 November 2023

David Best

Shea Homes

2630 Shea Center Drive

Livermore, CA 94551

david.best@sheahomes.com

**Subject: 1901 Lone Oak Road Property (Orchard Grove II)
Environmental Noise Study
Salter Project: 23-0438**

Dear David:

As requested, we conducted an environmental noise study for 1901 Lone Oak Road in Brentwood (aka "Orchard Grove II"), a 34-lot development of detached single-family residences. The purpose of the study is to measure the noise environment at the proposed site, compare the levels with applicable standards, and recommend preliminary mitigation measures as necessary. This report summarizes the results.

PROJECT CRITERIA

California Building Code

The California Building Code exterior noise criteria applies to multifamily housing. Since this project contains only single-family homes, the state noise criteria do not apply.

City of Brentwood Noise Standards

Section 14.5.2, Noise and Vibration of the City of Brentwood General Plan states the following:

"The standards require interior noise level attributable to exterior sources not exceed 45 dBA CNEL in any habitable room. Multi-family residential structures proposed where the CNEL would exceed 60 dBA requires an acoustical analysis showing that the proposed building design would achieve the prescribed allowable interior noise standard."



130 Sutter Street, Floor 5
San Francisco, CA 94104

tel 415.397.0442
salter-inc.com

Acoustics
Audiovisual
Telecommunications
Security

The City of Brentwood considers outdoor noise levels in residential locations DNL 60 dB and below to be “normally acceptable”. DNL¹ between 60 and 75 dB is considered “conditionally acceptable,” meaning that noise reduction features need to be included in the design.

NOISE ENVIRONMENT

The project is located on currently undeveloped land between Lone Oak Drive to the east and Adams Lane to the west. Grant Street is approximately 300 feet to the north of the site. Marsh Creek Elementary School is adjacent to the site, across Adams Lane to the northwest. The Rock Church is also adjacent to the site between it and Grant Street to the north. The earlier phase of the residential development, currently under construction, is immediately south.

To quantify the existing noise environment at 1901 Lone Oak, we conducted three long-term noise measurements (LT’s) between 20 and 24 October 2023. The noise monitors were at a height of 12 feet above grade. The measured levels and description of the monitor locations are shown in Figure 1.

To add to our three long-term noise measurements, we also conducted three short-term noise measurements (ST’s). These three short-term noise measurements were made on 24 October 2023. These short-term noise measurements allowed us to calculate the DNL from the interior of the site. The interior DNL was calculated by subtracting the offset of the LT’s Leq “X” (of a given time that matched) and the ST’s Leq “Y.” This gave us a “Z” value that was then subtracted to the LT’s DNL to get an interior DNL of the site. The measured levels and description of the monitor locations are shown in Figure 1.

The following is the estimated noise levels that we have found:

Meter Location	Sound Level -DNL	Approximate Noise Monitor distance from Street Center Line	Major Noise Sources
LT-3 - Lone Oak Road	62	25 ft	Car traffic, garbage trucks
LT-2 - Grant Street	65	25 ft	Car Traffic, Sunday Church, kid activities
LT-1 - Adams Lane	70	25 ft	Kids at recess, school intercom, groundskeepers, parents picking up kids, car traffic

¹ DNL (Day-Night Average Sound Level) – A descriptor for a 24-hour A-weighted average noise level. DNL accounts for the increased acoustical sensitivity of people to noise during the nighttime hours. DNL penalizes sound levels by 10 dB during the hours from 10 PM to 7 AM. For practical purposes, the DNL and CNEL are usually interchangeable. DNL is sometimes written as L_{dn}.



