Exhibit L

E202510000098

CITY OF FRESNO **NOTICE OF INTENT TO ADOPT A** **MITIGATED NEGATIVE DECLARATION**	Filed with the FRESNO COUNTY CLERK 2220 Tulare Street, Fresno, CA 93721
ENVIRONMENTAL ASSESSMENT FOR T-6376/P21-05373/P21-05090	FILED APR 24 2025 TIME 3:52 pm By FRESNO COUNTY CLERK DEPUTY
APPLICANT: John Bonadelle Bonadelle Neighborhoods 7030 N. Fruit # 101 Fresno, CA 93711	
PROJECT LOCATION: Located on the west side of South Armstrong Avenue, between the San Joaquin Valley Railroad and East Church Avenue in the County of Fresno, California (See Exhibit A - Vicinity Map) APN(s): 316-160-16s, -17s, -43s, -59s, and -61s Site Latitude: 36° 43' 16.41" N Site Longitude: 119 ° 40' 31.61" W Mount Diablo Base & Meridian, Township 14S, Range 21E, Section 15	

The full Initial Study is on file in the Planning and Development Department, Fresno City Hall, 3rd Floor, Room 3043, 2600 Fresno Street, Fresno, CA 93721.

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PROJECT DESCRIPTION:

John Bonadelle of Bonadelle Neighborhoods has filed Pre-zone Application No. P21-05373, Vesting Tentative Tract Map No. 6376 (T-6376), and Annexation Application No. P21-05090 pertaining to ±34.70 acres of property located on the west side of South Armstrong Avenue, between the San Joaquin Valley Railroad and East Church Avenue.

Pre-zone Application (P21-05373) proposes to pre-zone the property from AL20 (Exclusive Agricultural, Fresno County) zone district to the City of Fresno RS-5/UGM (*Single-Family Residential, Medium Density/Urban Growth Management*) zone district.

Annexation Application (P21-05090) proposes to detach the property from the King River Conservation District and Fresno County Fire Protection District and annexation to the City of Fresno.

Vesting Tentative Tract Map No. 6376 proposes to subdivide approximately 34.70 acres of property into a 202-lot single-family residential development.

The City of Fresno has prepared an Initial Study of the above-described project and proposes to adopt a Mitigated Negative Declaration.

Pursuant to the California Public Resources Code (PRC) §§ 21093 and 21094 and California Environmental Quality Act (CEQA) Guidelines §§ 15070 to 15075, 15150, and 15152, this project has been evaluated with respect to each item on the attached Appendix G/Initial Study Checklist to determine whether this project may cause any additional significant effect on the environment. After conducting a review of the adequacy of the Project Specific Mitigation Measure Checklist and CEQA Guidelines §§ 15151 and 15179(b), the Planning and Development Department, as lead agency, finds that no substantial changes have occurred, and that no new information has become available.

The completed Appendix G/Initial Study Checklist, its associated narrative, technical studies and mitigation measures reflect applicable comments of responsible and trustee agencies and research, and analyses conducted to examine the interrelationship between the proposed project and the physical environment. The information contained in the project application and its related environmental assessment application, responses to requests for comment, checklist, Initial Study narrative, and any attachments thereto, combine to form a record indicating that an Initial Study has been completed in compliance with the State CEQA Guidelines and the CEQA.

All new development activity and many non-physical projects contribute directly or indirectly toward cumulative impacts on the physical environment. It has been determined that the incremental effect contributed by this project toward cumulative impacts is not considered substantial or significant in itself and/or that cumulative impacts accruing from this project may be mitigated to less than significant with application of feasible mitigation measures.

With mitigation imposed under the Project Specific Mitigation Measure Checklist, there is no substantial evidence in the record that this project may have additional significant, direct, indirect or cumulative effects on the environment that are significant. The Planning and Development Department, as lead agency, finds that no substantial changes have occurred, and that no new information has become available.

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Based upon the evaluation guided by the Appendix G/Initial Study Checklist, it was determined that there are project specific foreseeable impacts which require project level mitigation measures.

The Initial Study has concluded that the proposed project will not result in any adverse effects, which fall within the "Mandatory Findings of Significance" contained in § 15065 of the State CEQA Guidelines. The finding is, therefore, made that the proposed project will not have a significant adverse effect on the environment.

Public notice has been provided regarding staff's finding in the manner prescribed by § 15072 of the CEQA Guidelines and by § 21092 of the PRC Code (CEQA provisions).

Additional information on the proposed project, including the Project Specific Mitigation Measure Checklist, proposed environmental finding of a Mitigated Negative Declaration and the Initial Study may be obtained from the Planning and Development Department, Fresno City Hall, 2600 Fresno Street, 3rd Floor, Room 3043, Fresno, California 93721 3604. Please contact Juan Lara at (559) 621-8039 or via email at Juan.Lara@fresno.gov for more information.

ANY INTERESTED PERSON may comment on the proposed environmental finding. Comments must be in writing and must state (1) the commentor's name and address; (2) the commentor's interest in, or relationship to, the project; (3) the environmental determination being commented upon; and (4) the specific reason(s) why the proposed environmental determination should or should not be made. Any comments may be submitted at any time between the publication date of this notice and close of business on May 15, 2025. Please direct comments to Juan Lara, Planner III, City of Fresno Planning and Development Department, City Hall, 2600 Fresno Street, Room 3043, Fresno, California, 93721-3604; or by email to Juan.Lara@fresno.gov.

INITIAL STUDY PREPARED BY: Juan Lara, Planner III	SUBMITTED BY:
DATE: 04/24/2025	Juan Lara, Planner III CITY OF FRESNO PLANNING AND DEVELOPMENT DEPARTMENT
Attachments: Exhibit A – Vicinity Map	

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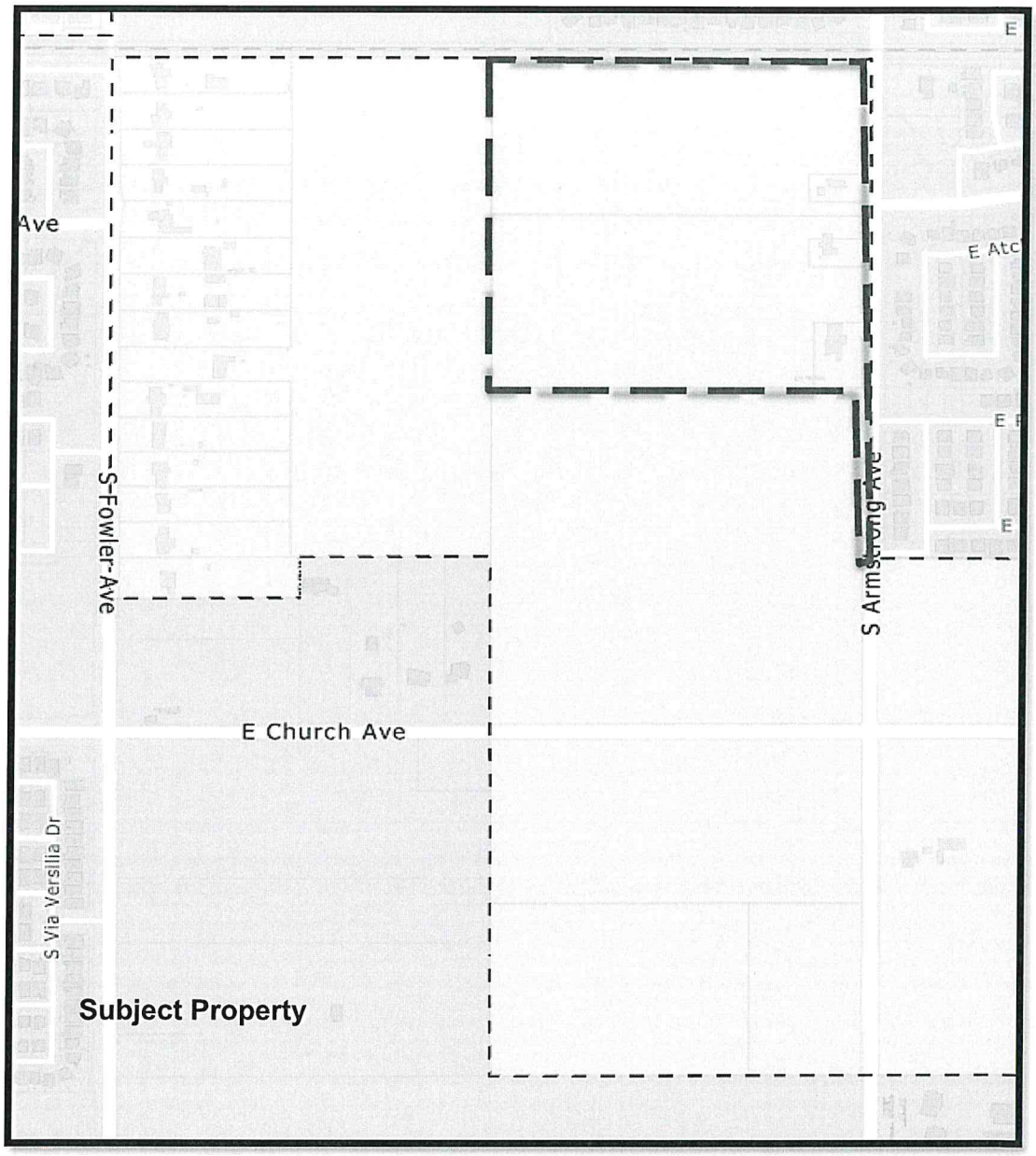
Exhibit A – Vicinity Map



Legend

APPENDIX G/INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

Environmental Checklist Form for:

Environmental Assessment Application No. T-6376/P21-05373/P21-05090

1.	**Project title:** **Environmental Assessment Application No. T-6376/P21-05373/P21-05090**
2.	**Lead agency name and address:** City of Fresno Planning and Development Department 2600 Fresno Street Fresno, CA 93721
3.	**Contact person and phone number:** Juan Lara, Planner III City of Fresno Planning and Development Department (559) 621-8039
4.	**Project location:** *Located on the west side of S. Armstrong Avenue, between the San Joaquin Valley Railroad and East Church Avenue, in the City and County of Fresno County, California* (see Figures 1 and 2). Site Latitude: 36.7212 º N - 36º 43’ 16.41” Site Longitude: 119.6754º W - 119 º 40’ 31.61” Mount Diablo Base & Meridian, Township 14S, Range 21E, Section 15 Assessor’s Parcel Number(s): 316-160-16S, -17S, -43S, -59S and -61S.

5.	**Project sponsor's name and address:** Bonadelle Communities 7030 N. Fruit Ave #101 Fresno, CA 93711
6.	**General & Community plan land use designation:** **General Plan:** Current: Medium Density Residential Proposed: Medium Density Residential Community Plan: Roosevelt Community Plan
7.	**Zoning:** Current: AL 20 (*Limited Agriculture, 20 Acre Parcel*) - Fresno County Proposed: RS-5/UGM (*Residential Single-Family, Medium Density/Urban Growth Management*)
8.	**Description of project:** Pre-zone Application No. P21-05373, Annexation Application No. P21-05090 and Vesting Tentative Tract Map No. 6376 were filed by Bonadelle Neighborhoods (herein, "Project Applicant"). The Project is located on the west side of South Armstrong Avenue, between the San Joaquin Valley Railroad and East Pitt Avenue, within Fresno County (APNs 316-160-16s, -17s, -43s, -59s, and -61s). Pre-zone Application No. P21-05373 requests authorization to change to the City of Fresno official zone map for the Project site from the AL20 (Agriculture, 20-acre parcel, Fresno County) zone district to the City of Fresno RS-5/UGM (*Single-Family Residential, Medium Density/Urban Growth Management*) zone district. Annexation Application No. P21-05090 proposes to detach from the King River Conservation District and Fresno County Fire Protection District and annexation to the City of Fresno. Vesting Tentative Tract Map No. 6376 proposes the subdivision of the approximately 34.7-acre site into 202 single-family residential lots approximate lot size will range

from 6,300 square feet to 4,445 square feet with public streets, sidewalks and a 0.39-acre park. There will be three access points from S. Armstrong Avenue. All required improvements are proposed and will be installed by the developer as part of the Project. See Figure 3.

There are three existing residences with wells on the eastern portion of the site along S. Armstrong Avenue which will be demolished as part of the Project.

Construction

The proposed Project includes the construction of a 202-lot single-family development with the associated public road and utility improvements. The site currently consists of three residential dwellings with associated wells, and vacant land that is regularly disked for weed control. Construction will take approximately 24 months with construction starting in mid to late 2025.

It is anticipated that the following pieces of equipment would be used during construction activities:

1. Roller;
2. Large bulldozer;
3. Loaded trucks;
4. Excavator;
5. Generator;
6. Service truck; and
7. Air compressor.

9. **Surrounding land uses and setting:**

	Planned Land Use	Existing Zoning	Existing Land Use
North	Residential, Medium Low Density	**RS-4** Residential Single Family, Medium Low Density (City of Fresno)	Single-Family Residential
East	Residential, Medium Low Density	**RS-4** Residential Single Family, Medium Low Density (City of Fresno)	Single-Family Residential
South	Residential, Medium Density	**AL-20** Limited Agriculture (Fresno County)	Agriculture
West	Residential, Medium Density	**AL-20** Limited Agriculture (Fresno County)	Vacant

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

Planning and Development Department, Building and Safety Services Division, Department of Public Works, Department of Public Utilities, Fire Department, Fresno Metropolitan Flood Control District, Fresno Irrigation District, PG&E, Sanger Unified School District, County of Fresno Department of Community Health, County of Fresno Department of Public Works and Planning, and San Joaquin Valley Air Pollution Control District.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code**

(PRC) Section 21080.3.1? If so, has consultation begun?

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Pursuant to Assembly Bill 52 (AB 52). The City of Fresno mailed notices of the proposed to the Table Mountain Rancheria Tribe and The Dumna Wo Wah Tribe on April 15, 2022, which included the required 30-day time period for tribes to request consultation, which ended on May 16, 2022. All tribes which were contacted declined consultation.

Figure 1 – Project Location

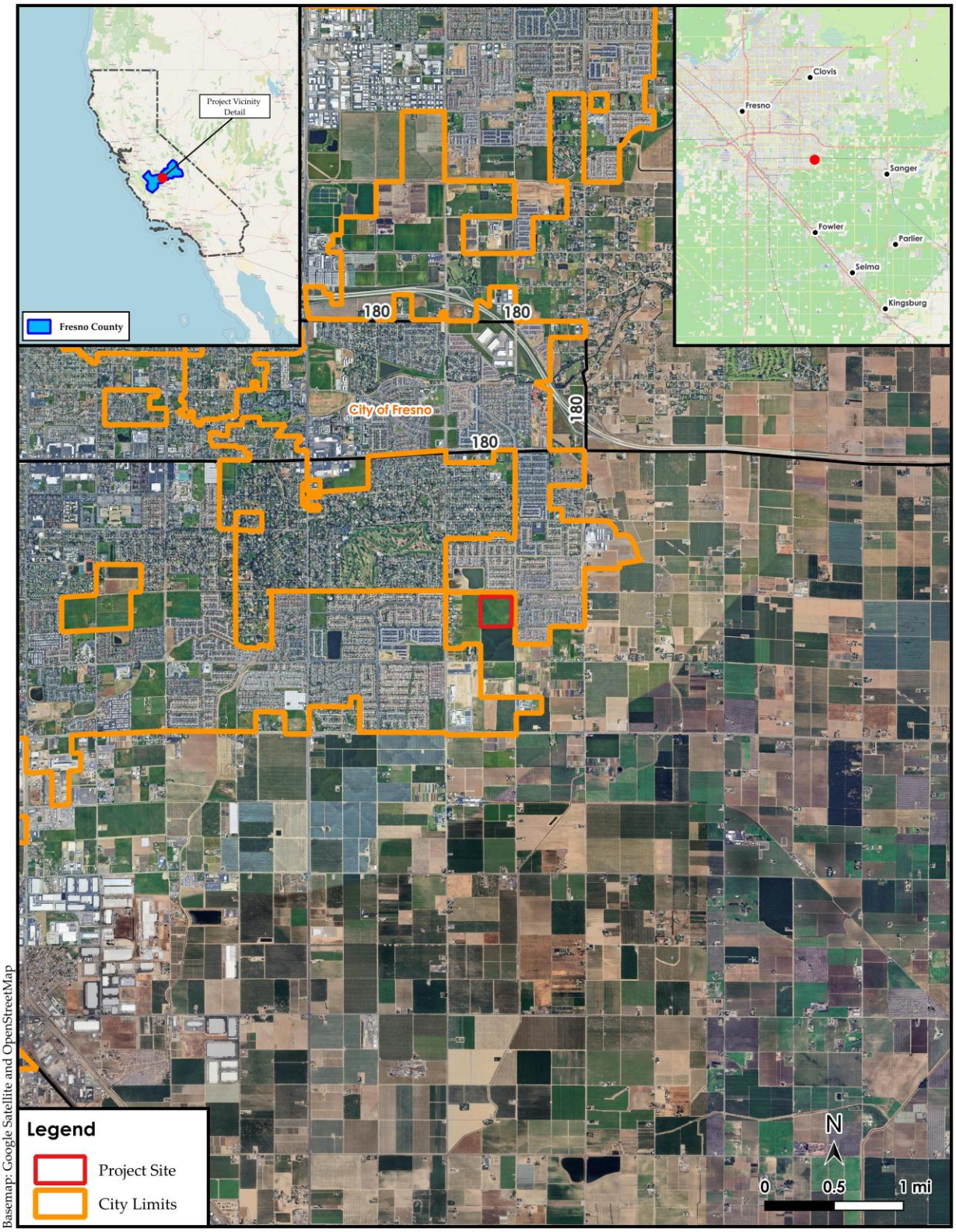
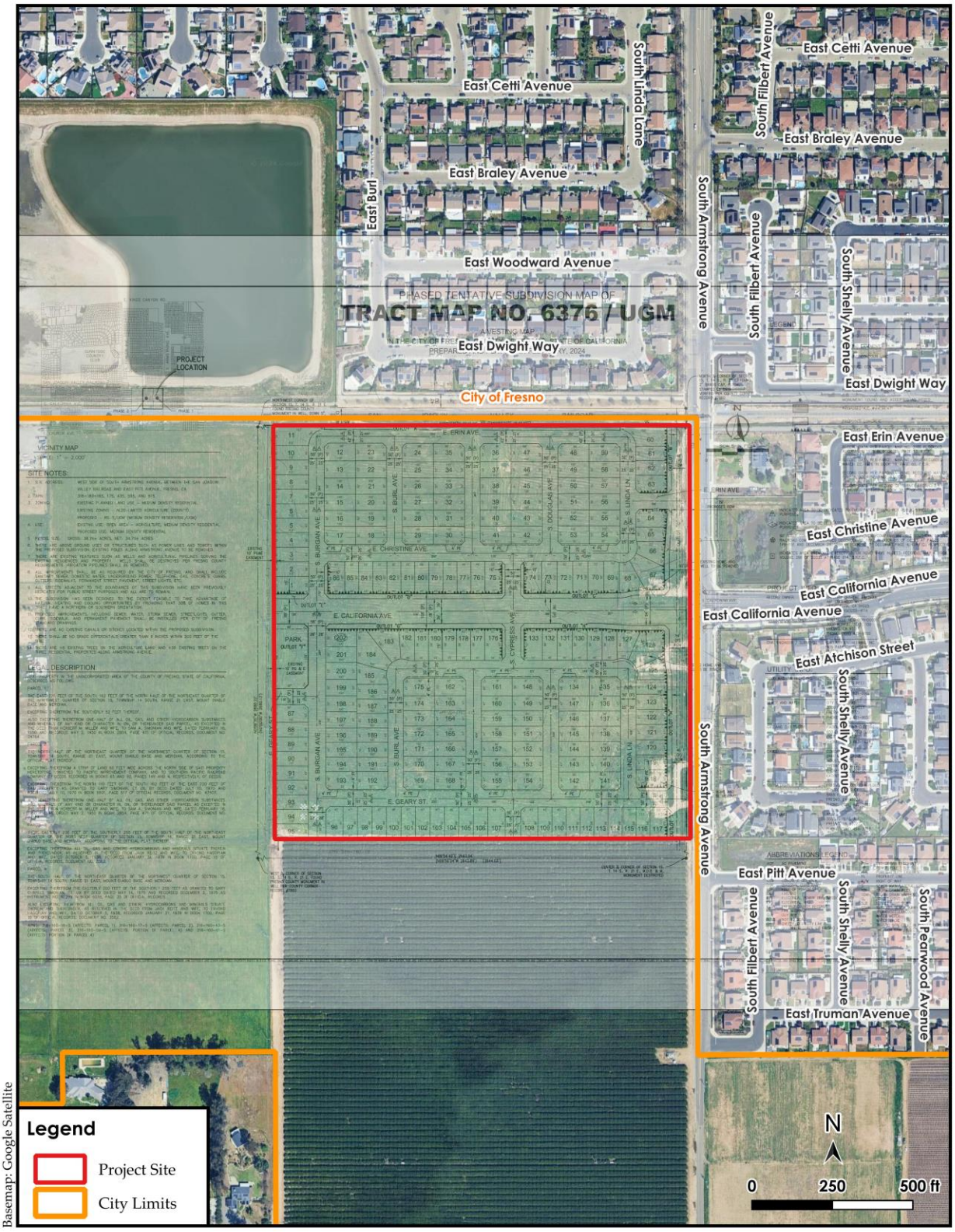


Figure 3 – Site Plan



Basemap: Google Satellite

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

DETERMINATION: (To be completed by the Lead Agency)

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 (EIR) 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 EIR 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.

_____ April 24, 2025_

Juan Lara, Planner III Date

City of Fresno, Planning and Development Department

EVALUATION OF ADDITIONAL ENVIRONMENTAL IMPACTS:

For purposes of this Initial Study, the following answers have the corresponding meanings:

a. “No Impact” means the specific impact category does not apply to the project, or that the record sufficiently demonstrates that project specific factors or general standards applicable to the project will result in no impact for the threshold under consideration.

b. “Less Than Significant Impact” means there is an impact related to the threshold under consideration, but that impact is less than significant.

c. “Less Than Significant with Mitigation Incorporation” means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the project, the impact is less than significant.

d. “Potentially Significant Impact” means there is substantial evidence that an effect may be significant related to the threshold under consideration.

2. 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).

3. 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.

4. 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.

5. "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, "Earlier Analyses," as described in (6) below, may be cross-referenced).

6. Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, 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 they are available for review.

   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the PEIR or another 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.

7. 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.

8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

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.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in PRC Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

No Impact. A scenic vista is a viewpoint that provides a distant view of highly valued natural or man-made landscape features for the benefit of the general public. Typical scenic vistas are locations where views of rivers, hillsides, and open space areas can be obtained as well as locations where valued urban landscape features can be viewed in the distance.

The City of Fresno General Plan (GP) identifies six locations along the San Joaquin River bluffs as designated vista points from which views should be maintained. The scenic views from the San Joaquin River bluffs are not expected to be substantially affected. As such, future development associated with the continued implementation of the approved General Plan would result in a less than significant impact on existing designated vista points.

According to the GP scenic views are also attributed to public views of buildings in Downtown Fresno that provide a skyline within the Planning Area. Due to relatively flat topography, intervening land uses, and landscaping, views of the skyline are primarily limited to areas within the Downtown Fresno area. Limited views of existing high-rise buildings in Downtown Fresno are visible from portions of elevated freeways, including State Route (SR) 41, SR 99, and SR 180. The continued implementation of the approved General Plan would allow future development in the Downtown area, which could include additional high rises. While views of scenic resources in the Downtown Fresno area may be partially obstructed following future development as allowed by the approved General Plan, existing development in these areas currently inhibits views of scenic vistas.

The proposed Project site is located in an area designated for residential zoning uses by the City. The site is outside of the San Joaquin River bluffs and Downtown Fresno area. The parcels to the north and east, beyond S. Armstrong Avenue and the SJVR, have also been developed into subdivision neighborhoods. According to the biological due diligence letter (see Appendix B), a site survey was conducted on March 25, 2021. At the time, the site consisted of loose, recently-disked soil, except for two residences on site, which will be demolished with Project implementation. Site vegetation is comprised mostly of grasses, but some low-growing forbs are also present. Plan height is currently low, with grasses and forbs 1-6 inches tall. The site can be characterized as annual grassland in the process of re-establishment. The existing topography of the site is nearly flat, with an elevation of approximately 323 feet above

mean sea level (amsl). There are no significant trees, rock outcroppings, and/or historic buildings located on the subject property that have been identified as important scenic resources.

There will be *no impacts* to scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Project site is in an agricultural and residential area in the City of Fresno and there are no scenic vistas or other protected scenic resources on or near the site. There are no scenic highways near the proposed site. The nearest eligible State Scenic Highway is Hwy 168, south of Shaw Avenue, approximately 7.3 miles to the northwest and Hwy 180 east of Frankwood Avenue, approximately 12 miles east of the site.[1] Miles of intervening land uses separate the Project site from either stretch of eligible State Scenic Highway. As such, there is *no impact*.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The proposed Project is located near the eastern Fresno City limit in an area historically utilized for agricultural development. The proposed Project site was used for agricultural purposes prior to 1937 but has been composed of the existing residences and associated outbuildings since 1979.[2] These residences, along with existing features such as wells and power lines, will be demolished or removed as part of the Project. It has been designated by the General Plan for urban development. The proposed Project would alter the existing visual character of public views of the site from vacant land with two dilapidated single story residences to fully developed with a 202-lot single-family residential development which would include a mix of one and two story residences. Also included in the

1 California State Scenic Highway Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed December 2024.

2 Phase I Environmental Site Assessment for Simonian Estates. RMA GeoScience, October 27, 2023.

development are the associated improvements such as an internal roadway and landscaping. The Project design is subject to the City's Design Guidelines adopted for the City's General Plan which apply to site layout, building design, landscaping, interior street design, lighting, parking and signage. Detailed architectural plans, color palettes and building materials as well as landscaping plans will be submitted by the Project developer to the City of Fresno Planning and Development Department. The plans shall be required prior to issuance of any building permits.

The Project will require demolition of all existing structures, as well as removal of existing trees and shrubs. Curb and gutters, electrical panels and pedestrian sidewalks are incorporated into the project design, along with site landscaping.

As part of the proposed Project, the site will be annexed and pre-zoned from AL 20/Limited Agriculture (Fresno County) to RS-5/Medium Density Residential (City of Fresno), to be consistent with the proposed Project density and with the residential development immediately to the east and north. Once pre-zoned, the proposed Project will be in compliance with the requirements of the Medium Density Residential Zone.

The improvements such as those proposed by the Project are typical of large city urban areas and are generally expected from residents of the City. These improvements would not substantially degrade the visual character of the area and would not diminish the visual quality of the area, as they would be consistent with the existing visual setting and consistent with regulations governing scenic quality The Project itself is not visually imposing against the scale of the existing landscape and nature of the surrounding area.

Therefore, the Project would have *less than significant impacts* on the visual character of the area.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant with Mitigation Incorporated. The proposed Project would result in new lighting sources on the site consistent with adjacent residential development. New lighting sources would include interior lighting from residences, street lighting, lighting from passing vehicles and security lighting. All street and

landscape lighting will be consistent with the lighting set forth in Section 15-2508 of the Fresno Municipal Code (FMC), which states that “lights shall be placed to deflect light away from adjacent properties and public streets, and to prevent adverse interference with the normal operation or enjoyment of surrounding properties.” It also states that “windows shall not cause glare that may disrupt adjoining properties, traffic on adjacent streets, etc.” Implementation of mitigation measure AES-1, which includes shielding street lighting to reduce glare, will further reduce potential impacts resulting from street lighting.

The proposed Project may produce temporary light and glare from construction activities, which could stem from construction vehicle and equipment lighting. However, most construction work is anticipated to take place during daylight hours, and lighting will be directed away from surrounding homes to minimize disruption. The construction-related light will cease once Project construction has finished.

Adherence to the FMC and mitigation measure AES-1 will ensure potential impacts resulting from new sources of light and glare will remain *less than significant.*

Mitigation Measures:

The proposed Project shall implement and incorporate the Visual resource related mitigation measure as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 24, 2025.

AES-1: Lighting systems for street and parking areas shall include shields to direct light to the roadway surfaces and parking areas. Vertical shields on the light fixtures shall also be used to direct light away from adjacent light sensitive land uses such as residents.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			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

DISCUSSION

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?

Less Than Significant Impact. The site is outside the City limits in an area historically used for agricultural purposes; however, the surrounding areas are now substantially built up with residential uses. This Project is contiguous to an existing urbanized area and would a be natural progression that allows orderly and consistent development of residences to meet the growing demand for housing in the City. The site is designated for residential development by the City of Fresno General Plan.

The California Department of Conservation, Important Farmland Finder Program considers the Project site to be primarily *Farmland of Local Importance,*[3] aside from the portions of the parcels on the eastern boundary containing the residences, which are designated *Urban and Built-Up Land*. *No Prime Farmland, Farmland of Statewide Importance,* or *Unique Farmland* is found on the proposed Project site. As such, there would be no significant farmland conversion. *Impacts resulting from farmland conversion are* **less than significant***.*

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. The site is zoned as AL-20 (Limited Agriculture) by Fresno County. The Applicant proposes re-zoning the Project site as RS-5/UGM (Residential Single Family, Medium Density), as per the City of Fresno General Plan zoning designations. The site is not subject to a Williamson Act contract and no mitigation is required. There is *no impact.*

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The site is located on the floor of the San Joaquin Valley and does not contain any forest land or timberland. As mentioned in Impact b), above, the site is zoned as AL-20 (Limited Agriculture) by Fresno County. The Applicant proposes re-

3 California Department of Conservation. California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed December 2024.

zoning the Project site as RS-5 (Residential Single Family, Medium Density), as per the City of Fresno General Plan zoning designations. The proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and no mitigation is necessary. There is *no impact*.

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

No Impact. As described in Impact c) above, there is no forest land on the Project site. There is *no impact.*

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?

No Impact. As discussed in Impacts a) and c) above, there is no impact to agricultural land and there is no forest land on-site. The proposed Project will not involve new other changes in the existing environment that could result in conversion of Farmland. Impacts are *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan (*e.g.*, by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?			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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

The following analysis is based primarily on the Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum performed on behalf of the proposed Project by LSA Consulting, report dated December 24, 2024 (see Appendix A).

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact with Mitigation Incorporation.

CEQA requires that certain projects be analyzed for consistency with the applicable air quality plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley Air Basin (SJVAB) into attainment, the San Joaquin Valley Air Pollution Control District (SJVAPCD) adopted the 2016 Plan for the 2008 8-Hour Ozone Standard in June 2016 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.

To assure the SJVAB's continued attainment of the U.S. Environmental Protection Agency (USEPA) respirable particulate matter (PM10) standard, the SJVAPCD adopted the 2007 PM10 Maintenance Plan in September 2007.

SJVAPCD Regulation VIII (Fugitive PM10 Prohibitions) is designed to reduce PM10 emissions generated by human activity. The SJVAPCD adopted the 2018 plan for the

1997, 2006, and 2012 fine particulate matter (PM2.5) standard to address the USEPA federal annual PM2.5 standard of 12 µg/m3, established in 2012. The SJVAPCD has established project construction and operational emissions thresholds for criteria pollutants, as shown in Table 1 and 2 below. For a project to be consistent with SJVAPCD attainment plans, the pollutants emitted from project operation should not exceed the SJVAPCD daily thresholds, cause a significant impact on air quality, or the project must already have been included in the attainment plans projection.

Construction Emissions

During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e. fugitive dust) generated by excavation activities. Emissions from construction equipment are also anticipated and would include CO, NOx, reactive organic gases (ROGs), directly emitted PM2.5 or PM10, and TACs (e.g. DPMs).

Project construction would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed Project would be greatest during the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{IO} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{IO} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has established Regulation VIII measures for reducing fugitive dust emissions (PM_{I0}). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{I0} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides {SO_x}, NO_x, ROGs, and some soot particulate {$PM_{2.5}$ and PM_{I0}} in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These

emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the Project using CalEEMod and are summarized in Table 1. Consequently, the construction emissions for the Project basis are *less than significant.*

Table 1: Construction Air Pollutant Emissions[4]

Year	Emissions (tons per year)				
	ROG	**NOx**	**CO**	**PM10**	**PM2.5**
2025	0.1	4.5	3.4	0.6	0.3
2026	0.1	2.5	2.2	0.2	0.1
2027	0.1	2.5	2.1	0.2	0.1
2028	1.3	1.5	1.3	0.1	0.1
Maximum Emissions	1.3	4.5	3.4	0.6	0.3
SJVAPCD Significance threshold (tons/year	10	10	100	15	15
Exceed threshold—significant impact?	No	No	No	No	No

Notes: Source: Compiled by LSA (2024)

CO=carbon monoxide

NOX=nitrogen oxides

PM2.5=particulate matter less than 2.5 microns in size

PM10=particulate matter less that 10 microns in size

ROG=reactive organic gases

SJVAPCD=San Joaquin Valley Air Pollution Control District

4 *Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum for Residential Tract 6376*, LSA Consulting. Report dated December 24, 2024. Page 31.

As shown in Table 1, construction emissions associated with the proposed Project would not exceed the SJVAPCD's thresholds for ROG, NO_x, CO, PM_{l0}, and $PM_{2.5}$ emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during construction, which will further reduce construction emissions.

Operational Emissions

Long-term air pollutant emission impacts associated with the proposed Project are those related to mobile sources {e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

Mobile source emissions include ROG and NO_X emissions that contribute to the formation of ozone. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity {i.e., the amount of natural gas) and the emission factor of the fuel source.

Typically, area source emissions consist of direct sources of air emissions located at the Project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the Project would include emissions from the use of landscaping equipment and the use of consumer products.

Long-term operational emissions associated with the proposed Project were calculated using CalEEMod. Table 2 provides the proposed Project's estimated operational emissions.

Table 2: Operational Air Pollutant Emissions[5]

5 Ibid, page 33.

Source	Emissions (tons per year)				
	ROG	**NOx**	**CO**	**PM10**	**PM2.5**
Mobile	1.1	1.0	6.7	1.6	0.4
Area	1.8	<0.1	1.0	<0.1	<0.1
Energy	0.0	0.0	0.0	0.0	0.0
Total	**2.9**	**1.1**	**8.3**	**1.6**	**0.4**
Significance threshold	10	10	100	15	15
Exceed threshold—significant impact?	No	No	No	No	No

Notes: ROG = reactive organic gases NOx = nitrogen oxides CO = carbon monoxide PM10 and PM2.5 = particulate matter

Area source emissions include emissions from natural gas, landscape, and painting.

Source: Compiled by LSA (2024)

The results shown in Table 2 indicate the proposed Project would not exceed the significance criteria for annual ROG, NO_X, CO, PM_{l0}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS. Thus, any impacts are considered *less than significant*.

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?

Less Than Significant Impact. The Air Basin is in non-attainment for ozone, PM10, and PM2.5, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. The air quality standards have been set to protect

public health, particularly the health of vulnerable people. Therefore, if the concentration of those contaminants exceeds the norm, some susceptible individuals in the population are likely to experience health effects. The health effects are therefore a factor in the dose-response curve. Concentration of the pollutant in the air, the length of time exposed and the individual's reaction are factors that affect the extent and nature of the health effects. As shown in Table 1 and Table 2, the regional construction and operational emission analysis shows that the Project does not surpass the substantial thresholds of the District and that the Project is compliant with the Air Quality Attainment Plan applicable. Therefore, the Project would not result in significant cumulative health impacts. Impacts are *less than significant.*

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact.

Long-Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed Project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed Project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed Project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate Project vicinity are not available. Ambient CO levels monitored at Fresno-Garland station, the closest station to the Project site, showed a highest recorded 1-

hour concentration of 2.2 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.8 ppm (the State standard is 9 ppm) during the past 3 years. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

The proposed Project is estimated to generate 1,914 average daily trips, including 142 trips during the peak a.m. hour and 191 trips during the peak p.m. hour. Therefore, given the extremely low level of CO concentrations in the Project area and the vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the Project would not result in any project-related impacts on CO concentrations.

Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. The Project site is surrounded primarily by residential and agricultural uses. The closest sensitive receptors to the Project site include a single-family home located east of the Project site within 135 feet. The nearest worker receptor to the Project site is located approximately 2,000 feet southeast of the Project site. The nearest school receptor to the Project site is located approximately 1,700 feet south of the Project site, across North South Armstrong Avenue.

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed Project. Table 3, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment as proposed by the Project.

Table 3: Health Risks from Project Construction to Off-Site Receptors[6]

6 Ibid, page 34.

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	11.57	<0.01	0.0
Worker Receptor Risk	<0.01	<0.01	0.0
School Receptor	0.04	<0.01	0.0
Significance threshold	20.0 in one million	1.0	1.0
Exceed threshold—significant impact?	**No**	**No**	**No**

As shown in Table 3, the maximum cancer risk for the residential receptor MEI would be 11.57 in one million, which would not exceed the SJVAPCD cancer risk threshold of 20 in one million. The worker receptor risk would be less than 0.01 in 1 million and the school receptor MEI would be 0.04 in 1 million, which would not exceed the SJVAPCD cancer risk thresholds. The total chronic HI would be less than 0.01 all receptors, which is below the threshold of 1.0. In addition, the total acute HI would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed Project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

Furthermore, the proposed Project would include the construction of a 202unit, single-family residential development. As identified in Table 2, Project operational emissions of criteria pollutants would be below SJVAPCD significance thresholds; thus, they are not likely to have a significant impact on sensitive receptors. In addition, the proposed

Project would be required to implement District Rule 9510, Indirect Source Review (ISR). Implementation of Rule 9510 would reduce operational emissions of NO_X and PM_{10} by 33.3 percent and 50 percent, respectively. Compliance with SJVAPCD rules would further limit doses and exposures, reducing potential health risk related to gasoline vapors to a level that is not significant. Once the proposed Project is constructed, the proposed Project would not be a source of substantial emissions and would not result in new sources of TACs. Therefore, the Project would not expose sensitive receptors to substantial levels of TACs.

Naturally Occurring Asbestos

The Project is in Fresno County, which is among the counties found to have serpentine and ultramafic rock in their soils. However, according to the California Geological Survey, no such rock has been identified in the Project vicinity. Therefore, the potential risk for naturally occurring asbestos during Project construction is small and would not be significant.

Valley Fever

The Project site is surrounded primarily by residential uses. The closest sensitive receptors to the Project site include a single-family home located east and north of the Project site within 125 feet. Except under high wind conditions, this distance is sufficient that particulate matter would settle prior to reaching the nearest sensitive receptor. In addition, crosswinds influenced by the adjacent roadways would help dissipate any particulate matter associated with the construction phase of the Project. Therefore, any Valley fever spores suspended with the dust would not be anticipated to reach the sensitive receptors. However, during Project construction, it is possible that workers could be exposed to Valley fever through fugitive dust. Dust control measures, such as regulating visible dust emissions, requiring soil stabilizers, and regulating on-site speed limits, consistent with SJVAPCD Regulation VIII, would reduce the exposure to the workers and sensitive receptors.

The Project should therefore not expose susceptible receptors to significant air pollutant concentrations during operation. Impacts to sensitive receptors will be *less than significant.*

d) Result in other emissions (such as those leading to odors) adversely affecting

a substantial number of people?

Less Than Significant Impact. The SJVAPCD addresses odor criteria within the GAMAQI. The district has not established a rule or standard regarding odor emissions, rather, the district has a nuisance rule: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact."

During Project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. Residential uses are not anticipated to emit any objectionable odors. Any odors in general would be confined mainly to the Project site and would readily dissipate. Therefore, the proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts resulting from creating objectionable odors are *less than significant.*

Mitigation Measures

None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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

The following analysis is based primarily on the Biological Due Diligence letter prepared on behalf of the proposed Project by H.T. Harvey & Associates, dated April 15, 2021 (see Appendix B).

DISCUSSION

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

Less than Significant Impact with Mitigation Incorporation. The proposed Project includes five parcels, which are partially developed by three existing residences and other associated structures. The site consists of loose, recently-disked soil, except for the residences located on the property. Approximately 11 acres in the southwest corner and along the central part of the southern border have been disked since the spring 2020 growing season and are sparsely vegetated. The remainder of the site also shows signs of recent disking, but currently is approximately 95% covered in vegetation, with the remainder consisting of bare soil. Garbage is relatively abundant, especially in the northwest corner. Overall, the site conditions are currently unsuitable for special-status plant species. Vegetation on the site is comprised mostly of grasses,

but some low-growing forbs are also present (see Appendix B). Plant height is currently low, with grasses and forbs 1-6 inches tall. The site can be characterized as annual grassland in the process of re-establishment; however, as a result of past ground disturbance, the Project site is highly suitable for nonnative invasive plants.

The Project site is relatively far from recent records of special-status species. A query of California Natural Diversity Database records occurring within 5 miles of the Project site revealed seven special-status species occurrences, two of which are for Swainson's hawk (*Buteo swainsoni*). The site falls within the extent of a Swainson's hawk occurrence mapped over Fresno that has not been reconfirmed since 1956. The other Swainson's hawk occurrence is based on observations from 2016 and is located 3.5 miles southwest of the project site. In addition, there are two occurrences of burrowing owls (*Athene cunicularia*), one located 4.2 miles to the north at Fresno Yosemite International Airport and another located 4.0 miles to the northwest in Clovis. Also, double-crested cormorant (*Phalacrocorax auritus*) was documented at a collection of ponds 4.8 mi. to the north-northwest in 2012. The remaining records (for least Bell's vireo [*Vireo bellii pusillus*] and western yellow-billed cuckoo [*Coccyzus americanus occidentalis*]) are both over 3.5 miles away from the site and have not been reconfirmed within the last 108 years.