Meter Location	Long Term Measurement (Leq) ²	Short Term Measurement (Leq)	Interior DNL	Exterior DNL
LT-3 - Lone Oak Rd	60 dBA			62
ST-3 - Inside site		45 dBA	47	

Meter Location	Long Term Measurement (Leq)	Short Term Measurement (Leq)	Interior DNL	Exterior DNL
LT-2 – Grant Street	66 dBA			65
ST-2 - Inside site		52 dBA	51	

Meter Location	Long Term Measurement (Leq)	Short Term Measurement (Leq)	Interior DNL	Exterior DNL
LT-1 – Adams Street	62 dBA			70
ST-1 - Inside site		52 dBA	61	

A traffic analysis has not been provided for this project. Therefore, we have added 1 dB to our measured noise levels to account for future traffic increases.³

² L_{eq} – The equivalent steady-state A-weighted sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period.

³ The California Department of Transportation (DOT) assumes a traffic volume increase of three-percent per year, which corresponds to a 1 dB increase in DNL over a ten-year period.



ANALYSIS AND RECOMMENDATIONS

Using the drawings from Shea Homes dated December 2022 that show lot plans and elevations, we calculated the window and exterior door assembly STC⁴ ratings needed to meet the project criteria. Our calculations are based on the following assumptions.

- Bedrooms and Studies will have carpet
- All other rooms will have hard-surfaced flooring
- Residential ceilings will be approximately nine feet high
- Exterior entry doors will have an STC rating of 29 or less
- Exterior façade assemblies will be equal in surface weight to three-coat stucco over an insulated 2x4 or 2x6 wall with a single layer of gypsum board on the interior side (approximately STC 45)

The recommended STC ratings are for full window assemblies (glass and frame) rather than just the glass itself. Tested sound-rated assemblies should be used per ASTM E90.

For reference, typical construction-grade dual pane windows achieve an STC rating of 28.

Interior Noise

To meet the city's indoor DNL 45 dB criterion, it will be necessary for all window and exterior door assemblies to have a minimum **STC rating of 28**.

Exterior Noise

Noise levels at the backyards closest to Adams Lane and Grant Street are estimated to reach as high as 70 dB and 65 dB, respectively. To reduce noise levels at the backyards along these roadways, a continuous 6-foot-high solid fencing would need to be built as an acoustical barrier to reduce levels to "Normally Acceptable" conditions.

The perimeter barriers should have a minimum surface weight of 3 psf (e.g., ship-lapped 1x wooden boards, marine-grade plywood, CMU, cement board, etc.) There are to be no gaps between boards/panels or at the base/ground.

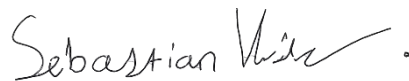
⁴ STC (Sound Transmission Class) – A single-number rating defined in ASTM E90 that quantifies the airborne sound insulating performance of a partition under laboratory conditions. Increasing STC ratings correspond to improved airborne sound insulation.

* * *

This concludes our preliminary environmental noise study for the 1901 Lone Oak Road project. If you have any questions, please give us a call.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.



Sebastian Vuskovic
Consultant



Ethan Salter, PE, LEED AP
Vice President

Enclosures as noted





SALTER © 2023
FOR ACOUSTICAL DESIGN INFORMATION ONLY

ORCHARD GROVE II MEASUREMENT LOCATIONS AND MEASURED NOISE LEVELS

FIGURE 1

Salter #
23-0438

SJV/ECS
11.03.23

Appendix G

VMT Analysis

Table I. Project Trip Generation

Land Use (ITE Code)	Size	Daily		A.M. Peak					P.M. Peak				
		Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Single-Family Detached Housing (210)	30DU	EQ	333	EQ	25:75	6	19	25	EQ	63:37	20	12	32
Single-Family Attached Housing (215)	4DU	7.20	29	0.48	25:75	1	1	2	0.57	59:41	1	1	2
Net New Trips			362			7	20	27			21	13	34

Note:

Source: Calculated based on *Trip Generation Manual 11th Ed.*, Institute of Transportation Engineers

Multiple ITE land use codes (LUC) have fitted curve equations (EQ) for various analysis periods in addition to rates. The methodology in the ITE's Trip Generation Handbook (3rd Ed.) was utilized to determine which was used.