The annual grassland in the Project area potentially provides habitat for common, rural and urban-adapted wildlife species, such as ground-foraging and -nesting birds, California ground squirrels (*Otospermophilus beecheyi*), pocket gophers (*Thomomys bottae*), and desert cottontail (*Sylvilagus audobonii*). Wildlife directly observed on the project site consisted of common bird species and the remains of two California ground squirrels. Several individuals of each of four common bird species (mourning dove [Zenaida macroura], California scrub-jay [*Aphelocoma californica*], dark-eyed junco [*Junco hyemalis*], and European starling [*Sturnus vulgaris*]) were observed perched on and flying around the line of trees on the southern border of the Project site. Numerous small mammal burrows occur on the Project site. Several active pocket gopher burrows were found scattered across the site. The site also currently supports a large population of California ground squirrels. Their burrows were abundant at the edge and along the slopes of the detention pond and were moderately abundant throughout the rest of the site. The California ground squirrel remains were located within 1 foot of burrows of this species and represent predation and/or

scavenging, perhaps by red-tailed hawks or other raptors. No signs of mammalian predators (e.g. coyotes [*Canis latrans*]) were observed. All animal species observed directly on or near (i.e., within 0.25 mi.) the Project site are listed in Appendix A within Appendix B. Many of the California ground squirrel burrows are large (about 3-5 inches in diameter), with large, unvegetated aprons, and thus are potentially suitable for use by burrowing owls, which is listed as Species of Special Concern by the State of California. No burrowing owls or signs of this species (e.g. pellets, feathers, or wash) were observed. However, the survey was conducted during conditions of light to moderately heavy rain in the middle of a rain event lasting several days. Any owls present would have been underground in their burrows, and their wash would have been rinsed away. The occurrence of potentially suitable burrows suggests that burrowing owls might be present. No direct evidence of special-status animal or plant species was observed and the site provides little or no value to sensitive plant and wildlife species with the exception of burrowing owl. The presence of burrowing owls on the property could constrain the development of the parcel or result in project delays. Burrowing owls, and their nests are protected under state laws and regulations, including the California Fish and Game Code Section 3503.5.

Based on current understanding of burrowing owl distribution in the Central Valley, burrowing owls are unlikely to occupy this site. The size of the parcel and the adjacent similar parcel west combined with the number of suitable burrows on the site, however, warrant a cautious approach. Implementation of Mitigation Measure BIO-1, which includes measures outlined in the CDFW Staff Report on Burrowing Owl, such as conducting construction during non-nesting season, will ensure that a *less than significant impact* to burrowing owl occurs.

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

No Impact. There are no riparian habitats or other sensitive natural communities identified in local or regional plans, policies, or regulation or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service in the subject site. Additionally, there are no natural waterways or sensitive natural communities on the subject site or in the immediate vicinity. As such, there is *no impact.*

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?

No Impact. There are no state or federally protected wetlands on the subject site.[7] As such, there is *no impact.*

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?

Less Than Significant Impact with Mitigation Incorporation. As previously mentioned, the site contains single-family residences and highly disturbed vacant land, periodically disked for weed control, and is substantially surrounded by urban development. This precludes the ability of wildlife species to freely move throughout the area creating a migratory corridor. Project development could, however, impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC). Migratory birds could potentially nest on and near the trees surrounding the existing buildings on the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered a "take" under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant impact Mitigation Measure BIO-2, which includes conducting construction during non-nesting season, shall be implemented to reduce the potential effect to a *less than significant level*.

e) Conflict with any local policies or ordinances protecting biological resources,

7 US Fish and Wildlife Service. National Wetlands Inventory Surface Waters and Wetlands Mapper. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed December 2024.

such as a tree preservation policy or ordinance?

Less Than Significant Impact. The City's General Plan Parks, Open Space, and Schools Element contains several objectives and policies pertaining to the protection of biological resources. Most of the policies pertain to general long-term protection and preservation of biological resources including providing buffers for natural areas, implementing habitat restoration where applicable, protection/enhancement of the San Joaquin River area, and other similar policies. Since the Project is located in a highly disturbed area with minimal biological resources and does not include significant impacts to protected plant or animal species, the Project does not conflict with any adopted policies pertaining to biological resources. The Project is also required to implement Fresno Municipal Code Chapter 13, Article 3 – Street Trees and Parkways pertaining to tree removal and replacement. Therefore, there is a *less than significant impact.*

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?

No Impact. The Pacific Gas & Electric (PG&E) San Joaquin Valley Operation and Maintenance (O&M) Habitat Conservation Plan (HCP) was approved in 2007 and covers portions of nine counties, including Fresno County and the city of Fresno. This HCP covers PG&E activities which occur as a result of ongoing O&M that would have an adverse impact on any species covered by the HCP. The HCP also provides incidental take coverage from the USFWS and CDFW.

The proposed Project site is not located within the boundaries of any other approved or draft Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other adopted local, regional or state HCP. Therefore, development of the proposed Project would not result in any impacts to an adopted HCP or NCCP. There is *no impact*.

Mitigation Measures

The proposed project shall implement and incorporate the biological resource related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 24, 2025.

BIO-1: In addition to implementation of the measures included in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), if construction activities occur during the avian nesting season (generally, February 1 through August 31), preconstruction surveys for nesting birds by a qualified ornithologist should be conducted to ensure that no active nests are disturbed during construction. The survey should be conducted no more than seven days before construction activities begin. During this survey, all potential nesting areas should be inspected in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist should determine the extent of a construction-free buffer zone to be established around the nest (typically, 300 ft. for raptors and 25–100 ft. for other species) to ensure that no active nests of species protected by the California Fish and Game Code would be disturbed during project construction.

BIO-2: To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests would be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

A Phase I Cultural Resources Survey was conducted by Hudlow Cultural Resource Associates, report date November 2024 (see Appendix C). The Phase I Cultural Resources Survey consisted of a pedestrian survey and a cultural resource record search and is the basis for analysis of the discussion below.

DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation Incorporated. For purposes of this section, the term "historical resources" shall include the following: (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 14 CCR, Section 4850 et seq.). (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant. (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 14 CCR, Section 4852) including the following:

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

(B) Is associated with the lives of persons important in our past;

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

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

A record search of the Project area and the environs within one half-mile was conducted at the Southern San Joaquin Information Center. Information Center staff conducted the record search, RS# 24-299, on July 8, 2024. The record search

revealed that one cultural resource survey has been conducted within one half-mile of the Project area. No cultural resource surveys have previously addressed the parcel in question. No cultural resources have been located on the current Project area; however, one cultural resource has been recorded within one half-mile of the current Project area, the former Southern Pacific Railroad line, which is operated by the San Joaquin Valley Railroad, which is directly on the project's northern boundary.

Additionally, on November 12-13, 2024, Scott M. Hudlow conducted a pedestrian archaeological survey of the entire proposed Project area. Hudlow surveyed in north/south transects across the lot in 10-meter (33 feet) intervals. No cultural resources were identified or observed; however, three homes were located on the property as recently as 2022, on the west side of Armstrong Avenue. No remains from these three homes survived demolition, except for a non-historic concrete block retaining wall along Armstrong Avenue. If archaeological resources are encountered during the course of construction, a qualified archaeologist should be consulted for further evaluation.

Although no cultural or archaeological resources, paleontological resources or human remains have been identified in the Project area to date, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. As such, Mitigation Measure CUL-1 shall be implemented to protect undiscovered resources. Adherence to this mitigation measure will result in a *less than significant impact.*

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation Incorporated. As discussed in Impact a) above, no surface or recorded evidence of sensitive cultural resources have been recorded. However, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measure CUL – 1 will be implemented to ensure that Project will result in *less than significant impact.*

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation Incorporated. The discovery of human remains is regulated by California Health and Safety Code Section 7050.5, which states that:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation…until the coroner…has determined…that the remains are not subject to…provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible…. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and…has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Compliance with California Health and Safety Code Section 7050.5 would reduce potential impacts to human remains to *less than significant.*

Mitigation Measures

The proposed project shall implement and incorporate the cultural resource related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 24, 2025.

CUL – 1: Should evidence of prehistoric archeological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the City of Fresno, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project

proponent shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources).

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY – Would the project:				
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	

The following analysis is based primarily on the Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum performed on behalf of the proposed Project by LSA Consulting, report dated December 24, 2024 (see Appendix A).

DISCUSSION

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The Project includes construction of a 202-lot single-family residential unit development, including a 0.39-acre park and other associated

improvements. The Project would increase energy usage on a site that is presently demanding minimal energy.

Construction

The anticipated construction schedule assumes that the proposed Project would be built in approximately three years. Construction-specific phases were assessed for their energy consumption under each construction sub-phase: grading, site preparation, building construction, paving, and architectural coating activities.

Construction would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from nonrenewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the Project. One common practice is to utilize Global Positioning System (GPS) technology on grading equipment to efficiently grade the site. Energy (i.e., fuel) usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources.

Operation

Energy use associated with the proposed Project would consist of natural gas, electricity, and vehicle fuel use associated with Project operations.

Table 4 shows the estimated potential increased electricity, gasoline, and diesel demand associated with the proposed Project. The electricity and natural gas rates are from the CalEEMod analysis, and the gasoline and diesel rates are based on the traffic analysis in conjunction with USDOT fuel efficiency data and use the USEPA's fuel economy estimates for 2020 and the California diesel fuel economy estimates for 2021. Energy and Fuel Calculations output sheets are included in Appendix A.

Table 4: Estimated Annual Energy Use of the Proposed Project[8]

8 *Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum for Residential Tract 6376*, LSA Consulting. Report dated December 24, 2024. Page 37.

	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Gasoline (gallons per year)	Diesel (gallons per year)
Proposed Project	1,897,356	0	159,991	122,720

Source: Compiled by LSA (2024).
kBTU= thousand British thermal units kWh= kilowatt hours

As shown in Table 4, the estimated increase in electricity demand associated with the operation of the proposed Project would be 1,897,356 kWh per year. Total electricity consumption in Fresno County in 2022 was 8,384,408,687 kWh; therefore, operation of the proposed Project would negligibly increase the annual electricity consumption in Fresno County by approximately less than 0.1 percent.

As shown in Table 4, there would not be an increase in natural gas use as the Project is all electric. Therefore, operation of the proposed Project would not increase the annual natural gas consumption in Fresno County.

In addition, the Project would result in energy usage associated with motor vehicle gasoline to fuel project-related trips. As shown above in Table 4, the proposed Project would result in the consumption of 159,991 gallons of gasoline and 122,720 gallons of diesel per year. Based on fuel consumption obtained from EMFAC2021, approximately 337.0 million gallons of gasoline and approximately 154.4 million gallons of diesel will be consumed from vehicle trips in Fresno County in 2028. Therefore, vehicle trips associated with the proposed project would increase the annual fuel use in Fresno County by approximately less than 0.1 percent for gasoline fuel usage and approximately less than 0.1 percent for diesel fuel usage. The proposed Project would result in fuel usage that is a small fraction of current annual fuel use in Fresno County, and fuel consumption associated with vehicle trips generated by Project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Therefore, gasoline demand generated by vehicle trips associated with the proposed Project would be a minimal fraction of gasoline and diesel fuel consumption in California.

Furthermore, the proposed Project would be constructed using energy efficient modern building materials, such as highly efficient insulation, multiple-pane windows and solar panels , and the proposed Project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed Project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings.

PG&E is the private utility that would supply the proposed Project's electricity. In 2021, a total of 50 percent of PG&E's delivered electricity came from renewable sources, including solar, wind, geothermal, small hydroelectric, and various forms of bioenergy. PG&E reached California's 2020 renewable energy goal in 2017 and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in SB 100. In addition, PG&E plans to continue to provide reliable service to its customers and upgrade its distribution systems as necessary to meet future demand. As such, the proposed Project would not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. As such, any impacts are *less than significant*.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The California Energy Commission (CEC) recently adopted the 2023 Integrated Energy Policy Report. The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

As indicated above, energy usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. In addition, energy usage associated with operation of the proposed Project would be relatively small in comparison to the region's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the Project's total impact on regional energy supplies would be minor, the proposed Project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed Project would not lead to new or substantially more severe energy impacts.

For the above reasons, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be *less than significant.*

Mitigation Measures

None required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or Indirectly cause potential substantial adverse effects, including the risk of 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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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		

DISCUSSION

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.**

Less Than Significant Impact. According to the Fault Rupture Zones Map prepared by the California Department of Conservation in 2018, the Project site is not located within a Fault-Rupture Hazard Area.[9] Moreover, no active faults have been identified within the City of Fresno. The nearest zoned fault to the City is a portion of the Nunez Fault, located approximately 48 miles southwest of the City. Therefore, because no active faults occur within the City, impacts associated with fault rupture would be *less than significant*.

ii. **Strong seismic ground shaking?**

Less Than Significant Impact. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of strong seismic ground shaking on the Project would be *less than significant.*

iii. **Seismic-related ground failure, including liquefaction?**

Less Than Significant Impact. The potential for soil liquefaction within the City of Fresno ranges from very low to moderate due to the variable density of the subsurface soils and the presence of shallow groundwater. The proposed Project will be subject to policies in the Fresno Municipal Code, including

9 California Department of Conservation. California Geological Survey. Fault Activity Map of California. https://maps.conservation.ca.gov/cgs/fam/. Accessed December 2024.

Section 11-101, which would reduce potential settlement and lateral spread impacts to *less than significant* levels.

iv. Landslides?

Less Than Significant Impact. Landslides are the release of rock, soil, or other debris and its subsequent movement down a slope or hillside. Landslides occur during earthquakes, triggered by the strain induced in soil and rock by ground shaking vibrations, and during non-earthquake conditions, most frequently during the rainy season. Any slope of 15 degrees or greater is susceptible to mud or landslides. The Project area is generally flat in nature, with slopes nearly at zero degrees. As such, the Project site is not susceptible to mud or landslides during non-earthquake conditions during the dry or rainy season.

Additionally, the proposed Project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act. No active faults have been mapped within the Project boundaries, so there is no potential for fault rupture. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of landslides on the Project would be *less than significant.*

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Construction activities associated with the Project involves ground preparation work for the new residential development, streets, and the associated improvements. These activities could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the Project

site. During construction, nuisance flow caused by minor rain could flow off-site. The City and/or contractor would be required to employ appropriate sediment and erosion control Best Management Practices (BMPs) as part of a Stormwater Pollution Prevention Plan (SWPPP) that is in the California National Pollution Discharge Elimination System (NPDES). In addition, soil erosion and loss of topsoil would be minimized through implementation of the SVJAPCD fugitive dust control measures (See Section III). Once construction is complete, the Project would not result in soil erosion or loss of topsoil. Adherence to local and state requirements will ensure that any impacts are *less than significant*.

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?

Less Than Significant Impact. As discussed in Impact a) above, the site is not at significant risk from earthquakes, ground shaking, liquefaction, or landslide and is otherwise considered geologically stable. Subsidence is typically related to over-extraction of groundwater from certain types of geologic formations where the water is partly responsible for supporting the ground surface. However, the City of Fresno is not recognized by the U.S. Geological Service as being in an area of subsidence.[10] Impacts are considered *less than significant*.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Surface and near-surface soils throughout the city of Fresno consist of varying combinations of clays, silts, sands, gravels, and cobbles.

The Project site is underlain by Exeter sandy loam (NCRS 2023). This soil type is considered well drained with a low ability for water storage, which means they are unlikely

10 U.S. Geological Service. Areas of Land Subsidence in California. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed December 2024.

to expand.[11] Any impacts are *less than significant.*

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?

No Impact. Under the approved City of Fresno General Plan, all development within the City limits is required to install public sewage collection and disposal systems. The Project does not include the construction or replacement of septic tanks or alternative wastewater disposal systems. Any existing on-site septic tanks and systems will be abandoned according to county standards. The Project will be required to tie into existing sewer services (See Utilities section for more details). Therefore, there is *no impact.*

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact with Mitigation. There are no unique geological features on site or in the area. As discussed previously in this document, there are no known cultural or historical resources on or near the site. (See Section V. for more details). Mitigation Measure CUL-1 is included to reduce potential impacts to undiscovered resources. Therefore, there is a *less than significant impact with mitigation.*

Mitigation Measures

See CUL-1 in Section V.

11 USDA Natural Resources Conservation Service. Custom Soil Resource Report for Eastern Fresno Area, California.

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

The following analysis is based primarily on the Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum performed on behalf of the proposed Project by LSA Consulting, report dated December 24, 2024 (see Appendix A).

DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact.

Construction Greenhouse Gas Emissions

Construction activities associated with the proposed Project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder

fossil-based fuels created GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that the total emissions associated with construction of the proposed Project would be approximately 1,562.8 metric tons (MT) of CO_2e. Construction GHG emissions were amortized over the life of the Project (assumed to be 30 years) and added to the operational emissions. When annualized over the life of the Project, amortized construction emissions would be approximately 52.1 MT CO_2e per year.

Operational Greenhouse Gas Emissions

Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the Project. Area-source emissions would be associated with activities such as landscaping and maintenance on the Project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the Project. Waste source emissions generated by the proposed Project include energy generated by land filling and other methods of disposal related to transporting and managing Project generated waste. In addition, water source emissions associated with the proposed Project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

GHG emissions for operation of the Project were calculated using CalEEMod. Based on the analysis results, summarized in Table 5, the proposed Project would result in emissions of approximately 2,018.7 MT CO2e per year. These estimated emissions are provided for informational purposes, and the significance of the proposed Project is further analyzed below.

Table 5: Greenhouse Gas Emissions[12]

Emission Type	Total CO2	CH4	N2O	CO2E
Mobile	1,684.7	0.1	0.1	1,716
Area	2.5	<0.1	<0.1	2.5
Energy	175.6	<0.1	<0.1	177
Water	6.1	0.3	0.3	14.7
Waste	16.1	1.6	0.0	56.4
Amortized Construction Emissions				52.1
Total Operational Emissions				**2,018.7**

Notes: Due to rounding, total may be marginally different from CalEEMod output.

CH4 = methane CO2E = carbon dioxide equivalent

Co2 = carbon dioxide N20 = nitrous oxide

Source: Compiled by LSA (2024).

As discussed above, the SJVAPCD has not established a numeric threshold for GHG emissions, and the City does not have a current GHG Reduction Plan. In the absence of any City or SJVAPCD specific guidelines or thresholds, this analysis evaluates the proposed Project for consistency with the BAAQMD Justification Report, which identifies project design elements as the applicable thresholds of significance. If a

12 *Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum for Residential Tract 6376*, LSA Consulting. Report dated December 24, 2024. Page 39.

project is designed and built to incorporate design elements related to natural gas, energy, VMT, and EVs, then it would contribute its portion of what is necessary to achieve California's long-term climate goals-its "fair share"-and an agency reviewing the project under CEQA can conclude that the project would not make a cumulatively considerable contribution to global climate change.

Per the significance thresholds described above, a less than significant GHG impact would occur if the Project were consistent with the identified design standards, as evaluated below.

Natural Gas Usage. A less than significant GHG impact would occur if the Project does not include natural gas appliances or natural gas plumbing. The proposed Project would not include natural gas. Therefore, the proposed Project would be consistent with this design element.

Energy Usage. Under this design criterion, the Project must not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*. Energy use consumed by the proposed Project would be associated with electricity consumption associated with the Project. Energy consumption was estimated for the Project using default energy intensities by land use type in the CalEEMod output, which is included in Appendix A.

As shown in Table 5 above, the estimated potential increase in electricity demand associated with the operation of the proposed Project is 1,897,356878,579 kWh per year. Total electricity consumption in Fresno County in 2022 was 8,384,408,687 kWh. Therefore, operation of the proposed Project would increase the annual electricity consumption in Fresno County by approximately 0.1 percent.

In addition, the proposed Project would be constructed to current Title 24 standards, which would require energy-saving building features. As such, based on this analysis, as required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*, the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy and energy efficiency measures into the building design, equipment use, and

transportation. As such, the proposed Project would be consistent with this design element.

Vehicle Miles Traveled. As discussed above, development that meets a locally adopted SB 743 VMT target would be considered to have a less than significant GHG emissions impact from transportation sources. A project specific VMT analysis was conducted for the Project utilizing the VMT Calculator tool developed by the City of Fresno and the project was found to be less than the screening thresholds established by the City to evaluate project consistency with the City's SB 743 VMT significance thresholds. Therefore, the proposed Project would be consistent with this project design element.

Electric Vehicle Requirements. The final project design element that the proposed Project should include to ensure that it is achieving its "fair share" of GHG emission reductions is compliance with off-street EV requirements in the most recently adopted version of the CALGreen Code Tier 2 measures. The proposed Project would include an EV charging station for each home, consistent with CALGreen Tier 2 standards. Therefore, the proposed Project would be consistent with this design element.

The proposed Project would be consistent with the project design elements related to natural gas, energy, VMT, and EVs. Therefore, the proposed Project would be consistent with the GHG emission thresholds identified for this Project. As such, the proposed Project would have a *less than significant impact* on the environment.

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The proposed Project is further analyzed for consistency with the City of Fresno General Plan policies, the 2022 Scoping Plan, and Fresno COG's RTP/SCS.

City of Fresno General Plan

The City's General Plan, including the Resources Conservation and Resilience Element as well as land use policies, includes objectives and policies that work to achieve and maintain reductions in GHG emissions and all strategies that reduce the

causes of climate change. A consistency analysis with the applicable policies from the Resources Conservation and Resilience Element and other relevant General Plan policies and objectives is presented below.

The proposed Project would be consistent with the following policies:

RC-5-a: In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take timely, necessary, and the most cost-effective actions to achieve and maintain reductions in greenhouse gas emissions and all strategies that reduce the causes of climate change in order to limit and prevent the related potential determinant effects upon public health and welfare of present and future residents of the Fresno community.

RC-5-d: SCS and CAP Conformity Analysis. Ensure that the City includes analysis of a project's conformity to an adopted regional Sustainable Community Strategy or Alternative Planning Strategy (APS), an adopted Climate Action Plan (CAP), and any other applicable City and regional greenhouse gas reduction strategies in affect at the time of project review.

RC-5-e: Ensure Compliance. Ensure ongoing compliance with GHG emissions reduction plans and programs by requiring that air quality measures are incorporated into projects' design, conditions of approval and mitigation measures.

RC-5- g: Evaluate Impacts with Models. Continue to use computer models such as those used by the SJVAPCD to evaluate greenhouse gas impacts of plans and projects that require such review.

RC 7: Promote water conservation through standards, incentives and capital investments.

RC 7-h: Landscape Water Conservation Standards. Refine landscape water conservation standards that will apply to new development installed landscapes, buildingon the State Model Water Efficient Landscape Ordinance and other State regulations.

- Evaluate and apply, as appropriate, augmented xeriscape, "water-wie," and

"green gardening" practices to be implemented in public and private landscaping design and maintenance.

- Facilitate implementation of the State's Water Efficient Landscape Ordinance by developing alternative compliance measures that are easy to understand and observe.

RC 11: Strive to reduce the solid waste going to landfills to zero by 2035..

The proposed Project would construct a 203-unit single-family development in a vacant lot and would provide infill development to an already established neighborhood in the City. Thus, the Project would be consistent with land use policies and strategies established in the General Plan including:

UF 12: Locate roughly one-half of future residential development in infill area – defined as being within the City on December 31, 2012 – including the Downtown core area and surrounding neighborhoods, mixed-use centers and transit-oriented development along major BRT corridors, and other non-BRT corridor infill areas, and vacant land.

UF 12-a: BRT corridors – Design land uses and integrate development site plans along BRT corridors, with transit-oriented development that supports transit ridership and convenient pedestrian access to bus stops and BRT station stops.

RC 2-a:Link Land Use to Transportation – Promote mixed-use, higher density infill development in multi-modal corridors. Support land use patterns that make more efficient use of the transportation system and plan future transportation investments in areas of higher-intensity development. Discourage investment in infrastructure that would not meet these criteria.

In addition, the proposed Project would comply with the 2022 CALGreen Code building measures and Title 24 standards for solar and EVs. Thus, the proposed Project would incorporate the appropriate energy and water conservation standards, facilitate incentives for the incorporation of bicycle and pedestrian amenities, and would encourage the use of alternative modes of transportation.

The proposed Project would also provide complete streets for all internal roadway improvements, which would increase connectivity with the surrounding land uses and neighborhoods. Therefore, the proposed Project would also be consistent with the

applicable strategies under policy RC-5-c and policies related to energy conservation, land use planning, and transportation demand outlined in the General Plan such as MT 4, MT 4-c, MT 5, MT 6, MT 8, and MT 8-b. Moreover, the proposed Project would provide recycling canisters and would implement techniques for solid waste segregation, disposal, and reduction, consistent with the CalRecycle Waste Diversion and Recycling Mandate. Therefore, the proposed Project would be consistent with waste diversion and recycling strategies under RC 11-a.

As further discussed in the following section, the proposed Project would also be consistent with the goals outlined in the Fresno COG 2022 RTP/SCS and would not interfere with the Fresno COG's ability to achieve the region's GHG reductions. Therefore, the Project would also be consistent with policy RC-5-d. Furthermore, PG&E is the private utility that would supply the proposed Project's electricity. Future residents would have the option to join an energy savings program, which would help educate homeowners on green energy. Therefore, the proposed Project would be consistent with policy RC-5-f. The analysis presented is conducted with the latest CalEEMod version, consistent with policy RC-5-g.

Through consistency with supporting and implementing the General Plan objectives and policies, the proposed Project is consistent with and would not conflict with or obstruct the implementation of the City's General Plan.

2022 Scoping Plan

The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan,[49] EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional

direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed in the Energy section of this document, the proposed Project would not result in the wasteful or inefficient use of energy. The proposed Project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The Project would comply with the CALGreen Code, which includes a variety of different measures, including the reduction of wastewater and water use. In addition, the proposed Project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed Project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed Project. The second phase of Pavley II (LEV III) Advanced Clean Cars Program will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to and from the Project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed Project would not conflict with the identified transportation and motor vehicle measures.

Fresno COG's 2022 RTP/SCS

The Fresno COG RTP/SCS reflects transportation planning for Fresno County through 2046. The vision, goals, and policies in the 2022 RTP are intended to serve as the foundation for both short and long-term planning and guide implementation activities. The core vision in the 2022 RTP is to create a region of diverse, safe, resilient, and accessible transportation options that improve the quality of life for all residents by fostering sustainability, equity, a vibrant economy, clean air, and healthy communities. The 2022 RTP contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The actions in the 2022 RTP address all transportation modes (e.g., highways, local streets and roads, mass transportation, rail, bicycle, and aviation facilities and services) and consists of short and long-term activities that address regional transportation needs. While the actions are organized by the five key policy areas, many of them support multiple goals and policies. Some actions are intended to support the SCS and reduce GHG emissions directly, while others are focused on the RTP's broader goals. The 2022 RTP does

not require that local General Plans, Specific Plans, or zoning be consistent with the 2022 RTP, but provides incentives for consistency for governments and developers.

The proposed Project would not interfere with the Fresno COG's ability to achieve the region's GHG reductions. Furthermore, the proposed Project is not regionally significant per *State CEQA Guidelines* Section 15206, and it would not conflict with the 2022 RTP targets because those targets were established and are applicable on a regional level. While the proposed Project site would require rezoning for the proposed land use, the proposed Project would result in a baseline VMT well above the per-capita threshold established by the City to support the region achieving the State's GHG reductions included under SB 743. Based on the average number of residents per household in Fresno of 2.96, the proposed Project would result in an estimated population increase of approximately 601 residents, well within the estimated population growth of 647,980 residents in 2030 as included in the 2022 RTP. Therefore, it is anticipated that implementation of the proposed Project would not interfere with Fresno COG's ability to implement the regional strategies outlined in the 2022 RTP. The proposed Project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 RTP and would be consistent with applicable State plans and programs designed to reduce GHG emissions.

Therefore, the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

The Project would not result in the emission of substantial GHG emissions. Additionally, the Project would not conflict with local or regional plans and policies for GHG emission reductions, nor with the State's GHG emissions reductions objectives embodied in the 2022 Scoping Plan.

Therefore, the proposed Project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable. The impact would be considered *less than significant.*

Mitigation Measures:

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIAL – Would the project:				
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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Construction of the Project would require the use and transport of hazardous materials, including fuels, oils, and other chemicals (e.g., paints, lead, adhesives, etc.) typically used during construction. It is likely that these hazardous materials and vehicles would be stored by the contractor(s) on-site during construction activities. Improper use and transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. However, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA), as regulated by the Fresno County Department of Public Health. In addition, as discussed previously, a Storm Water Pollution Prevention Plan (SWPPP) is required for the Project and shall include emergency procedures for incidental hazardous materials releases. The SWPPP also includes Best Management Practices which includes requirements for hazardous materials storage.

The operational phase of the proposed Project would occur after construction is completed and residents move in to occupy the structures on a day-to-day basis. Residential land uses do not typically routinely transport, use, or dispose of hazardous materials, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential hazardous materials such as cleaners, paint, petroleum products, etc. The use of hazardous materials would mostly be confined to the Project construction period. Any impacts are *less than significant.*

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?

Less Than Significant. The proposed Project includes the development of a 202-lot single-family residential development, including a 0.39-acre park and other associated improvements. As discussed in Impact a) above, the use of hazardous materials would be primarily confined to the Project construction period and those materials would be contained, stored, and handled in compliance with applicable standards and regulations. As such, there are *less than significant impacts* regarding the release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Sequoia Elementary School is located approximately 0.6 miles southeast of the Project site, located at 1820 Armstrong Avenue. Sanger West High School is located approximately 0.8 miles southwest of the Project site, located at 1850 S. Fowler Avenue. There are no schools located within one-quarter mile of the proposed Project site. Any hazardous materials contained, stored, or handled on site would be in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). The immediate area surrounding the Project site is primarily comprised of residential purposes. Any impacts would be *less than significant*.

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?

Less Than Significant Impact with Mitigation Incorporation. The proposed Project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Geotracker[13] and Envirostor[14] databases –

13 California State Water Resources Control Board, GeoTracker Database. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Fresno. Accessed December 2024.

14 California Department of Toxic Substances Control, EnviroStor Database. https://www.envirostor.dtsc.ca.gov/public/map/. Accessed December 2024.

accessed in December 2024). However, a database search performed in the Phase I ESA on behalf of the Project (RMA GeoScience) found that fuel underground storage tanks (UST) are listed at 1099 and 1183 Armstrong Avenue (See Appendix D). There were no records of leaks, spills, or the UST being removed from the location. Additional testing was performed to assess the possible presence of contaminated soil, utilizing soil gas probes in the area in question (See Appendix E). Soil gas samples collected from the former UST locations revealed concentrations of freon 113, acetone, carbon disulfide, chloroform, carbon tetrachloride, PCE, 2-butanone, 4-methyl-2-pentanone, toluene, ethylbenzene, xylenes, and 1,2,4-trimethylbenzene to be present in soil gas. However, with the exception of PCE, the concentrations detected are all below their respective ESL. The concentration of PCE detected in SGP-2-5 was reported at 22 ug/m3. The Residential ESL for PCE is 15 ug/m3.

The residential ESL for PCE is extremely conservative and should not be confused with regulatory cleanup standards. The presence of PCE in excess of the ESL does not necessarily indicate that an adverse impact to human health or the environment has occurred, it simply indicates that an adverse risk does exist, and that additional investigation may be warranted.

Soil samples collected from within the upper 18 inches of soil along the northern and eastern property boundary contained concentrations of metals that are consistent with normal background levels in the area of the Site. Soil samples collected from the central, eastern, and western portions of the Site contained low levels of organochlorine pesticides, however, the concentrations detected were all below their respective residential ESLs. No detectable concentrations of organophosphorus pesticides, SVOCs, or herbicides were detected above the laboratory reporting limits in any of the samples submitted for analysis.

Mitigation Measure HAZ-1 includes additional soil gas sampling once over-excavation, site grading, and other earthwork activities have been completed to confirm the low-level detections of PCE do not pose a vapor intrusion threat to future residential units. With this mitigation implemented, any impacts would remain *less than significant.*

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

Less than Significant Impact. The Project site is located just outside the Precision Approach Zone for the Airport Influence Area (AIA) of Fresno-Yosemite International Airport,[15] which lies approximately 3.7 miles to the northwest.

As the Project is outside the AIA of the Fresno-Yosemite International Airport, impacts resulting from creating a safety hazard for potential residents are *less than significant*.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant. The City of Fresno maintains an Emergency Preparedness Office (EPO) function for its jurisdictional responsibility area and coordinates with Fresno County OES regarding disaster preparedness, response, and recovery activities. The site plan's three ingress and egress points onto S. Armstrong Avenue have been reviewed by Public Works Traffic Planning to ensure that the Project does not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Thus, the Project would not impair the implementation of. Or physically interfere with, any adopted emergency response plan or emergency evacuation plans. *No impact* would occur.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. Implementation of the Project would not change the degree of exposure to wildfires because there are no wildlands in the Project vicinity, thus precluding the

15 Fresno County Airport Land Use Compatibility Plan, December 2018, Part Two. Exhibit D1, Fresno-Yosemite INTL. Airport Influence Area and Safety Zones. https://fresnocog.wpenginepowered.com/wp-content/uploads/2019/01/fresno-final-alucp-113018-r_part2.pdf. Accessed December 2024.

possibility of wildfires. Therefore, there is *no impact.*

Mitigation Measures:

The proposed project shall implement and incorporate the hazardous materials related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 24, 2025.

HAZ – 1 Additional soil gas sampling shall be performed near the former southeastern UST once over-excavation, site grading, and other earthwork activities have been completed to confirm the low-level detections of PCE do not pose a vapor intrusion threat to future residential dwellings. If PCE levels are above the California Department of Toxic Substances Control (DTSC) soil gas thresholds, sub-slab vapor barriers, or another construction method which will reduce PCE levels to less than DTSC soil gas threshold shall be implemented.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			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:			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Result in a 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 off-site:			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	

DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. The Project has the potential to impact water quality standards and/or waste discharge requirements during construction (temporary impacts) and operation. Impacts are discussed below.

Construction

Although the proposed Project site is relatively small in scale, grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed Project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment.

Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, “good housekeeping” procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These BMPs would be required in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project

construction. When properly designed and implemented, these “good-housekeeping” practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to review and approval by the RWQCB and are an existing regulatory requirement.

Operation

The long-term operations of the proposed Project could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious areas associated with site improvements, including new asphalt, concrete and the proposed structures on site. Urban runoff typically contains oils, grease, fuel, antifreeze, byproducts of combustion (such as lead, cadmium, nickel, and other metals) and other household pollutants. Precipitation early in the rain season displaces these pollutants into storm water resulting in high pollutant concentrations in initial wet weather runoff. This initial runoff with peak pollutant levels can be referred to as the "first flush" of storm events.

The proposed Project would install storm water drainage facilities (e.g. storm drainage mechanisms and storm water pipes) that would be in compliance with the City of Fresno and Fresno Metropolitan Flood Control District (FMFCD) Design Standards.

In accordance with the City’s storm water management regulations and National Pollutant Discharge Elimination System (NPDES) Stormwater Program (General Stormwater Permit), BMPs would be implemented to reduce the amount of pollution in stormwater discharged from the Project site. The management of water quality through the requirement to obtain a General Stormwater Permit and implement appropriate BMPs would ensure that water quality does not degrade to levels that would violate water quality standards. These are existing regulatory requirements.

In addition, the Project will generate typical wastewater (sewer) associated with residential developments and will connect to the City's sewer system. The Project will not result in a violation of any water quality standards or waste discharge requirements.

Therefore, any impacts are *less than significant.*

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The proposed Project includes a 202-lot single-family residential development. Each home will be equipped with typical restroom facilities. The proposed Project consists of 202 dwelling units, and the average household size in the City of Fresno is 2.97,[16] therefore the Project will house approximately 600 people. As such, the proposed Project would result in estimated water demand of 118,800 gallons per day (600 people x 198 gallons/day[17] = 118,800 gallons/day).

Water service would be provided to the Project by the City of Fresno. Based on the assumptions in the City's Urban Water Management Plan (UWMP),[18] the Project would not negatively impact water supplies or otherwise deplete groundwater supplies. Moreover, the proposed Project is not anticipated to interfere with groundwater recharge efforts being implemented by the City. The City's UWMP contains a detailed evaluation of existing sources of water supply, anticipated future water demand, extensive conservation measures, and the development of new water supplies (recycled water, increased recharge, surface water treatment, etc.). Measures contained in the UWMP as well as the City's General Plan are intended to reduce demands on groundwater resources by augmenting supply and introducing

[16] U.S. Census Bureau. QuickFacts. Fresno City. 2017-2017. https://www.census.gov/quickfacts/fact/table/fresnocitycalifornia,fresnocountycalifornia/PST045222. Accessed December 2024.

[17] City of Fresno 2020 Urban Water Management Plan. July 2021. Pg. ES-4. https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-2020-UWMP_Final_2021-07-21-1.pdf. Accessed December 2024.

[18] Ibid.

conservation measures and other mitigation strategies. As such, a *less than significant* impact to a groundwater management basin would occur.

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?

Less Than Significant Impact. The Project site is comprised of single-family residences and vacant disturbed land. The site is surrounded by urban development and agriculture. The existing on-site single-family residences would be demolished and would be cleared of vegetation and leveled to accommodate construction. The Project requires a Soils Report (i.e., Geotechnical Investigation) prior to granting of a grading permit. Because the Project would disturb more than one acre of land, a National Pollution Discharge Eliminate System (NPDES) permit and preparation of a Stormwater Pollution Prevention Plan (SWPPP) would also be required prior to granting a grading permit. Preparation of the soils report as well as implementation of standard best management practices (e.g., silt fences, fiber rolls, rumble grate, etc.) which would be identified in the SWPPP would be effective in reducing erosion and siltation impacts on or off-site to less than significant levels. Therefore, impacts with regard to substantial erosion or siltation on or off-site are considered *less than significant.*

ii. Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Less Than Significant Impact. Development of the Project site would result in the addition of impervious surfaces in the form of 202 residential buildings, internal driveways and roadways. This will result in an increase in storm water runoff as well as the potential for contaminated runoff to enter FMFCD drainage basins. The Project site is surrounded by existing storm drainage infrastructure. The proposed Project is designated and planned for urban development. Accordingly, infrastructure has considered this level of development in its capacity. Therefore, the Project will result in a *less than significant* impact regarding on- or off-site flooding.

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?

Less Than Significant Impact. Site runoff from precipitation currently either percolates into the ground where there are no impervious surfaces or drains into the City's stormwater system and eventually into drainage basins that serve the area. Site development will result in the addition of impervious surfaces in the form of additional foundations, buildings, streets, and other paved surfaces. This will result in an increase in storm water runoff from the site and will increase the potential for contaminated runoff to enter FMFCD drainage basins or for drainage basins to overflow and cause flooding. However, the proposed Project will be designed to FMFCD and City of Fresno standards to prevent drainage overflow and flooding and the potential for contaminated runoff. The Project site has been anticipated for residential urban use by the City of Fresno General Plan. As with all developments, existing policies and standards are required to be complied with, which are assessed during design and review of entitlements by the City and FMFCD to ensure that none of the water quality standards are violated and that waste discharge requirements are adhered to during construction and operation of the Project. The proposed Project will connect to the City of Fresno's existing storm-drain system and pay drainage fees pursuant to the Drainage Fee Ordinance. Impacts resulting from polluted runoff will be *less than significant*.

iv. Impede or redirect flood flows?

Less Than Significant Impact. The Project site is outside of any Special Flood Hazard Areas or Other Areas of Flood Hazard, FEMA Flood Map 06019C2135H, effective 2/18/2009. As discussed above in Impacts ii, the Project site is served with stormwater infrastructure that has been sized to accommodate urban development. The Project would not impede or redirect flood flows as it has been designed with on-storm drainage infrastructure that will connect with the City's system. The impact will be *less than significant*.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. The Project site is outside of any Special Flood Hazard Areas or Other Areas of Flood Hazard, FEMA Flood Map 06019C2135H, effective 2/18/2009. There are no bodies of water near the site that would create a potential risk of hazards from seiche, tsunami or mudflow. The Project will not conflict with any water quality control plans or sustainable groundwater management plan. As mentioned in Impact c) above, all new development within the City of Fresno Planning Area must conform to standards and plans detailed by the Fresno Metropolitan Flood Control District. By conforming to all standards and policies as outlined, any impacts will remain *less than significant.*

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The City of Fresno is part of the North Kings Groundwater Sustainability Agency (GSA) which is one of the seven GSA's within the Kings Groundwater Subbasin. The North Kings GSA submitted the Groundwater Sustainability Plan to the CA Department of Water Resources in January 2020. The City of Fresno relies on natural groundwater recharge, subsurface inflow, and intentional recharge to replenish groundwater. As the City of Fresno will provide water to the proposed Project (upon approval), and the City will be subject to the requirements of the GSA, the proposed Project does not conflict with any adopted water quality or sustainable groundwater management plan.