Project Vehicle Miles Traveled

The OPR *Technical Advisory* (December 2018) provides guidance to analysts and local jurisdictions for implementing VMT as a metric for determining the transportation impact for land use projects. The OPR guidelines state that for analysis purposes, "VMT" refers to automobile VMT, specifically passenger vehicles and light trucks. Heavy truck traffic is typically excluded. The adopted CCTA VMT analysis methodology provides specific procedures and thresholds for land use projects within Contra Costa County.

SCREENING CRITERIA

The CCTA VMT methodology provides standards for identifying which projects should be expected to prepare a detailed VMT analysis, based on characteristics such as their size, mix of uses, proximity to transit, or location. These screening criteria are used to quickly determine if a proposed project should be expected to prepare a detailed VMT analysis, as screened out projects can be presumed to have a less-than-significant impact on VMT. Projects are considered small if they would construct no more than 20 residential units or 10,000 sq. ft. of non-residential space. The project would construct 34 residential units, exceeding the screening criteria for size. Existing residential VMT in the project location must therefore be established in order to determine whether the project is located in a low VMT area, as other screening criteria do not apply. If a project does not meet any screening criteria, it would typically be required to prepare a detailed VMT analysis.

Under the CCTA VMT methodology, a low VMT area is defined as a city or unincorporated portion within one of the CCTA subregions where home-based VMT per resident is at least 15 percent below the countywide or where the commute VMT per employee is at least 15 percent below the regional average. A conservative reading of the methodology would indicate that when the citywide average VMT per resident is above the countywide average, projects cannot be screened out based on location, and a VMT analysis must be completed. In such cases, the appropriate significance thresholds based on countywide or regional average would be applied. The methodology also permits the applicable average VMT for the subject municipality or unincorporated CCTA subregion to be utilized instead of the countywide or regional average, if it is less stringent.

Under the residential use classification outlined in the OPR *Technical Advisory*, and the CCTA VMT methodology, home-based VMT includes all trips that begin or end at a residence, and home-work (commute) VMT includes trips between a residence and an employment-generating use. The CCTA travel demand model generates weekday VMT per capita by traffic analysis zone (TAZ) within Contra Costa County and throughout the Bay Area, for home-based VMT per resident and commute VMT per employee. For the year 2020, the Contra Costa County average home-based VMT per capita generated by the CCTA travel demand model is 19.78. The Brentwood average is 29.6, and the East Subarea average is 24.9, both higher than the countywide average. Using a conservative reading of the CCTA screening criteria, the proposed project is not located in a low-VMT area and would require a VMT analysis to determine if it has a significant VMT impact.

EXISTING VMT GENERATED PER RESIDENT

The project site east of Adams Lane is within the boundaries of two existing TAZs (#30327 and #30328), with the majority of the project area located within TAZ #30327. There is a small amount of geographic overlap between the project boundaries and the other TAZ, and it is expected that this is a minor misalignment between TAZ boundaries and actual roadways, and that the site would be entirely assigned to TAZ #30327 in future model revisions. Within these two TAZs, the majority of residential units are part of subdivisions similar to the proposed project: predominantly single family homes, with a small number of duplexes. Consistent with the analysis of Orchard Grove phase I, TJKM used a weighted average of both TAZs to establish the existing residential VMT at the project location. For these TAZs, based on model simulations for the year 2020, the existing home-based VMT per resident is 20.77 miles. **Table 1** shows a summary of the TAZ data for this location. A map view showing these TAZ boundaries is included in the **Appendix**.

Table 1: Year 2020 VMT Generation

TAZ #	Description	Population	Home-Based VMT	Home Based VMT per Capita
30327	Bounded by Adams Ln., Grant St., Gracie Ln., and Marsh Creek	561	10,740	19.1
30328	Bounded by Grant St., railroad tracks, Sand Creek Rd., and TAZs #30326/30327 (approximately following Adams Ln. and O'Hara Ave.)	568	12,710	22.4
Total		57.2	9.4	20.77

Notes:

Source: CCTA travel demand model, year 2020. Model revision 2016, Kittelson & Associates.

PROJECT-RELATED RESIDENTIAL VMT

The CCTA VMT methodology requires that baseline and baseline plus project scenarios be evaluated, using the most recent baseline CCTA travel demand model. In general, the baseline plus project scenario would be generated by adding the project to the appropriate TAZ and re-running the model simulations. However, the methodology states that for single-use projects that are very similar to the

existing uses in the TAZ, “the analyst may conclude that the project generated home-based VMT per capita or home-work VMT per worker will be the same as the existing VMT per capita or per worker in that TAZ,” and a new travel demand model run with the project is not required. This is the case for the proposed project, as noted above. It is expected that the project’s home-based VMT per capita would be 20.77, the same as the existing VMT per capita in the project location.

Although the proposed project is located entirely within the Brentwood city limits, the travel demand model data incorrectly identifies these two TAZs as being in unincorporated Contra Costa County in the East Subarea. As such, VMT generated at the project location was compared to the average VMT for both the City of Brentwood and the East Subarea, in addition to the countywide average.

For residential projects, CCTA establishes a significance threshold of 15 percent below the subject municipality (or unincorporated CCTA subregion outside of municipalities) average residential VMT, or below the countywide average VMT, whichever is less stringent. The Contra Costa County average home-based VMT per capita generated by the CCTA travel demand model is 19.78. The City of Brentwood average is 29.6, and the East Subarea average is 24.9, both higher than the countywide average and thus less stringent. The corresponding screening thresholds, 15 percent below the average, are 25.16 in the City of Brentwood and 21.16 in the East Subarea. These are both higher than the existing VMT at the project location. Based on CCTA significance thresholds, the project would produce a **less-than-significant** impact on VMT.

Conclusion

The proposed development of 34 homes on Adams Lane in Brentwood is expected to generate 362 daily vehicle trips, including 27 a.m. peak hour trips and 34 p.m. peak hour trips. Based on the existing residential VMT generated by other similar homes surrounding the project location, the project is expected to generate VMT per resident that is at least 15 percent below the Brentwood citywide average. Based on adopted CCTA thresholds, the project would produce a less-than-significant impact to VMT.

Appendix

Project Site Plan

TAZ boundaries in the project vicinity, CCTA travel demand model



GENERAL NOTES:

- OWNER: GLORIA McCOY
1901 LONE OAK ROAD
BRENTWOOD, CA 94513
- APPLICANT: SHEA HOMES, NORTHERN CALIFORNIA
2630 SHEA CENTER DRIVE
LIVERMORE, CA 94551
(925) 460-8910
DAVE BEST
- CIVIL ENGINEER: CARLSON, BARBEE & GIBSON, INC.
2633 CAMINO RAMON, SUITE 350
SAN RAMON, CA 94583
(925) 866-0322
JASON D. VOGAN, RCE 59299
- SOILS ENGINEER: ENGO, INC.
17278 GOLDEN VALLEY PARKWAY
LATHROP, CA 95330
(925) 835-0610
STEVE HARRIS, RCE 2804
- TOPOGRAPHIC SOURCE: GEOMAPS INC.
3362 MATHER FIELD ROAD
RANCHO CORDOVA, CA 95670
(916) 361-9133
- CONTOUR INTERVAL: 1 - FOOT BASED ON NAVD88 (EXISTING & PROPOSED)
- BENCHMARK: CITY OF BRENTWOOD BENCHMARK NO. 2052R
EAST BAY MUNICIPAL UTILITY DISTRICT DISK 2954+83.58 RESET
BENCHMARK 2011 IN CONCRETE VAULT, GRANT STREET AT LONE
OAK ROAD AT EDEN PLAINS ROAD, SOUTHWEST ROADWAY
INTERSECTION.
ELEVATION = 69.98 FEET (NAVD 88) ADJUSTED MAY 2013
- BASIS OF BEARINGS: THE BASIS OF BEARINGS FOR THIS SURVEY IS THE BEARING BEING
N89°22'45"W BETWEEN STATION NO. 2130 AND STATION NO. 2112
PER RECORD OF SURVEY NO. 2496 (118 LSM 40). THE BEARINGS
SHOWN ARE ON THE CALIFORNIA COORDINATE SYSTEM ZONE III.
MULTIPLE DISTANCES AS SHOWN BY 0.99993544 TO OBTAIN GRID
DISTANCES.