Potential stormwater flows would discharge to on-site stormwater infrastructure and be conveyed to FMFCD retention basins. No stormwater flows would directly discharge to the San Joaquin River thereby avoiding water quality impacts. Any impacts would be *less than significant.*

Mitigation Measures

None required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
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

DISCUSSION

a) Physically divide an established community?

Less Than Significant Impact. The proposed Project site is currently designated by the City of Fresno General Plan for Residential, Medium Density planned land use. The site is currently occupied by three single-family residences and vacant disturbed land. The site does not include an established community. The proposed Project land use designation allows for densities between 5 to 12 units per acre, intended to provide for single-family detached housing. The proposed Project would include 202 units on approximately 34.7 acres of land, for a density of approximately 6 dwelling units per acre. Pursuant to Fresno Municipal Code Section 15-303, fractions of one-half (0.5) or greater shall be rounded up to the nearest whole number and fractions of

less than one-half (0.5) shall be rounded down to the nearest whole number. Specific to residential density rounding, fractions only apply to minimum density, but not maximum density. In this case, 5.82 dwelling units per acre would be rounded up to six dwelling units per acre, which is consistent with the minimum density requirement per the Fresno General Plan. Within the Project vicinity, there are single-family residences, active agricultural land, and vacant land surrounding the proposed Project. The proposed residential use is allowed within this land use designation, after the approval of an annexation, Rezone, TTM and Planned Development Permit. The Project is not dividing an established community. The Project is not being built in a pre-existing community area and would not create any physical barrier between an established community. Any impacts are *less than significant.*

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?

No Impact. The proposed Project is located in an area that is planned for residential and urban development by the City. The site is currently designated as Medium Density Residential by the City of Fresno General Plan and is currently zoned as AL - 20 (Limited Agriculture) by Fresno County. As part of the proposed Project, the site will be rezoned to RS-5 / UGM (Residential Single Family, Medium Density/Urban Growth Management.

The proposed development is planned for single-family residential uses. The Project proposes to rezone to change the property from AL-20 to RS-5, which increases the density allowed on the site. However, the site is adjacent to existing residential subdivisions to the north and east and will be consistent with nearby residential densities.

The proposed subdivision is a standard infill development being proposed in compliance with the City's planned land use designation within the City limits. Infill development contributes to environmental preservation by reducing agricultural land conversion, reduce costs to build and maintain infrastructure, and improving air quality by overall reducing travel distances and subsequent greenhouse gas emissions.

Further, through the entitlement process, the Project has been reviewed for compliance with applicable regulations inclusive of those adopted for the purpose of avoiding or mitigating environmental effects. Overall, the entitlement process would ensure that the proposed Project complies with the General Plan, FMC, and any other applicable policies and regulations. *Less than significant* impacts will occur.

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				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

DISCUSSION

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?**

No Impact. Mineral resources are concentrated along the San Joaquin River Corridor. The proposed Project is not located along the San Joaquin River Corridor, there are no known mineral resources in the proposed Project area, and none are identified in the City's General Plan near the Project site. Therefore, there is *no impact.*

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?

No Impact. As discussed in Impact a) above, there are no known mineral resources identified in the City's General Plan in the proposed Project area. There is *no impact.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		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	

An Acoustical Analysis was performed on behalf of the proposed Project by WJVA

Acoustics, Inc. (report date October 25, 2023, update July 12, 2024) and is the basis of analysis for the discussion below. The Acoustical Analysis is provided in Appendix F.

DISCUSSION

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 in other applicable local, state, or federal standards?

Less Than Significant Impact.

Short-term (Construction) Noise Impacts

Proposed Project construction related activities will involve temporary noise sources. Typical construction related equipment includes graders, trenchers, small tractors, and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Activities involved in construction will generate maximum noise levels, as indicated in Table 6, ranging from 80 to 95 dBA at a distance of 50 feet.

Table 6: Typical Construction Equipment Noise Levels19

Equipment Description	Maximum Noise Level (Lmax) at 50 Feet
Backhoes	80
Compactor (ground)	80
Cranes	85
Dozers	85
Dump Trucks	84

[19] Federal Highway Administration. Roadway Construction Noise Model (January 2006).

Excavators	85
Flat Bed Trucks	84
Front-end Loaders	80
Graders	85
Impact Pile Drivers	95
Jackhammers	85
Pick-up Truck	55
Pneumatic Tools	85
Pumps	77
Rock Drills	85
Rollers	85
Scrapers	85
Tractors	84

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time in urban environments. Most residents of urban areas recognize this reality and expect to hear construction activities on occasion.

Construction activities would not occur between the hours of 10:00 PM and 7:00 AM, Monday through Saturday, and not at all on Sundays, in accordance with Fresno Municipal Code Section 10-109, which limits work hours “to between the hours of 7 AM and 10 PM on any day except Sunday.”

Long-term (Operational) Noise Impacts

The proposed Project includes future residential uses. The immediate vicinity consists of existing and planned residential uses, which produce noise levels that are likely similar to long-term noise levels produced by the proposed Project. Additionally, all surrounding properties are adjacent to collector and arterial streets, which increase the ambient noise of the Project site. The proposed Project is not projected to be a long-term noise source due to the Project being a use consistent with neighboring land uses.

Project Site Noise Exposure

The Project site is located on the west side of S. Armstrong Avenue, north of E. Church Avenue, in Fresno, California. The Project site is exposed to traffic noise associated with vehicles on S. Armstrong Avenue and train noise associated with train operations on the San Joaquin Valley Railroad (SJVR). The distance from center of the backyards of the closest proposed lots to the centerline of S. Armstrong Avenue is approximately 80 feet. The distance from the center of the backyards of the closest proposed lot to the SJVR line is approximately 70 feet (lot 76). Additionally, the backyards of the remaining lots along the south side of E. Erin Avenue would be located approximately 115 feet from the SJRV line.

*Traffic Noise Exposure***:** Noise exposure from traffic on S. Armstrong Avenue was calculated for existing and future (2046). From Table 7 it may be determined that the traffic noise levels predicted by the FHWA Model were 1.5 dB lower than those measured for the conditions observed at the time of the noise measurements for S. Armstrong Avenue. This is considered to be reasonable agreement with the model and therefore no adjustments to the model are necessary.

Table 7:
Comparison of Measured and Predicted (FHWA Model) Noise Levels for Tract 6376, Fresno

	S. Armstrong Avenue
Measurement Start Time	8:50 a.m.
Observed # Autos/Hr.	216
Observed # Medium Trucks/Hr.	0
Observed # Heavy Trucks/Hr.	0
Observed Speed (MPH)	40
Distance, ft. (from center of roadway)	40
L_{eq}, dBA (Measured)	61.1
L_{eq}, dBA (Predicted)	59.6
Difference between Predicted and Measured L_{eq}, dBA	**1.5**

Note: FHWA "soft" site assumed for calculations.
Source: WJV Acoustics, Inc.

Annual Average Daily Traffic (AADT) data for S. Armstrong Avenue in the Project vicinity was obtained from Fresno COG. Truck percentages and the day/night distribution of traffic were estimated by WJVA, based upon previous studies conducted in the Project vicinity since project-specific data were not available from government sources. A speed limit of 40 mph (as posted) was assumed for the roadway. Table 8 summarizes annual average traffic data used to model noise exposure within the Project site.

Table 8:
Traffic Noise Modeling Assumptions for Tract 6376, Fresno

	S. Armstrong Ave.	
	Existing	2046
Annual Avenue Daily Traffic (AADT)	1,929	2,304
Day/Night Split (%)	90/10	
Assumed Vehicle Speed (mph)	40	
% Medium Trucks (% AADT)	2	
% Heavy Trucks (% AADT)	1	

Sources: Fresno COG
WJV Acoustics, Inc.

Using data from Table 8, the FHWA Model, annual average traffic noise exposure was calculated for the closest proposed backyards from S. Armstrong Avenue. The calculated noise exposures for existing and future (2046) traffic conditions for the closest proposed setbacks to S. Armstrong Avenue were approximately 55 dB Ldn for existing traffic conditions and approximately 56 dB Ldn future (2046) traffic conditions.

Such noise exposure levels are below the City's 65 dB Ldn exterior noise level standard and further mitigation of traffic noise is therefore not required.

Railroad Noise Exposure: The San Joaquin Valley Railroad (SJVR) line is located approximately 70 feet from the backyard of lot 76. Additionally, the backyards of the remaining lots along the south side of E. Erin Avenue would be located approximately 115 feet from the SJRV line. The railroad consists of jointed rails with the top of the rails being approximately one foot above the grade of the project site.

Train engineers are required to sound warning horns when within approximately ¼ mile of a grade crossing. As the entire project site railroad frontage is located within ¼ mile of the S. Armstrong Avenue grade crossing, all lots adjacent to the SJRV line would be impacted by train warning horns.

According to data obtained from the U.S. Department of Transportation Federal Railroad Administration (FRA), trains along this portion of the railroad line do not exceed 25 mph in speed. According to the local trainmaster they typically pass by at speeds in the range of 10-20 mph. Additionally, according to both the FRA and the SJVR trainmaster, typical operations consist of two train movements per day along the line, typically one occurring during daytime hours and one occurring during nighttime hours. There is a grade crossing at South Armstrong Avenue where locomotive engineers are required to blow their warning horn.

WJVA observed one train movement on January 22, 2018 at a different project site located along the same section of SJVR railroad line, east of the Project site. A westbound freight train passby occurred at approximately 2:45 p.m. Noise levels were measured from two locations along the track using automated sound level meters. Both meters were located approximately 50 feet from the tracks. One meter was located approximately 500 feet west of the grade crossing, and noise levels of the train event were measured to 102.8 dB (SEL). The second meter was located approximately 1,300 feet from the grade crossing at South Temperance, and noise levels of the train event were measured to be 98.6 dB (SEL). The difference in noise levels is a result of varying distances from the grade crossing, where the engineer is required to sound their warning horn. WJVA also reviewed other noise measurements obtained along the SJVR to assess noise levels for parcels closer to grade crossings along the SJVR railroad line, and determined the average SEL at the closest lots

adjacent to the SJVR railroad line to be 105.8 dB (SEL).

Railroad noise exposure may be quantified in terms of the Ldn using the following formula:

Ldn =SEL+ 10 log Neq – 49.4

where,

SEL is the average SEL for a train pass-by, Neq is the equivalent number of pass-bys in a typical 24-hour period determined by adding 10 times the number of nighttime movements (10 p.m.-7 a.m.) to the actual number of daytime movements (7 a.m.-10 p.m.). 49.4 is a time constant equal to 10 times the log of the number of seconds in a day.

Using the above-described formula, railroad operations data (assuming one train event during daytime hours and one train event during nighttime hours) and noise measurement results, the railroad noise exposure within the backyards of the proposed lots closest to the SJVR line. Using the above-described train noise measurements and calculations, SJVR train noise was calculated to be as follows:

1. Lot 76: 68 dB Ldn
2. Lots along south side of E. Erin Avenue: 65 dB Ldn

These noise levels indicate that exterior noise levels along the lots closest to the SJVR railroad line exceed the City's exterior maximum noise level standard, and mitigation measures must be incorporated into Project design.

Based on the Acoustical Analysis' findings, Mitigation Measure NOI-1, which includes constructing a sound wall, and NOI-2, which requires air conditioning units in all residences to allow for windows to stay shut for indoor insulation shall be implemented which will reduce potential impacts to *less than significant with mitigation incorporation.*

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The dominant sources of man-made vibration are sonic booms, blasting, pile driving, pavement breaking, demolition, diesel

locomotives, and rail-car coupling. None of these activities are anticipated to occur with construction or operation of the proposed Project. Vibration from construction activities could be detected at the closest sensitive land uses, especially during movements by heavy equipment or loaded trucks and during some paving activities (if they were to occur). Typical vibration levels at distances of 100 feet and 300 feet are summarized by Table 9. These levels would not be expected to exceed any significant threshold levels for annoyance or damage, as provided above in Table 9.

Table 9: Typical Vibration Levels During Construction

Equipment	PPV (in/sec)	
	@100'	**@300'**
Bulldozer (Large)	0.011	0.006
Bulldozer (Small)	0.0004	0.00019
Loaded Truck	0.01	0.005
Jackhammer	0.005	0.002
Vibratory Roller	0.03	0.013
Caisson Drilling	0.01	0.006
Source: Caltrans		

After full Project build out, it is not expected that ongoing operational activities will result in any vibration impacts at nearby sensitive uses. There are no aspects of construction or daily operations that would create groundborne vibration. As such, any impacts would be *less than significant.*

c) 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 expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The closest airport or airstrip is the Fresno Yosemite International Airport, located approximately 3.7 miles northwest of the Project site. The site is outside of the Airport Land Use Compatibility Plan (ALUCP). The City of Fresno has created specific designations to prioritize development in the urban portions of the city. These "Urban Core" areas are used by the City of Fresno to identify areas that should be prioritized for development from the City of Fresno's perspective. The Handbook, in Figure 4G, includes provisions for developing safety criteria for urban areas which includes no limit for intensity or density. Using the City of Fresno's "Urban Core" areas, there is no limit for non-residential intensity in areas designated as Urban.

The proposed Project is outside the noise level contours identified in the ALUCP. In conclusion, the proposed Project would not expose people residing or working in the Project site to excessive noise levels associated with such airport facilities, and there would be *less than significant impact.*

As such, impacts will remain *less than significant.*

Mitigation Measures:

The proposed project shall implement and incorporate the noise related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 24, 2025.

NOI – 1 A sound wall shall be constructed along the entire project site frontage with the SJVR railroad line. In the vicinity of Lot 76, the wall shall be constructed to a minimum height of eight feet six inches (8'6") above project site grade, and the sound wall shall be constructed to a minimum height of seven (7) feet above project site grade along the remainder of the SJVR project site frontage. In order to be effective, the sound wall shall be turned inward (southward) for a minimum distance of twenty (20) feet along the east side of Lot 76. The locations and heights of the required sound walls are provided on Figure 1 of Appendix F. Suitable construction materials include concrete blocks, masonry, or stucco on both sides of a wood or steel stud wall.

NOI – 2 Mechanical ventilation or air conditioning shall be provided for all homes so that windows and doors can remain closed for sound insulation purposes.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

DISCUSSION

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)?

Less Than Significant Impact. As of July of 2023, the population in Fresno is 545,716 people with an average household size of 2.97.[20] The Project will construct housing with 202 dwelling units, which will house approximately 600 persons. The

[20] U.S. Census Bureau. QuickFacts. Fresno City. 2017-2017. https://www.census.gov/quickfacts/fact/table/fresnocitycalifornia,fresnocountycalifornia/PST045222. Accessed December 2024.

City's General Plan encourages residential developments to meet the future population growth needs. This project accommodates this anticipated increase in City's population by providing 202 new residences for existing and future residents.

The Project site has a proposed designation of Medium Density Residential as per the City's General Plan and a proposed rezoning of RS-5 (Medium Density Residential). Upon approval, the Project will be consistent with both the General Plan and zoning ordinance. Therefore, the Project would not induce substantial unplanned population growth in an area, either directly or indirectly. Impacts would be *less than significant*.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant Impact. The Project site is occupied by three single-family residences and is surrounded primarily by residential development. As proposed, the Project will displace existing housing; however, the Project will provide 202 new homes to a community in need of additional housing in the area. There is *a less than significant impact.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would the project:				
a) 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:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

DISCUSSION

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

a) Fire protection?

Less Than Significant. The Project includes construction of a 202-lot single-family residential unit development, including a 0.39-acre park and other associated improvements.

The City of Fresno Fire Department (Fire Department) offers a full range of services including fire prevention, suppression, emergency medical care, hazardous materials, urban search and rescue response, as well as emergency preparedness planning and public education coordination within the Fresno City limit, in addition to having mutual aid agreements with the Fresno County Fire Protection District, and the City of Clovis Fire Departments.

The City of Fresno Fire Department operates its facilities under the guidance set by the National Fire Protection Association in NFPA 1710, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operation to the Public by Career Fire Departments. NFPA 1710 sets standards for turnout time, travel time, and total response time for fire and emergency medical incidents, as well as other standards for operation and fire service. The Fire Department has established the objectives set forth in NFPA 1710 as department objectives to ensure the public health, safety, and welfare.

The proposed Project would be served by the current Fire Station 15, which is located at 5630 E. Park Circle Drive, approximately 1.5 miles northwest of the Project site. After reviewing the Project, the Fire Department has determined that the Project can be adequately serviced by the current local Fire Facilities and Personnel,

consistent with National Fire Protection Association 1710 Objectives. Additionally, the Project will also be subject to Fire Facilities Fees.

Project implementation will result in *less than significant impacts.*

b) Police protection?

Less Than Significant. The Project includes construction of a 202-lot single-family residential unit development, including a 0.39-acre park and other associated improvements. The surrounding area is currently protected by the existing Southeast Police District, approximately 1.8 miles to the northwest at 224 S. Argyle Avenue. The Fresno Police Department provides a full range of police services including uniformed patrol response to calls for service, crime prevention, tactical crime and enforcement (including gang and violent crime suppression), and traffic enforcement/accident prevention. The proposed Project would also be protected by the Southeast Police District and would be subject to pay development impact fees to offset any potential impacts to police protection. Additionally, the Fresno Police Department reviewed the Project and had no comments. Any impacts are considered *less than significant.*

c) Schools?

Less Than Significant. According to the Sanger Unified School District, the schools that will serve the proposed project are Sequioa Elementary School, approximately 0.7 miles southeast of the Project, Washington Academic Middle School approximately 6.4 miles southeast of the Project, and Sanger West High School also approximately 0.7 miles southeast of the Project.

The proposed residential uses result in the generation of students, which would impact the District's student classroom capacity. Any future development occurring as a result of the proposed project may have an effect on the Sanger Unified School District's student housing capacity. The District, through local funding, is in a position to mitigate its shortage of classrooms to accommodate planned population growth for the foreseeable future. However, the District recognizes that the legislature, as a matter of law, has deemed under Government Code Section 65996 that all school facilities impacts are mitigated as a consequence of SB 50 Level 1, 2, and 3 developer fee legislative provisions. The developer will pay appropriate impact fees

at time of building permits. The proposed Project will not result in the need for construction of new school facilities. Impacts would be *less than significant*.

d) Parks?

Less Than Significant. The Project includes construction of a 202-lot single-family residential unit development, including a 0.39-acre park and other associated improvements.

The nearest park is South Sunnyside Granville Greenpark, approximately 0.7 miles southwest of the Project. The City of Fresno maintains a park goal to provide five acres of city park space per 1,000 residents. A 0.39-acre park is included in the proposed Project's design; however, Project review and approval process will ensure that all additional park related fees are paid by the applicant. These requirements will ensure that the proposed Project does not significantly affect park and recreation facilities. Impacts would be *less than significant.*

e) Other public facilities?

Less Than Significant. The Department of Public Utilities (DPU) has determined that adequate sanitary sewer and water services are available to serve the project site subject to compliance with the conditions submitted by the DPU for this project and implementation of the Fresno General Plan policies and the mitigation measures of the related Master Environmental Impact Report; and, the construction and installation of public facilities and infrastructure in accordance with Department of Public Works standards, specifications and policies.

For sanitary sewer service, these infrastructure improvements and facilities include typical requirements for the construction and extension of sanitary sewer mains and branches. The proposed Project will also be required to provide payment of sewer connection charges.

No significant adverse impacts are expected to occur as a result of the construction of any such facilities or improvements associated with the proposed Project. Impacts would be *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION–- Would the project:				
a) 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	

DISCUSSION

a) 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?

Less Than Significant. The Project includes construction of a 202-lot single-family residential unit development, including a 0.39-acre park and other associated improvements. The proposed Project may result in the physical deterioration of existing parks or recreational facilities.

The South Sunnyside Granville Greenpark lies approximately 0.7 miles to the southwest of the Project and a pocket park located at 5626 Burns Avenue is 1.4 miles to the southwest of the Project. There are also two schools with sports fields and other outdoor areas located within a mile of the Project; one to the southwest and one to the southeast.

Park and recreation fees, per the Quimby Act, are collected for new residential developments. The Project review and approval process will ensure that all park related fees are paid by the applicant. These requirements will ensure that the proposed Project does not significantly affect park and recreation facilities. Impacts would be *less than significant.*

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less Than Significant. As discussed above, the Project includes construction of a 202-lot single-family residential unit development, including a 0.39-acre park and other associated improvements. Through the standard City building process for the future park and payment of the required development fees, the Project will not significantly affect park and recreation facilities. The Project would not result in any new recreational, environmental impacts and are considered to be *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		X		
b) Conflict or be inconsistent with CEQA Guidelines § 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	

A Traffic Impact Analysis Report (TIA) was performed on behalf of the proposed Project by JLB Traffic Engineering, Inc., report date December 9, 2024 (See Appendix G). Additionally, the City of Fresno Urban Form VMT Calculator was utilized to address potential VMT impacts and is included as Appendix H. The following discussion is based

primarily on those two resources.