GENERAL NOTES (CONTINUED):

- EXISTING TOPOGRAPHY: AERIAL TOPOGRAPHY IS BASED ON PHOTOGRAPHY TAKEN ON
MARCH 11, 2020 AND PREPARED BY GEOMAPS. THE FLIGHT WAS
SURVEY GROUND CONTROLLED BY CARLSON, BARBEE & GIBSON, INC.
- FLOOD ZONE: ZONE X
REFER TO FLOOD INSURANCE RATE MAP
PANEL 06013C 0354 G (MARCH 21, 2017)
- ADDRESS: 1901 LONE OAK ROAD, BRENTWOOD, CA 94513
- ASSESSORS PARCEL NO: 016-040-004
- PROPOSED SITE AREA: 10.00± AC
- GENERAL PLAN: RESIDENTIAL-VERY LOW DENSITY (R-VLD)
- ZONING: EXISTING & PROPOSED: R-1-E
- PROPOSED LOT SIZES: 80' X 100' - 8,000 SF MIN (MARKET RATE SFR)
42' X 78' - 3,276 SF MIN (AFFORDABLE DUET)
- AVERAGE LOT SIZE: 86.5' X 100' (8,650 SF)
- MAXIMUM LOT SIZE: 90' X 139'
- PROPOSED DENSITY: 34 DU / 10.00± AC = 3.4 DU/AC
- EXISTING STRUCTURES: ALL EXISTING BUILDINGS WITHIN THE PROJECT BOUNDARY TO BE
REMOVED UNLESS OTHERWISE NOTED.
- EXISTING UTILITIES: ALL EXISTING UTILITIES WITHIN THE PROJECT BOUNDARY TO BE
REMOVED UNLESS OTHERWISE NOTED.
- EXISTING TREES: EXISTING TREES WITHIN THE PROJECT BOUNDARY TO BE REMOVED
UNLESS OTHERWISE NOTED.
- WALLS AND FENCING: ALL WALLS AND FENCING WILL BE PRIVATELY OWNED AND PRIVATELY
MAINTAINED EXCEPT THE LANDSCAPE PRIVACY WALLS ALONG ADAMS
LANE, LONE OAK ROAD OR ADJACENT TO PARCEL A, WHICH WILL BE
IN THE CITY RIGHT OF WAY OR PARCELS OWNED BY THE CITY.
- PUBLIC UTILITIES: ALL UTILITIES WITHIN THE PUBLIC RIGHT OF WAY OR WITHIN A
PUBLIC UTILITY EASEMENT WILL BE PUBLIC AND WILL BE PUBLICLY
OWNED AND MAINTAINED.

GENERAL NOTES (CONTINUED):

- UTILITY PROVIDER: WATER/SEWER/STORM DRAIN: CITY OF BRENTWOOD
GAS & ELECTRIC: PACIFIC GAS & ELECTRIC
TELEPHONE: AT&T
CABLE TV: COMCAST
- STREETS: ALL STREETS WILL BE PER CITY STANDARD AND DEDICATED TO THE
CITY OF BRENTWOOD AS A PUBLICLY OWNED AND MAINTAINED STREETS.
- STREET LIGHTS: ALL STREET LIGHTS WILL BE DECORATIVE PER DETAIL SL-4.
- GRADING: PROPOSED GRADING IS PRELIMINARY. FINAL GRADING IS SUBJECT TO FINAL DESIGN.
- BOUNDARY: THE BOUNDARY IS BASED ON A FIELD RESOLVED SURVEY BOUNDARY AND EASEMENTS SHOWN HEREON ARE
BASED UPON RECORD TITLE INFORMATION AS LISTED AND DESCRIBED IN THE PRELIMINARY TITLE REPORT
PREPARED BY CHICAGO TITLE COMPANY, DATED APRIL 4, 2023, ORDER NUMBER 36303481-363-1B-KD.
NO ADDITIONAL TITLE RESEARCH HAS BEEN PERFORMED TO COMPLETE THIS PACKAGE.
- PHASING: PROJECT MAY BE CONSTRUCTED IN PHASES.
- FINAL MAP: MULTIPLE FINAL MAPS MAY BE FILED UPON APPROVAL OF THE VESTING TENTATIVE SUBDIVISION MAP.
- DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL MAP.

LAND AREA SUMMARY		
PARCEL / LOT	LAND USE	AREA
LOTS 1-34	RESIDENTIAL	6.77 AC ±
ADAMS LANE	RIGHT OF WAY DEDICATION	0.23 AC ±
LONE OAK ROAD	RIGHT OF WAY DEDICATION	0.23 AC ±
IN-TRACT STREETS	PUBLIC RIGHT OF WAY	1.72 AC ±
DESIGNATED REMAINDER	EXISTING RESIDENTIAL	0.33 AC ±
PARCEL A	LANDSCAPE OPEN SPACE / WATER QUALITY BIORETENTION	0.72 AC±
TOTAL:		10.00 AC±

ABBREVIATIONS	
CL	CENTERLINE
EM	EASEMENT
FC	FACE OF CURB
LS	LANDSCAPE
LME	LANDSCAPE MAINTENANCE EASEMENT
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS
RW	RIGHT OF WAY
SF	SQUARE FEET
SW	SIDEWALK

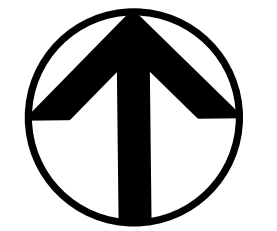
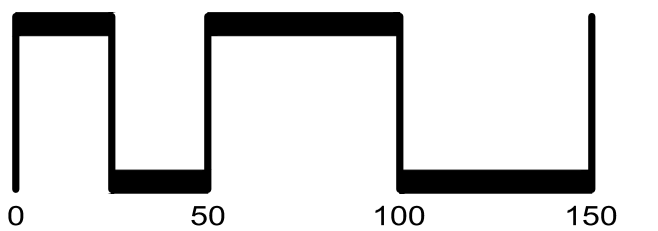

LEGEND

EXISTING	PROPOSED	
---	---	PROJECT BOUNDARY
---	---	RIGHT OF WAY
---	---	LOT LINE
---	---	FACE OF CURB
---	---	EASEMENT
---	---	AC PAVEMENT
---	---	SIDEWALK
---	---	BIORETENTION

Sheet List Table	
Sheet Number	Sheet Title
1	GENERAL NOTES, DIMENSIONED SITE PLAN & SHEET INDEX
2	PRELIMINARY GRADING PLAN
3	PRELIMINARY UTILITY PLAN
4	PRELIMINARY STORMWATER CONTROL PLAN