DISCUSSION

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant with Mitigation. The proposed Project is located on the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad in the City of Fresno. The Project proposes to develop approximately 202 single-family residential units. The potential traffic impacts of the proposed Project were evaluated in accordance with the standards set forth by the Level of Service (LOS) policies of the City of Fresno and Fresno County.

The following intersections and study segments are included in the traffic analysis:

Intersections:

- Fowler Avenue / Hamilton Avenue
- Armstrong Avenue / Hamilton Avenue
- Temperance Avenue / Hamilton Avenue
- Armstrong Avenue / California Avenue
- Temperance Avenue / California Avenue (future intersection)
- Fowler Avenue / Church Avenue
- Armstrong Avenue / Church Avenue

Study Segments:
Armstrong Avenue between Geary Avenue and Church Avenue

Roadway Descriptions

Fowler Avenue is an existing north-south three-lane divided arterial in the vicinity of the proposed Project site. In this area, Fowler Avenue is a four-lane divided arterial between the State Route 180 Interchange and Kings Canyon Road, a two to three-lane arterial divided by a two-way left-turn lane between Kings Canyon Road and the San Joaquin Valley Railroad, a two to three-lane divided arterial between the San Joaquin Valley Railroad and Jensen Avenue and a two-lane undivided arterial

between Jensen Avenue and North Avenue. The Fresno General Plan Circulation Element designates Fowler Avenue as a four-lane divided arterial between State Route 180 and Kings Canyon Road, a two-lane arterial between Kings Canyon Road and Hamilton Avenue and Hamilton Avenue, a four-lane arterial between Hamilton Avenue and Jensen Avenue and a two-lane collector between Jensen Avenue and North Avenue.

Armstrong Avenue is an existing north-south three-lane undivided collector adjacent to the proposed Project. In this area, Armstrong Avenue is a three- to four-lane undivided collector between Kings Canyon Road and Hamilton Avenue, a three to four-lane collector divided by a two-way left-turn lane between Hamilton Avenue and Truman Avenue, a two-lane undivided collector between Truman Avenue and North Avenue. The Fresno General Plan Circulation Element designates Armstrong Avenue as a four-lane collector between Kings Canyon Road and Jensen Avenue and a two-lane collector between Jensen Avenue and North Avenue.

Temperance Avenue is an existing north-south two-lane undivided super arterial in the vicinity of the proposed Project. In this area, Temperance Avenue is a two-lane undivided super arterial between Kings Canyon Road and Butler Avenue, a four-lane divided super arterial between Butler Avenue and Hamilton Avenue and a two-lane undivided super arterial between Hamilton Avenue and North Avenue. The Fresno General Plan Circulation Element designates Temperance Avenue as a six-lane super arterial between Kings Canyon Road and Jensen Avenue and a four-lane super arterial between Jensen Avenue and North Avenue.

Hamilton Avenue is an existing east-west two-lane collector divided by a two-way left-turn lane in the vicinity of the proposed Project. In this area, Hamilton Avenue exists as a two-lane collector divided by a two-way left-turn lane between Fowler Avenue and Temperance Avenue. The Fresno General Plan Circulation Element designates Hamilton Avenue as a two-lane collector between Fowler Avenue and Temperance Avenue.

California Avenue is an existing east-west four-lane collector west of Fowler Avenue and east of Armstrong Avenue. Through the Project, California Avenue is proposed to

be designed as a modified collector which will include a single vehicle lane in each direction divided by a 16-foot wide raised median with landscaping and a curbside Class II or Class IV bikeways. In this area, California Avenue exists between Armstrong Avenue and approximately 100 feet west of Temperance Avenue. The Fresno General Plan Circulation Element designates California Avenue as a four-lane collector between Fowler Avenue and Temperance Avenue. However, the Fresno COG traffic forecasting and the LOS operations within this TIA support the proposed cross section with a maximum of one vehicular lane per direction. Based on information provided by City of Fresno staff, the easterly extension of California Avenue to Temperance Avenue will be constructed and operational by early 2026.

Church Avenue is an existing east-west two-lane undivided collector in the vicinity of the proposed Project site. In this area, Church Avenue is a four-lane collector divided by a two-way left-turn lane between Peach Avenue and Sunnyside Avenue, a three-lane divided collector between Sunnyside Avenue and Fowler Avenue, a two-lane undivided collector between Fowler Avenue and Temperance Avenue and a two-lane undivided roadway between Temperance Avenue and Leonard Avenue. The Fresno General Plan Circulation Element designates Church Avenue as a four-lane collector between Willow Avenue and Temperance Avenue and a two-lane local roadway between Temperance Avenue and Highland Avenue.

Study Scenarios

Existing Traffic Conditions: This scenario evaluates the Existing Traffic Conditions based on existing traffic volumes and roadway conditions from traffic counts and field surveys conducted in June, August and September of 2024. The traffic counts for the existing study intersections and segments are contained in Appendix G.

Existing plus Project Traffic Conditions: This scenario evaluates total traffic volumes and roadway conditions based on the Existing plus Project Traffic Conditions. The Existing plus Project traffic volumes were obtained by adding the Project Only Trips to the Existing Traffic Conditions. The Project Only Trips to the study facilities were developed based on existing travel patterns, the Project Select Zone, the surrounding roadway network, engineering judgment, data provided by the developer, knowledge of the study area, existing residential and commercial densities, and the Fresno

General Plan Circulation Element in the vicinity of the Project site. The Fresno COG Project Select Zone results are contained in Appendix G.

Near Term plus Project Traffic Conditions: This scenario evaluates total traffic volumes and roadway conditions based on the Near Term plus Project Traffic Conditions. The Near Term plus Project traffic volumes were obtained by adding the Near Term related trips to the Existing plus Project Traffic Conditions scenario.

Cumulative Year 2046 plus Project Traffic Conditions: This scenario evaluates total traffic volumes and roadways conditions based on the Cumulative Year 2046 plus Project Traffic Conditions. The Cumulative Year 2046 plus Project traffic volumes were obtained by using a combination of the Fresno COG activity-based model (ABM) (Base Year 2019 and Cumulative Year 2046) and existing traffic counts. Under this scenario, the increment method, as recommended by the Model Steering Committee was utilized to determine the Cumulative Year 2046 traffic volumes. The Fresno COG ABM results provided by Kittelson & Associates are contained in Appendix G.

Results Under Each Study Scenario

Existing Traffic Conditions

A search was conducted of the Statewide Integrated Traffic Records System (SWITRS) to obtain collision reports for the most recent five-year period. Based on a review of the collision reports, a total of twenty-three (23) collisions were reported within the influence zone of the study intersections. Based on the number of correctable collisions, changes to the existing traffic controls at any of these intersections as a result of collision activity is not recommended. At present, all study intersections and the study segments operate at an acceptable LOS.

Existing plus Project Traffic Conditions

The locations of the existing and proposed roadways and access points were analyzed. This review revealed that all access points are located at points that minimize traffic operational impacts to existing and future roadway networks. At buildout, the proposed Project is estimated to generate a maximum of 1,905 daily trips,

141 AM peak hour trips and 190 PM peak hour trips. Under this scenario, all study intersections and segments are projected to continue operating at an acceptable LOS.

Near Term plus Project Traffic Conditions

The total trip generation for the Near-Term Projects is 96,426 weekday daily trips, 6,883 weekday AM peak hour trips and 8,598 weekday PM peak hour trips. Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during AM peak period. Accordingly, the following improvements (Mitigation Measure TRA-1) will be included with the Project:

Traffic signal pole(s), less signal mast arms, including all related pull boxes and conduit associated with said pole(s), as necessary for a future four-leg intersection at California Avenue and Armstrong Avenue.

These improvements will reduce LOS impacts to less than significant.

Cumulative Year 2046 plus Project Traffic Conditions

Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue, Temperance Avenue at California Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during one or both peak periods. As such, Mitigation Measure TRA-1 shall be implemented which will include improvements at the intersections of Temperance Avenue at Hamilton Avenue, Temperance Avenue and California Avenue and Armstrong Avenue at Church Avenue. These improvements will reduce LOS impacts to less than significant.

Active Transportation Plan

The Fresno Active Transportation Plan (ATP) is an extensive guide detailing the conception for active transportation in the City of Fresno that was adopted in December 2016. This ATP aims to improve safety, increase non-motorized trips, improve access and fill in gaps in networks for Fresno's pedestrians and bicyclists. In order to achieve these goals for active transportation, this ATP proposes a comprehensive network of citywide bikeways, trails and sidewalks. The recommended network would add 166 miles of Class I Bike Paths, 691 miles of Class II Bike Lanes, 69 miles of Class III Bike Routes, 21 miles of Class IV Separated Bikeways and 661 miles of sidewalks. This ATP also recommends bicycle detection at traffic signals,

destination signage, bicycle parking, showers and changing facilities and bikeway maintenance. This network will be constructed in conjunction with adjacent land developments, roadway maintenance and active transportation infrastructure projects using funds from different local, state and federal sources.

Bikeways

The Fresno ATP classifies bicycle facilities into the following types:

- Class I Bikeway (Bike Path) – Provides a completely separated right-of-way for exclusive use of bicycles and pedestrians with crossflow minimized.
- Class II Bikeway (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bikeway (Bike Route) – Provides a shared use with pedestrians or motor vehicle traffic, typically on lower volume roadways.
- Class IV Bikeways (Separated Bikeways) – Provides a protected lane for one-way bike travel (one-way cycle track) and protected lanes for two-way bike travel (two-way cycle track) on a street or highway.

Class II (Bike Lane) Bikeways exist in the vicinity of the Project site along portions of Fowler Avenue, Armstrong Avenue, Hamilton Avenue, California Avenue and Church Avenue. The Fresno ATP recommends that Class II Bikeways be implemented adjacent to and in the vicinity of the Project site. Adjacent to the Project site, a Class II Bikeway is planned along the west side of Armstrong Avenue. In the vicinity of the Project site, Class II Bikeways are planned on remaining stretches Fowler Avenue, Armstrong Avenue, Temperance Avenue, Hamilton Avenue, California Avenue and Church Avenue. In the vicinity of the Project site, a Class I Bikeway is planned on Temperance Avenue between SR 180 and North Avenue. Mitigation Measure TRA-2 is included to require that the Project construct a Class II Bikeway on its frontages to Armstrong Avenue and California Avenue, as required by the Fresno ATP.

Walkways

The Fresno ATP classifies pedestrian facilities into sidewalks and Class I Bike Paths. Pedestrian sidewalks exist in the vicinity of the Project site along portions of Fowler Avenue, Armstrong Avenue, Temperance Avenue, Hamilton Avenue, California

Avenue and Church Avenue. The Fresno ATP recommends that pedestrian sidewalks be implemented in the vicinity of the Project site along remaining stretches of Fowler Avenue, Armstrong Avenue, Temperance Avenue, Hamilton Avenue, California Avenue and Church Avenue. Therefore, Mitigation Measure TRA-2 is included to require the Project construct ADA compliant pedestrian sidewalks along internal streets connecting all uses to external sidewalks and along its frontages to Armstrong Avenue and California Avenue, in compliance with the Fresno ATP.

Transit

Fresno Area Express (FAX), is the transit operator in the City of Fresno. At present, there are two (2) FAX transit routes that operate in the vicinity of the proposed Project site, Routes 1 and 22. FAX Route 1, which runs on a portion of Kings Canyon Road, operates at 15-minute intervals on weekdays and weekends. The nearest stop on this route to the Project site is located along the north side of Kings Canyon Road approximately 750 feet east of Clovis Avenue. This route provides a direct connection to the River Park Shopping Center, Manchester Center, Fresno City College, Downtown Fresno, the Big Fresno Fair grounds and Sunnyside High School. FAX Route 22, which runs on Clovis Avenue, operates at 30minute intervals on weekdays and weekends. The nearest stop on this route to the Project site is located along the west side of Burgan Avenue approximately 100 feet north of Lyell Avenue and is only used during peak hours. This route provides a direct connection Roosevelt High, the Amtrak Station, Central Library, Downtown Transit Center, Downtown Fresno, Community Center, Talking Book Library, West Lan Shopping Center and Fig Garden Library. It is worth noting that retention of the existing and expansion of future transit routes is dependent on transit ridership demand and available funding.

In conclusion, upon implementation of Mitigation Measures TRA-1 and TRA-2, the proposed Project will not require any additional changes to existing transportation systems and will have less than significant impact on any plans, ordinances, or policies related to the effectiveness or performance of transit, pedestrian and bicycle facilities. The Project will comply with all applicable City development standards. Any impacts would be *less than significant with mitigation incorporation*.

b) Would the project conflict or be inconsistent with CEQA Guidelines section

15064.3, subdivision (b)?

Less Than Significant Impact. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds pursuant to Senate Bill 743 to be effective of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

The City of Fresno VMT Thresholds adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis.

The City of Fresno VMT Thresholds Section 3.0 regarding Project Screening discusses a variety of projects that may be screened out of a VMT analysis including specific development and transportation projects. For development projects, conditions may exist that would presume that a development project has a less than significant impact. These may be size, location, proximity to transit, or trip-making potential. For transportation projects, the primary attribute to consider with transportation projects is the potential to increase vehicle travel, sometimes referred to as “induced travel.”

Trip generation rates for the proposed Project were obtained from the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE) (see Appendix G), the proposed Project will generate 1,905 Average Daily Trips (ADT), 141 AM peak hour trips and 190 PM peak hour trips.

One of the eligible screening criteria is whether a residential project is located within an area with low VMT, as designated in the screening map for residential uses (Figure 6) in the City of Fresno’s CEQA Guidelines for VMT Thresholds Technical Advisory. These low VMT areas were calculated using Fresno County as the region. The Fresno County average VMT per capita is 16.90. The City of Fresno’s Urban Form VMT Calculator was utilized on behalf of the Project and indicated that the Project had an adjusted VMT per capita of 14.00 (See Appendix H). This results in a *less than significant impact.*

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. Access to and from the proposed Project site will be from four (4) access points along future California Avenue west of Armstrong Avenue, and 2 (two) along the west side of Armstrong Avenue at buildout. The Project proposes to construct California Avenue west of Armstrong Avenue within the Project

site for approximately 1,300 feet. The four (4) access points along California Avenue include two (2) access points located on either side of future California Avenue approximately 1,150 feet west of Armstrong Avenue and two (2) access point located on either side of future California Avenue approximately 550 feet west of Armstrong Avenue. All four (4) access points are proposed to have full access to California Avenue. The two (2) access points proposed along the west side of Armstrong Avenue are located approximately 330 feet north of California Avenue and approximately 600 feet south of California Avenue. Both of these access points are proposed to have full access to Armstrong Avenue. Furthermore, one (1) outlet on the south, one (1) outlet on the west and California Avenue on the west can all be connected to for more access in the future.

A review of the existing and proposed roadways and access points indicates that they are located at points that minimize traffic operational impacts to existing and future roadway networks. The Project will be designed to current standards and safety regulations. All intersections will be constructed to comply with the City and Caltrans regulations, and design and safety standards of Chapter 33 of the California Building Codes (CBC) and the guidelines of Title 24 in order to create safe and accessible roadways.

Vehicles exiting the subdivision will be provided with a clear view of the roadway without obstructions. Landscaping associated with the entry driveways could impede such views, if improperly installed. Specific circulation patterns and roadway designs will incorporate all applicable safety measures to ensure that hazardous design features or inadequate emergency access to the site or other areas surrounding the project area would not occur. Therefore, with the incorporated design features and all applicable rules and regulations, the Project will have a *less than significant impact.*

d) Result in inadequate emergency access?

Less Than Significant Impact. State and City Fire Codes establish standards by which emergency access may be determined. The proposed Project would have to provide adequate unobstructed space for fire trucks to turn around. The Fresno City Fire Department reviewed the proposed Project plans and determined access is

acceptable as proposed. The proposed project site would have adequate internal circulation capacity including entrance and exit routes to provide adequate unobstructed space for fire trucks and other emergency vehicles to gain access and to turn around. The proposed Project would not inhibit the ability of local roadways to continue to accommodate emergency response and evacuation activities. Impacts would be *less than significant*.

Mitigation Measures:

The proposed Project shall implement and incorporate the transportation related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 24, 2025.

TRA – 1: The proposed Project shall implement the following intersection improvements to reduce impacts to LOS:

- The developer shall install traffic signal pole(s) less signal mast arms including all related pull boxes and conduit associated with said pole(s), as necessary for a future four-leg intersection at California Avenue and Armstrong Avenue.

TRA – 2: The following measures shall be implemented to ensure compliance with the Fresno Active Transportation Plan:

- The Project shall construct a Class II Bikeway on its frontages to Armstrong Avenue and California Avenue.
- The Project shall construct ADA compliant pedestrian sidewalks along internal streets connecting all uses to external sidewalks and along its frontages to Armstrong Avenue and California Avenue.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES – Would the project:				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 PRC section 5020.1(k), or,		X		

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 subdivisionI) of PRC section 5024.1. In applying the criteria set forth in subdivisI (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

DISCUSSION

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), or

Less Than Significant Impact with Mitigation. A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site,

feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources. Pursuant to Assembly Bill 52 (AB 52), the Table Mountain Rancheria Tribe and the Dumna Wo Wah were invited to consult under both AB 52. The City of Fresno mailed notices of the proposed Project to each of these tribes on April 15, 2022, which included the required 30-day time period for tribes to request consultation. Following the close of the 30-day comment period, City staff confirmed that no comments were received. Because the Tribes did not request consultation, because of compliance with California Health and Safety Code Section 7050.5 as discussed in Section V, and because of the implementation of CUL-1 which will protect any unknown resources, any impacts to TCR's are *less than significant.*

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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact. The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural

Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Native American tribes traditionally and culturally affiliated with the project area were invited to consult regarding the project based on a list of contacts provided by the Native American Heritage Commission (NAHC). This list includes tribes that requested notification pursuant to Assembly Bill 52 (AB 52). The City of Fresno mailed notices of the proposed project to each of these tribes on April 15, 2022, which included the required 30-day time period for tribes to request consultation, which ended on May 16, 2022. All tribes which were contacted declined consultation. Therefore, there is a *less than significant impact*.

Mitigation Measures

1. The proposed project shall implement and incorporate the tribal cultural resource related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated April 24, 2025.

CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effect?			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 waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	

DISCUSSION

a. **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Less Than Significant Impact. The proposed Project will require construction of new infrastructure to connect to the existing utility infrastructure. This will include water, wastewater, and storm water drainage connections. Additionally, the Project will include connections for electric power, natural gas, and telecommunications facilities. The installation of this infrastructure will not require any major upsizing or other offsite construction activities that would cause a significant impact. The new infrastructure would be connected to the existing infrastructure that is adjacent to the Project site.

Impacts to storm drainage facilities have been previously discussed under the Hydrology and Water Quality section included within this analysis herein above. As described in Section VII, Geology and Soils, and in compliance with NPDES General Construction Permit requirements, the proposed Project would design and submit a site-specific SWPPP to minimize the discharge of wastewater during construction and a Water Quality Management Plan that includes best management practices (BMPs) for runoff control as required. Therefore, the proposed Project would not require new stormwater drainage facilities to manage stormwater runoff during construction or operation.

The proposed Project would be subject to the payment of any applicable connection charges and/or fees and extension of services in a manner that is compliant with the Department of Public Utilities standards, specifications, and policies.

Sanitary sewer and water service under City of Fresno jurisdiction, delivery is also subject to payment of applicable connection charges and/or fees; compliance with the Department of Public Utilities standards, specifications, and policies; the rules and regulations of the California Public Utilities Commission and California Health Services; and, implementation of the City-wide program for the completion of incremental expansions to facilities for planned water supply, treatment, and storage. Impacts would be *less than significant.*

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. As discussed under the Section VII Hydrology and Water Quality section of this Initial Study, the Fresno General Plan recognizes regional water resource planning efforts, such as, the Kings Basin's Integrated Regional Water Management Plan, the Fresno-Area Regional Groundwater Management Plan, and City of Fresno Metropolitan Water Resource Management Plan and cites the findings of the City of Fresno 2020 UWMP. The purpose of these management plans is to provide safe, adequate, and dependable water supplies in order to adequately meet existing and future needs of the Kings Basin regions and the Fresno-Clovis metropolitan area in an economical manner; protect groundwater quality from further degradation and overdraft; and provide a plan of reasonably implementable measures and facilities. Through routing to the applicable

departments and agencies, the City has determined that adequate water supply exists to serve the proposed Project. Additionally, the applicant will be required to comply with all requirements of the City of Fresno Department of Public Utilities to reduce the Project's water impacts to *less than significant*.

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

Less Than Significant Impact. See Impact (b) above. The City of Fresno acts as the Regional Sewer Agency and is responsible for operating the Fresno/Clovis Regional Wastewater Reclamation Facility (RWRF) and the North Fresno Wastewater Treatment Facility (NFWTF). The Regional Facility provides wastewater treatment for a service area that includes most of the Cities of Fresno and Clovis, and some unincorporated areas of Fresno County. The City is currently evaluating upgrades and modifications to the existing Regional Facility that may result in a capacity rating increase of 15.0 MGD. The City of Clovis owns 9.3 MGD of wastewater treatment capacity at the Regional Facility, and the City of Fresno owns the remaining capacity.

The NFWTF was constructed in late 2006 to provide wastewater treatment service for residential and commercial development in the surrounding area of north Fresno. The permitted capacity of the NFWTF is 0.71 MGD, as an average monthly flow, and 1.07 MGD, as a maximum daily flow. The City's master plan for the NFWTF calls for ultimate expansion to an average monthly flow capacity of 1.07 MGD upon full development of the NFWRF service area.

The City of Fresno Department of Public Utilities has reviewed the Project and determined that sanitary sewer facilities are available to provide service to the site, subject to the required conditions of approval. The City will provide sewer connection. The conditions of approval include payment of the applicable sanitary sewer fees, which would eventually be used to provide funding for the improvements at the RWRF and NFWTF in order to expand. The proposed Project will not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing

commitments. Impacts would be *less than significant.*

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?

Less Than Significant Impact. The City of Fresno Department of Public Utilities, Solid Waste Division has reviewed the Project for compliance with any federal, State, and local management and reduction statutes and regulations related to solid waste. Solid waste disposed of in the City of Fresno is taken to Cedar Avenue Recycling and Transfer Station. Once the trash has been off-loaded at the transfer station, it is sorted, and non-recyclable solid waste is loaded onto large trucks and taken to the American Avenue Landfill located approximately six miles southwest of Kerman. American Avenue Landfill is owned and operated by Fresno County and began operations in 1992 for both public and commercial solid waste haulers. The American Avenue Landfill is a sanitary landfill, meaning that it is a disposal site for a nonhazardous solid waste spread in layers, compacted to the smallest practical volume, and covered by material applied at the end of each operating day.

The American Avenue Landfill (i.e., American Avenue Disposal Site 10-AA-0009) has a maximum permitted capacity of 32,700,000 cubic yards and a remaining capacity of 29,358,535 cubic yards, with an estimated closure date of August 31, 2031. The maximum permitted throughput is 2,200 tons per day.

In the operational phase, typical household refuse would be generated by residences. According to CalRecycle, residential units average 12.23 lbs.[21] of household refuse per day. The proposed 202 units would generate approximately 2,470.5 lbs. per day, or approximately 409 tons per year. The site is designated by the General Plan for residential uses and as such, site development has been accounted for in the City's infrastructure planning documents, including waste management. Additionally, the Project would be required to comply with the City's Resolution which would curb solid waste generation in keeping with the provisions of

[21] CalRecycle. Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/wastecharacterization/general/rates. Accessed December 2024.

AB 939. The Project will comply with any statutes and regulations related to solid waste. Therefore, the proposed Project would not result in any waste related environmental impacts, and impacts would be *less than significant*.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. While there are no applicable federal regulations, the proposed Project would be required to comply with State and local statutes and regulations related to solid waste. Pursuant to the provisions of AB 939, the City is required to divert 50 percent of solid waste generated in its jurisdiction away from landfills. The Project will comply with any statutes and regulations related to solid waste. Impacts would be *less than significant*.

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) 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

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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

Setting

There are no State Responsibility Areas (SRAs) within the vicinity of the Project site. The Project site is not categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire. Although this CEQA topic only applies to areas within an SRA or Very High FHSZ, out of an abundance of caution, these checklist questions are analyzed below.

DISCUSSION

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The City of Fresno does have an adopted Emergency Operations Plan (EOP); however the EOP does not designate evacuation routes, which may not be necessary since Fresno does not face any expected natural hazards from likely sources or locations.[22] The Project site will connect to an existing network of City streets. The Project site is located in an area with several alternative access roads allowing access in the event of an emergency. Access to the alternative access roads would be maintained throughout construction, and appropriate detours would be

e Fresno General Plan. Chapter 9: Noise and Safety. Page 9-40. https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf. Accessed December 2024.

provided in the event of potential road closures. The City of Fresno Fire Department oversees emergency response and preparedness.

Therefore, no significant impacts related to the impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan would occur. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. There is *no impact.*

b) 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?

Less Than Significant Impact. 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 a significant risk for wildlife. There are minimal amounts of highly flammable fuels such as dry grass in the area. Therefore, in the unlikely event of a wildfire, the Project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts will be *less than significant.*

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?

No Impact. The Project includes development of infrastructure (water, sewer, and storm drainage) required to support the proposed residential uses. The Project site is surrounded by existing and future urban development. The Project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. However, the development will meet local and State development codes and regulations related to fire protection and prevention. There is ***no impact.***

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?

No Impact. 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. A storm drainage plan would be designed and engineered to ensure the proper construction of storm drainage infrastructure to control runoff and prevent flooding, erosion, and sedimentation.

Upon development of the site, stormwater would flow to the existing storm drains in the adjacent roadways. Any further storm drain requirements will be processed by the Fresno Metropolitan Flood Control District and constructed per the District's standards. Additionally, the Project site is outside of any Special Flood Hazard Areas or Other Areas of Flood Hazard, FEMA Flood Map 06019C2135H, effective 2/18/2009. Further, 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. There is ***no impact.***

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to 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, 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	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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		

DISCUSSION

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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. The proposed Project site is developed with a single-family residence and highly disturbed vacant land that is regularly disked for weed control. The site includes the development of 202 residential units and the associated improvements. As evaluated in this IS/MND, the proposed Project would not 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; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory. Mitigation measures have been included to lessen the significance of potential impacts. Similar mitigation measures would be expected of other projects in the surrounding area, most of which share similar cultural paleontological and biological resources. Consequently, the incremental effects of the proposed Project, after mitigation included in this Initial Study, would not contribute to an adverse cumulative impact on these resources. Therefore, the project would have a *less than significant impact.*

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.)

Less than Significant Impact. CEQA Guidelines Section 15064(h) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. All Project-related impacts were determined to be either less than significant, or less than significant after mitigation. The proposed Project would not contribute substantially to adverse cumulative conditions or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc.). Due to buildout of the area and existing land constraints, it is not anticipated that further unplanned substantial residential

development will occur in the area in the foreseeable future. As such, Project impacts are not considered to be cumulatively considerable given the lack of proposed new development in the area and the insignificance of Project-induced impacts. The impact is therefore *less than significant.*

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

Less than Significant Impact with Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on human beings, either directly or indirectly. Project-specific mitigation measures have been incorporated as described in each specific impact area which will reduce all potentially significant impacts to *less than significant.*

References

California Department of Transportation. State Scenic Highway Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed December 2024.

California Department of Conservation. California Important Farmland Finder. https://maps.conservation.ca.gov/dlrp/ciff/. Accessed December 2024.

California Department of Conservation. California Geological Survey. Fault Activity Map of California. https://maps.conservation.ca.gov/cgs/fam/. Accessed December 2024.

California Department of Conservation. California Agricultural Land Evaluation and Site Assessment (LESA) Model. Instruction Manual. 1997.Page 2. https://www.conservation.ca.gov/dlrp/Pages/qh_lesa.aspx. Accessed December 2024.

California Department of Toxic Substances Control, EnviroStor Database. https://www.envirostor.dtsc.ca.gov/public/map/. Accessed December 2024.

California State Water Resources Control Board, GeoTracker Database. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Fresno. December 2024.

CalRecycle. Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/wastecharacterization/general/rates. Accessed December 2024.

City of Fresno 2020 Urban Water Management Plan. July 2021. Pg. ES-4. https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-2020-UWMP_Final_2021-07-21-1.pdf. Accessed December 2024.

Fresno County Airport Land Use Compatibility Plan, December 2018, Part Two. Exhibit D1, Fresno-Yosemite INTL. Airport Influence Area and Safety Zones. https://fresnocog.wpenginepowered.com/wp-content/uploads/2019/01/fresno-final-alucp-113018-r_part2.pdf. Accessed December 2024.

Fresno General Plan. Chapter 9: Noise and Safety. Page 9-40. https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf. Accessed May, 2024.

Fresno General Plan Program Environmental Impact Report Public Review Draft. March 2020. https://www.fresno.gov/wp-content/uploads/2023/03/Fresno-GP-Public-Review-Draft-Program-EIR.pdf. Accessed May 2024. Page 4.4-3.

U.S. Census Bureau. QuickFacts. Fresno City. 2017-2017. https://www.census.gov/quickfacts/fact/table/fresnocitycalifornia,fresnocountycalifornia/PST045222. Accessed November 2024.

USDA Natural Resources Conservation Service. Custom Soil Resource Report for Eastern Fresno Area, California.

U.S. Geological Service. Areas of Land Subsidence in California. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed October 2024.

US Fish and Wildlife Service. National Wetlands Inventory Surface Waters and Wetlands Mapper. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed November 2024.

MITIGATION MONITORING AND REPORTING PROGRAM – April 24, 2025

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the City of Fresno's T-6376/P21-05373/P21-05090 Residential Project (proposed Project). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements as well as conditions recommended by responsible agencies who commented on the project.

The first column of the Table identifies the mitigation measure. The second column, entitled "Party Responsible for Implementing Mitigation," names the party responsible for carrying out the required action. The third column, "Implementation Timing," identifies the time the mitigation measure should be initiated. The fourth column, "Party Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the City to ensure that individual mitigation measures have been monitored.

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
BIO-1: In addition to implementation of the measures included in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), if construction activities occur during the avian nesting season (generally, February 1 through August 31), preconstruction surveys for nesting birds by a qualified ornithologist should be conducted to ensure that no active nests are disturbed during construction. The survey should be conducted no more than seven days before construction activities begin. During this survey, all potential nesting areas should be inspected in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist should determine the extent of a construction-free buffer zone to be established around the nest (typically, 300 ft. for raptors and 25–100 ft. for other species) to ensure that no active nests of species protected by the California Fish and Game Code would be disturbed during project construction.	Project Applicant and Qualified Biologist	Prior to initiation of any site preparation/construction	City of Fresno, Planning and Development Department	
BIO-2: To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests would be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior	Project Applicant and Qualified Biologist	Prior to initiation of any site preparation/construction	City of Fresno, Planning and Development Department	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.				
CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant	Project Applicant and qualified historical resources specialist	Planning and Development Department to review construction specifications to ensure inclusion of provisions included in mitigation measure.	City of Fresno, Planning and Development Department	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.				
HAZ-1: Additional soil gas sampling shall be performed near the former southeastern UST once over-excavation, site grading, and other earthwork activities have been completed to confirm the low-level detections of PCE do not pose a vapor intrusion threat to future residential dwellings. If PCE levels are above the California Department of Toxic Substances Control (DTSC) soil gas thresholds, sub-slab vapor barriers, or another construction method which will reduce PCE levels to less than DTSC soil gas threshold shall be implemented.	Project Applicant	After earthwork activities have been completed, prior to constructing residential foundations.	City of Fresno, Planning and Development Department	
NOI-1: A sound wall shall be constructed along the entire project site frontage with the SJVR railroad line. In the vicinity of Lot 76, the wall shall be constructed to a minimum height of eight feet six inches (8’6”) above project site grade, and the sound wall shall be constructed to a minimum height of seven (7) feet	Project Applicant	Construction shall be completed prior to occupancy permit.	City of Fresno, Planning and Development Department	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
above project site grade along the remainder of the SJVR project site frontage. In order to be effective, the sound wall shall be turned inward (southward) for a minimum distance of twenty (20) feet along the east side of Lot 76. The locations and heights of the required sound walls are provided on Figure 1 of Appendix F. Suitable construction materials include concrete blocks, masonry, or stucco on both sides of a wood or steel stud wall.				
NOI-2: Mechanical ventilation or air conditioning shall be provided for all homes so that windows and doors can remain closed for sound insulation purposes.	Project Applicant	Planning and Development Department to review construction specifications to ensure inclusion of provisions included in mitigation measure.	City of Fresno, Planning and Development Department	
TRA-1: The proposed Project shall install traffic signal pole(s) less signal mast arms including all related pull boxes and conduit associated with said pole(s), as necessary for a future four-leg intersection at California Avenue and Armstrong Avenue.	Project Applicant	Planning and Development Department to review construction specifications to ensure inclusion of provisions included in mitigation measure.	City of Fresno, Planning and Development Department	
TRA-2: The following measures shall be implemented to ensure compliance with the Fresno Active Transportation Plan:	Project Applicant	Planning and Development Department to review construction specifications to ensure	City of Fresno, Planning and Development Department	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
○ The Project shall construct a Class II Bikeway on its frontages to Armstrong Avenue and California Avenue. ○ The Project shall construct ADA compliant pedestrian sidewalks along internal streets connecting all uses to external sidewalks and along its frontages to Armstrong Avenue and California Avenue.		inclusion of provisions included in mitigation measure.		

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: December 24, 2024

TO: Emily Bowen, Crawford & Bowen Planning, Inc.

FROM: Jessica Coria, Associate

SUBJECT: Air Quality, Energy, and Greenhouse Gas Emissions Technical Memorandum for the Proposed Aster Place Residential Development Project in Fresno, California

INTRODUCTION

LSA has prepared this Air Quality, Energy, and Greenhouse Gas Emissions Technical Memorandum to evaluate the impacts associated with construction and operation of the proposed Aster Place Residential Development Project (project) in Fresno, Fresno County, California. This analysis was prepared using methods and assumptions recommended in the San Joaquin Valley Air Pollution Control District's (SJVAPCD) *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI).[1] This analysis includes a description of the existing regulatory framework, an assessment of project construction and operation period emissions, and an assessment of greenhouse gas (GHG) emissions and energy impacts resulting from the proposed project.

PROJECT DESCRIPTION

The proposed project is located at East California Avenue and Armstrong Avenue in Fresno, Fresno County, California. The proposed project includes the development of a single-family residential project consisting of 203 units on approximately 38.76 acres, to be developed in two phases. The proposed project would include the development of 203 single-family residential lots, as well as the extension of East California Avenue through the proposed project site and the development of internal project roadways. Figure 1 shows the Project Location and Figure 2 shows the Project Site Plan (all figures are provided in Attachment A).

The site is bounded to the north by the San Joaquin Valley Railroad, to the west by a vacant lot, to the south by an orchard, and to the east by South Armstrong Avenue. Sensitive receptors near the proposed project site include single-family homes to the east of the project site, across South Armstrong Avenue, and to the north within 115 feet of the proposed project site boundaries.

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[1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. *Guidance for Assessing and Mitigating Air Quality Impacts*. March 19. Website: www.valleyair.org/transportation/ceqa_idx.htm (accessed December 2024).

The proposed project is expected to include demolition, site preparation, grading, building construction, paving, and architectural coating during construction phases and would include 11,310 cubic yards of soil import. Construction is expected to begin at the beginning of 2025 and last approximately 4 years. Moreover, the proposed project would generate approximately 1,914 average daily trips. In addition, consistent with SJVAPCD Rule 4901,[2] this analysis assumes that the proposed project would not include any wood burning (or natural gas) fireplaces.

SENSITIVE RECEPTORS IN THE PROJECT AREA

For this analysis, sensitive receptors are considered areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution. The project site is surrounded primarily by residential, agricultural, and educational uses. The Sequoia Elementary School is approximately 3,100 feet from the proposed project site boundary, and the Sanger West High School is approximately 3,500 feet from the project boundary. The areas adjacent to the project site include the following:

- **North:** Residential, open space
- **East:** Residential, agricultural
- **South:** Agricultural, educational
- **West:** Residential, agricultural

The proposed project is bound by South Armstrong Avenue to the east, East Church Avenue to the south and South Fowler Avenue to the west. The closest sensitive receptors are single-family residential uses to the east, approximately 130 feet from the project boundary, and single-family residential uses to the west, approximately 925 feet from the project boundary. Table A shows the proposed project activity, the nearest sensitive receptor, and point of analysis in distance (feet).

Table A: Summary of Analysis Distances by Impact Category

Activity	Nearest Sensitive Receptor	Points of Analysis	Distance (feet)
Construction[1]	Single-family homes on South Armstrong Avenue	Perimeter of construction activities to centroid of nearest sensitive receptor	125
Operations	Single-family homes on South Armstrong Avenue	Emissions sources on-site generalized at the centroid of the project site to centroid of nearest sensitive receptor	770

Source: Compiled by LSA (2024).

[1] Distance for construction air quality impact potential includes the assumption that heavy construction equipment would operate adjacent to the proposed project boundary, which is 30 feet from the nearest off-site structures where a person would live.

[2] SJVAPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

EXISTING LAND USES IN THE PROJECT AREA

The existing land use for the proposed project site is medium-density residential. Currently, the existing zoning is medium-density residential per the City of Fresno (City). Therefore, the proposed project would be consistent with current zoning and land uses.

Current transportation ingress and egress access points for the proposed project are from South Armstrong Avenue. Erin Avenue will be expanded along the northern project boundary, East Geary will be expanded to the west and south of the project boundaries, and East California Avenue will be expanded through the center of the proposed project. The expansion of these arterial ways will support circulation for the proposed project.

Air Quality Background

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The proposed project is in Fresno County and is within the jurisdiction of the SJVAPCD, which regulates air quality in the San Joaquin Valley Air Basin (SJVAB).

The SJVAB is comprised of approximately 25,000 square miles and covers all of seven counties (including Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare) and the western portion of an eighth, Kern. The SJVAB is defined by the Sierra Nevada mountains in the east (8,000 to 14,000 feet in elevation), the Coast Ranges in the west (averaging 3,000 feet in elevation), and the Tehachapi mountains in the south (6,000 to 8,000 feet in elevation). The valley is topographically flat with a slight downward gradient to the northwest. The valley opens to the sea at the Carquinez Straits where the San Joaquin-Sacramento Delta empties into San Francisco Bay. An aerial view of the SJVAB would simulate a "bowl" opening only to the north. These topographic features restrict air movement through and out of the basin.

Both the State and federal government have established health-based ambient air quality standards for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter (particulate matter less than 2.5 microns in diameter [$PM_{2.5}$] and particulate matter less than 10 microns in diameter [PM_{10}]). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO_2, and Pb are considered local pollutants that tend to accumulate in the air locally.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations

are used by the United States Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and to comply with the NAAQS. As shown in Table B, the SJVAB is designated as nonattainment by federal standards for O_3 and $PM_{2.5}$ and nonattainment by State standards for O_3, PM_{10}, and $PM_{2.5}$.

Table B: Attainment Status of Criteria Pollutants in the San Joaquin Valley Air Basin

Pollutant	State	Federal
Ozone (1-hour)	Revoked	Nonattainment/Severe
Ozone (8-hour)	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified

Source: San Joaquin Valley Air Pollution Control District (2024).
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter

Ozone levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by the SJVAPCD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the SJVAPCD still exceeds the State standard for 1-hour and 8-hour O_3 levels. In addition, the SJVAB was designated as a serious nonattainment area for the federal 1997 8-hour ozone level in June 2004. The USEPA lowered the 1997 0.80 parts per million (ppm) federal 8-hour ozone standard to 0.75 ppm in 2008 and then to 0.70 ppm on October 1, 2015. The SJVAB is classified as nonattainment for the 1-hour and 8-hour ozone standards at the State and federal levels, although a request for redesignation as attainment of the 1-hour ozone standard was submitted to the USEPA in 2014.

Federal and State standards have also been established for $PM_{2.5}$ over 24-hour and yearly averaging periods. $PM_{2.5}$, because of the small size of individual particles, can be especially harmful to human health. $PM_{2.5}$ is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. On February 7, 2024, the USEPA strengthened the NAAQS for $PM_{2.5}$ by revising the primary (health-based) annual standard from 12.0 micrograms per cubic meter ($\mu g/m^3$) to 9.0 $\mu g/m^3$; however, a new attainment designation has not been issued. The SJVAB is considered a nonattainment area for the $PM_{2.5}$ standard at the State and federal levels.

The SJVAPCD is classified as a PM_{10} nonattainment area at the State level and was redesignated from serious nonattainment to attainment of the federal PM_{10} standard in 2008. Because the SJVAPCD was redesignated from nonattainment to attainment, a PM_{10} maintenance plan was adopted in 2007 and is required to be updated every 10 years.

No exceedances of the State or federal CO standards have been recorded at any of the region's monitoring stations since 1991. The SJVAB is currently considered an attainment area for State and federal 8-hour and 1-hour CO standards.

Toxic Air Contaminant Background

The public's exposure to toxic air contaminants (TACs) is a significant environmental health issue in the State of California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. Health and Safety Code Section 39655 defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Subsection (b) of United States Code [USC] Title 42, Section 7412, is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through the California Air Resources Board (CARB), is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (the Tanner Air Toxics Act), AB 2588 (the Air Toxics "Hot Spot" Information and Assessment Act of 1987), and Senate Bill (SB) 25 (the Children's Environmental Health Protection Act). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once TACs are identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions.