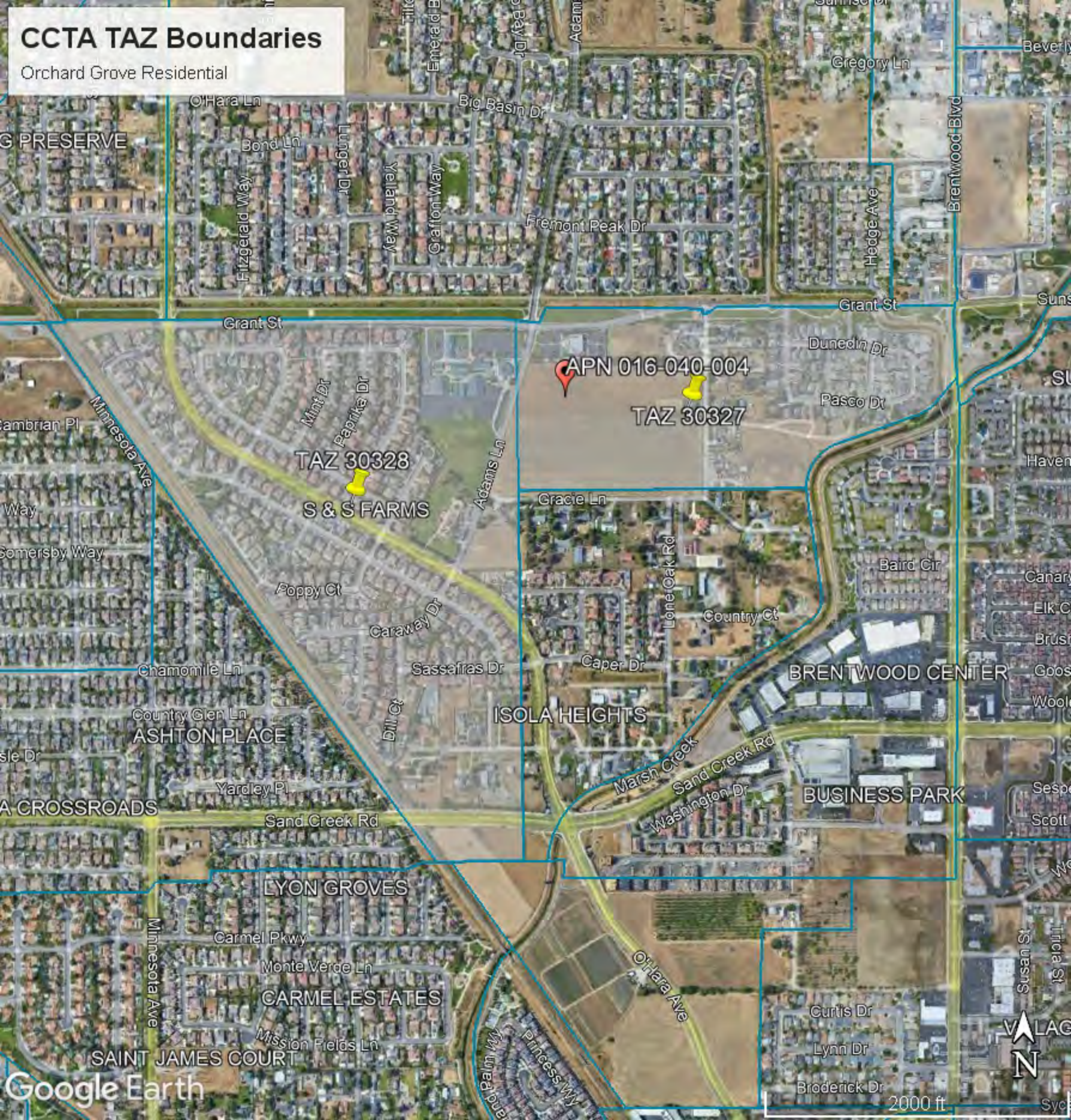
**GENERAL NOTES,
DIMENSIONED SITE PLAN & SHEET INDEX
VESTING TENTATIVE MAP
ORCHARD GROVE NORTH - SUBDIVISION 9649**

CITY OF BRENTWOOD CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: JULY 11, 2023 JOB NO.: 3170-010




 SAN RAMON • (925) 866-0322
 ROSEVILLE • (916) 788-4456
 WWW.CBANDG.COM

CCTA TAZ Boundaries

Orchard Grove Residential



APN 016-040-004

TAZ 30327

TAZ 30328

S & S FARMS

ISOLA HEIGHTS

BRENTWOOD CENTER

BUSINESS PARK

LYON GROVES

CARMEL ESTATES

SAINT JAMES COURT



2000 ft