Air toxics from stationary sources are also regulated in California under AB 2588 (the Air Toxics "Hot Spot" Information and Assessment Act of 1987). Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the designated air quality management district or air pollution control district. High-priority facilities are required to perform a Health Risk Assessment (HRA) and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

To date, CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (i.e., diesel particulate matter [DPM]).

Air Quality Monitoring Results

Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The SJVAPCD, together with the CARB, maintains ambient air quality monitoring stations in the SJVAB. The air quality monitoring stations closest to the project area are Fresno Drummond Street station located at 4706 East Drummond Street, Fresno, Fresno County, California, and the Fresno Garland station located at 3727 North First Street, Fresno, Fresno County, California.

Pollutant monitoring results for years 2021 to 2023 at the nearby ambient air quality monitoring stations, shown in Table C, indicate that air quality in the area has generally been moderate. As indicated in the monitoring results, the State PM_{10} standard was exceeded 20 times in 2021, 133 times in 2022, and 120 times in 2023. In addition, the federal PM_{10} standard was not exceeded in the 3-year period. The federal PM2.5 standard had 30 exceedances in 2021, 12 exceedances in 2022, and 4 exceedances in 2023. The State 1-hour ozone standard was exceeded 9 times in 2021 and 3 times in 2022 and 2023. The State 8-hour ozone standard was exceeded 41 times in 2021, 8 times in 2022, and 24 times in 2023. The federal 8-hour ozone standard was exceeded 39 times in 2021, 8 times in 2022, and 20 times in 2023. The federal CO maximum 1-hour and federal CO maximum 8-hour standards was not exceeded in the 3-year period with no available State data. The federal SO2 standard was not exceeded between 2021 and 2023. The State SO2 standard had an unknown number of exceedances for the 3-year period. The State NO2 maximum 1-hour standard had no exceedances for the 3-year period.

Table C: Ambient Air Quality Monitored in the Project Vicinity

Pollutant	Standard		2021	2022	2023
Carbon Monoxide (CO) [1]					
Maximum 1-hr concentration (ppm)			1.9	2.1	2.2
Number of days exceeded:	State:	> 20 ppm	ND	ND	ND
	Federal:	> 35 ppm	0	0	0
Maximum 8-hr concentration (ppm)			1.7	1.8	1.7
Number of days exceeded:	State:	≥ 9.0 ppm	ND	ND	ND
	Federal:	≥ 9.0 ppm	0	0	0
Ozone (O_3) [2]					
Maximum 1-hr concentration (ppm)			0.125	0.111	0.102
Number of days exceeded:	State:	> 0.09 ppm	9	3	3
Maximum 8-hr concentration (ppm)			0.099	0.089	0.088
Number of days exceeded:	State:	> 0.070 ppm	41	8	24
	Federal:	> 0.070 ppm	39	8	20
Coarse Particulates (PM_{10}) [2]					
Maximum 24-hr concentration (µg/m^3)			151.8	73.4	131.1
Number of days exceeded:	State:	> 50 µg/m^3	20	133	120
	Federal:	> 150 µg/m^3	0	0	0
Annual arithmetic average concentration (µg/m^3)			43.8	31.2	42.7
Exceeded for the year:	State:	> 20 µg/m^3	Yes	Yes	Yes
	Federal:	> 50 µg/m^3	No	No	No

Table C: Ambient Air Quality Monitored in the Project Vicinity

Pollutant	Standard		2021	2022	2023
Fine Particulates ($PM_{2.5}$) [1]					
Maximum 24-hr concentration (µg/m^3)			99.9	53.3	39.1
Number of days exceeded:	Federal:	> 35 µg/m^3	30	12	4
Annual arithmetic average concentration (µg/m^3)			15.6	12.9	10.4
Exceeded for the year:	State:	> 12 µg/m^3	Yes	Yes	No
	Federal:	> 15 µg/m^3	Yes	No	No
Nitrogen Dioxide (NO_2) [2]					
Maximum 1-hr concentration (ppm)			0.0645	0.0583	0.0581
Number of days exceeded:	State:	> 0.18 ppm	0	0	0
Annual arithmetic average concentration (ppm)			0.011	0.012	0.010
Exceeded for the year:	State:	> 0.030 ppm	No	No	No
	Federal:	> 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2) [1]					
Maximum 24-hr concentration (ppm)			0.0027	0.0012	0.0023
Number of days exceeded:	State:	> 0.04 ppm	ND	ND	ND
	Federal:	> 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)			0.00043	0.00034	0.00043
Exceeded for the year:	Federal:	> 0.030 ppm	No	No	No

Sources: 2021–2023 Air Quality Data, Website: www.epa.gov/outdoor-air-quality-data/monitor-values-report (United States Environmental Protection Agency 2024) and iADAM: Air Quality Data Statistics, Website: www.arb.ca.gov/adam/index.html (California Air Resources Board 2024).

[1] Data taken from the Fresno Garland station located at 3727 North First Street, Fresno, Fresno County, California.

[2] Data take from the Fresno Drummond Street station located at 4706 East Drummond Street, Fresno, Fresno County, California.

µg/m^3 = micrograms per cubic meter
hr = hour
ND = no data available
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ppm = parts per million

Energy

Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2022, California's electricity was generated primarily by natural gas (47.5 percent), renewable sources (52.2 percent), large hydroelectric (7.2 percent), nuclear (8.7 percent), coal (<1.0 percent), and other unspecified sources. Total electric generation in California in 2022 was 287,220 gigawatt-hours (GWh), up 3.4 percent from the 2021 total generation of 287,220 GWh.[3]

[3] California Energy Commission (CEC). 2022. *2022 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation (accessed November 2024).

The project site receives its electricity from Pacific Gas and Electric (PG&E). According to the California Energy Commission (CEC), total electricity consumption in the PG&E service area in 2022 was 77,887.0 GWh (27,210.0 GWh for the residential sector and 50,677.0 GWh for the nonresidential sector).[4] Total electricity consumption in Fresno County in 2022 was 8,384.4 GWh (or 8,384,408,687 kilowatt-hours [kWh]).[5]

Natural Gas

Natural gas is a nonrenewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[6]

PG&E is the natural gas service provider for the project site. According to the CEC, total natural gas consumption in the PG&E service area in 2022 was 4,421.06 million therms (1,856.1 million therms for the residential sector and 2,564.9 million therms for the nonresidential sector).[7] Total natural gas consumption in Fresno County in 2022 was 319.4 million therms (319,435,645 therms).[8]

Fuel

Petroleum is also a nonrenewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the Earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to

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4 CEC. 2021a. Electricity Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed November 2024).

5 CEC. 2020a. Electricity Consumption by County. Websites: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed November 2024).

6 CEC. 2021c. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed November 2024).

7 CEC. 2021b. Gas Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed November 2024).

8 CEC. 2020b. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasby county.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed November 2024).

22.9 mpg in 2021.[9] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. This act, which originally mandated a federal fuel economy standard of 35 mpg by year 2020,[10] applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most-used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and SUVs. According to the most recent data available, in 2022, total gasoline consumption in California was 316,425 thousand barrels or 1,597.6 trillion British Thermal Units (BTU).[11] Of the total gasoline consumption, 299,304 thousand barrels or 1,511.2 trillion BTU were consumed for transportation.[12] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 366.2 million gallons of gasoline and approximately 157.8 million gallons of diesel will be consumed from vehicle trips in Fresno County in 2024.

Greenhouse Gas Background

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs (e.g., CO_2, CH_4, and N_2O), some gases (e.g., HFCs, PFCs, and SF_6) are completely new to the atmosphere.

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9 United States Department of Transportation (USDOT). n.d. *Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles*. Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed November 2024).

10 United States Department of Energy. 2007. *Energy Independence & Security Act of 2007*. Website: https://www.afdc.energy.gov/laws/eisa (accessed November 2024).

11 United States Energy Information Administration (EIA). 2022. California State Profile and Energy Estimates, Data. Website: www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed November 2024).

12 Ibid.

Certain gases (e.g., water vapor) are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalents (CO_2e).

REGULATORY FRAMEWORK

This section provides regulatory background information for air quality, GHGs, and energy.

Air Quality

Federal Regulations

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O_3, SO_2, and NO_2 by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Regional Regulations

San Joaquin Valley Air Pollution Control District. The SJVAPCD has specific air quality-related planning documents, rules, and regulations.[13] This section summarizes the local planning documents and regulations that may be applicable to the proposed project as administered by the SJVAPCD with CARB oversight.

- **Rule 8011—General Requirements: Fugitive Dust Emission Sources.** Fugitive dust regulations are applicable to outdoor fugitive dust sources. Operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources.

- **Regulation VIII—Fugitive PM_{10} Prohibitions.** Rules 8011–8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, and carryout and track out. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

- **Rule 2201—New and Modified Stationary Source Review Rule.** This rule provides the review of new and modified stationary sources of air pollution to operate without interfering with the attainment or maintenance of ambient air quality standards and results in no net increase in emissions above specified thresholds.

- **Rule 4901—Wood Burning Fireplaces and Wood Burning Heaters.** The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices.

- **Rule 9510—Indirect Source Review.** This rule reduces the impact of nitrogen oxides (NO_x) and PM_{10} emissions from new development projects. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site SJVAPCD-administered projects, or a combination of the two. Compliance with SJVAPCD Rule 9510 reduces emissions impacts through incorporation of on-site measures as well as payment of an off-site fee that funds emission reduction projects in the SJVAB. The emissions analysis for Rule 9510 is detailed and is dependent on the exact project design that is expected to be constructed or installed. Compliance with Rule 9510 is separate from the California Environmental Quality Act (CEQA) process, though the control measures used to comply with Rule 9510 may be used to mitigate significant air quality impacts.

Guidance for Assessing and Mitigating Air Quality Impacts. The SJVAPCD prepared the GAMAQI to assist lead agencies and project applicants in evaluating the potential air quality impacts of projects in the SJVAB. The GAMAQI provides SJVAPCD-recommended procedures for evaluating potential air

[13] SJVAPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

quality impacts during the CEQA environmental review process. The GAMAQI provides guidance on evaluating short-term (construction) and long-term (operational) air emissions. The most recent version of the GAMAQI, adopted on March 19, 2015, was used in this evaluation. It contains guidance on the following:

- Criteria and thresholds for determining whether a project may have a significant adverse air quality impact
- Specific procedures and modeling protocols for quantifying and analyzing air quality impacts
- Methods to mitigate air quality impacts
- Information for use in air quality assessments and environmental documents, including air quality, regulatory setting, climate, and topography data

Fresno Council of Governments. Fresno Council of Governments (Fresno COG) is responsible for regional transportation planning in Fresno County and participates in developing mobile source emission inventories used in air quality attainment plans.

Regional Transportation Plan/Sustainable Communities Strategy. Regional Transportation Plans (RTPs) are State-mandated plans that identify long-term transportation needs for a region's transportation network. Fresno COG's 2022 RTP charts the long-range vision of regional transportation in Fresno County through 2046.[14] The RTP identifies existing and future transportation-related needs, while considering all modes of travel, analyzing alternative solutions, and identifying priorities for the anticipated available funding for the 1,100 projects and multiple programs included within the RTP. SB 375, which went into effect in 2009, added statutes to the California Government Code to encourage planning practices that create sustainable communities. It calls for each metropolitan planning organization to prepare a Sustainable Communities Strategy (SCS) as an integrated element of the RTP that is to be updated every 4 years. The SCS is intended to show how integrated land use and transportation planning can lead to lower GHG emissions from automobiles and light trucks. Fresno COG has included the SCS in its 2022 RTP.

Local Regulations

City of Fresno General Plan. The City's General Plan Resources Conservation and Resilience Element includes objectives and policies that work to achieve and maintain compliance with State and

[14] Fresno Council of Governments (Fresno COG). 2022. Regional Transportation Plan and Sustainable Communities Strategy. Website: https://www.fresnocog.org/project/regional-transportation-plan/ (accessed November 2024).

federal air quality standards for criteria pollutants.[15] The following policies related to air quality are applicable to the proposed project:

- **Policy RC-4-a: Support Regional Efforts.** Support and lead, where appropriate, regional, State and federal programs and actions for the improvement of air quality, especially the SJVAPCD's efforts to monitor and control air pollutants from both stationary and mobile sources and implement Reasonably Available Control Measures in the Ozone Attainment Plan.

- **Policy RC-4-b-: Conditions of Approval.** Develop and incorporate air quality maintenance requirements, compatible with Air Quality Attainment and Maintenance Plans, as conditions of approval for General Plan amendments, community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals

- **Policy RC-4-c: Evaluate Impacts with Models.** Continue to require the use of computer models used by SJVAPCD to evaluate the air quality impacts of plans and projects that require such environmental review by the City.

- **Policy RC-4-d: Forward Information.** Forward information regarding proposed General Plan amendments, community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals that require air quality evaluation, and amendments to development regulations to the SJVAPCD for their review of potential air quality and health impacts.

- **Policy RC-4-e: Ensure Compliance.** Ensure ongoing compliance with GHG emissions reduction plans and programs by requiring that air quality measures are incorporated into projects' design, conditions of approval, and mitigation measures.

Energy

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy, and the USEPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. On the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at

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[15] City of Fresno. 2014. *Fresno General Plan.* December 18. Website: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf (accessed November 2024).

reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs State response to energy emergencies. The applicable federal, State, regional, and local regulatory framework is discussed below.

Federal Regulations

Energy Policy Act of 2005. The Energy Policy Act of 2005 seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy Standards. On March 31, 2022, the NHTSA finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024 to 2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gasoline between model years 2030 to 2050.

State Regulations

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting. In 2002, the State Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural

gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2023 Integrated Energy Policy Report*.[16] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

Renewable Portfolio Standard. SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[17]

California Energy Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards in Part 6 of Title 24 of the California Code of Regulations (CCR), known as the Energy Code. The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The Energy Code is updated every 3 years, with the most recent update consisting of the 2022 Energy Code that became effective January 1, 2023. Mid-cycle supplements to the 2022 Code will become effective on July 1, 2024. The efficiency standards apply to both new construction and rehabilitation of both residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government

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16 CEC. 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

17 California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed December 2024).

agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in the Energy Code.

California Green Building Standards Code (CALGreen Code). In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the CALGreen Code. The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that became effective January 1, 2023. The CALGreen Code established mandatory measures for residential and nonresidential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and nonresidential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Strategic Plan was updated in 2011. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

Local Regulations

City of Fresno General Plan. The City of Fresno's General Plan[18] Resource and Conservation Element includes objectives and policies that work to reduce the consumption of non-renewable energy resources by requiring and encouraging conservation measures and the use of alternative energy sources. The following policies related to energy are applicable to the proposed project:**Policy RC8-a: Existing Standards and Programs.** Continue existing beneficial energy conservation programs, including adhering to the California Energy Code in new construction and major renovations.

- **Policy RC8-b: Energy Reduction Targets.** Strive to reduce per capita residential electricity use to 1,800 KWh per year and non-residential electricity use to 2,700 KWh per year per capita by developing and implementing incentives, design and operation standards, promoting alternative energy sources, and cost-effective savings.

[18] City of Fresno. 2014. *Fresno General Plan.* December 18. Website: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf (accessed November 2024).

- **Policy RC-8-c: Energy Conservation in New Development.** Consider providing an incentive program for new buildings that exceed California Energy Code requirements by 15 percent.

- **Policy RC-8-d: Incentives.** Establish an incentive program for residential developers who commit to building all of their homes to ENERGY STAR performance guidelines.

- **Policy RC8-i: Renewable Target.** Adopt and implement a program to increase the use of renewable energy to meet a given percentage of the city's peak electrical load within a given time frame.

- **Policy RC8-j: Alternative Fuel Network.** Support the development of a network of integrated charging and alternate fuel station for both public and private vehicles, and if feasible, open up municipal stations to the public as part of network development.

Greenhouse Gas Emissions

This section describes regulations related to global climate change at the federal, State, and local level.

Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the CAA.

While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change, including the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that seven GHGs (CO_2, CH_4, N_2O, HFCs, NF_3, PFCs, and SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to federal GHG emission standards.

State Regulations

The CARB is the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort set a GHG emission reduction target to reduce GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) CO_2e. The emissions target of 427 MMT CO_2e requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that

contribute to global climate change. The CARB approved the Scoping Plan on December 11, 2008. It contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emission level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reduction of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. The CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[19] to reflect the 2030 target set by EO B-30-15 and codified by SB 32.

The 2022 Scoping Plan[20] was approved in December 2022 and assesses progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, the CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). The CARB may update the targets every 4 years and

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19 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November. Website: ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf (accessed December 2024).

20 CARB. 2022. *2022 Scoping Plan Update*. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed December 2024).

must update them every 8 years. MPOs, in turn, must demonstrate how their plans, policies, and transportation investments meet the targets set by the CARB through SCSs. The SCSs are included with the Regional Transportation Plan, a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction target, it may prepare an Alternative Planning Strategy (APS). The APS identifies the impediments to achieving the targets.

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. The CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the CPUC for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016, the Legislature passed and the Governor signed SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change analysis of the emission trajectory that would stabilize atmospheric GHG concentrations at 450 ppm CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide

easier public access to air pollutant emissions data that are collected by the CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the Western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279. AB 1279 was signed in September of 2022 and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant state agencies to achieve these goals.

Regional Regulations

San Joaquin Valley Air Pollution Control District. Fresno County is located within the SJVAB, which is under the jurisdiction of the SJVAPCD. The SJVAPCD has regulatory authority over certain stationary and industrial GHG emission sources and provides voluntary technical guidance on addressing GHGs for other emission sources in a CEQA context. SJVAPCD initiatives related to GHGs are described below:

> ***Climate Change Action Plan.*** The San Joaquin Valley Air Pollution Control District Climate Change Action Plan (CCAP) was adopted on August 21, 2008. The CCAP includes suggested best performance standards (BPS) for proposed development projects. However, the SJVAPCD's CCAP was adopted in 2009 and was prepared based on the State's 2020 GHG targets, which are now superseded by State policies (i.e., the 2022 California Green Building Code) and the 2030 GHG targets, established in SB 32.
>
> ***San Joaquin Valley Carbon Exchange and Rule 2301.*** The SJVAPCD initiated work on the San Joaquin Valley Carbon Exchange in November 2008. The Exchange was implemented with the adoption of Amendments to Rule 2301 Emission Reduction Credit Banking on January 19,

2012.[21] The purpose of the carbon exchange is to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley.

The SJVAPCD incorporated a method to register voluntary GHG emission reductions with amendments to Rule 2301. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use
- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use
- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable

The SJVAPCD is participating in a new program developed by the California Air Pollution Control Officers Association (CAPCOA) to encourage banking and use of GHG reduction credits referred to as the CAPCOA Greenhouse Gas Reduction Exchange (GHGRx). The GHGRx provides information on GHG credit projects within participating air districts. The SJVAPCD is one of the first districts to have offsets available for trading on the Exchange.

Local Regulations

City of Fresno General Plan. The City of Fresno's General Plan[22] Resources Conservation and Resilience Element includes objectives and policies that work to achieve and maintain reductions in GHG emissions and strategies that reduce the causes of climate change. The following policies related to GHG emissions from the General Plan would be applicable to the proposed project:

- **Policy RC-5-a: Support State Goal to Reduce Statewide GHG Emissions.** As is consistent with State law, strive to meet AB 32 goal to reduce greenhouse gas emissions to 1990 levels by 2020 and strive to meet a reduction of 80 percent below 1990 levels by 2050 as stated in Executive Order S-03-05. As new statewide GHG reduction targets and dates are set by the State update the City's Greenhouse Gas Reduction Plan to include a comprehensive strategy to achieve consistency with those targets by the dates established.
- **Policy RC-5-b: Greenhouse Gas Reduction Plan.** n. As is consistent with State law, prepare and adopt a Greenhouse Gas Reduction Plan as part of the Master Environmental Impact Report to be concurrently approved with the Fresno General Plan in order to achieve compliance with State mandates, assist development by streamlining the approval process, and focus on feasible

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21 SJVPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

22 City of Fresno. 2014. *Fresno General Plan.* December 18. Website: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf (accessed November 2024).

actions the City can take to minimize the adverse impacts of growth and development on global climate change

- **Policy RC-5-c: GHG Reduction through Design and Operations.** Increase efforts to incorporate requirements for GHG emission reductions in land use entitlement decisions, facility design, and operational measures subject to City regulation through the following measures and strategies:
    - Promote appropriate energy and water conservation standards and facilitate mixed-use projects, new incentives for infill development, and the incorporation of mass transit, bicycle and pedestrian amenities into public and private projects.
    - Require energy and water audits and upgrades for water conservation, energy efficiency, and mass transit, pedestrian, and bicycle amenities at the time of renovation, change in use, change in occupancy, and change in ownership for major projects meeting review thresholds specified in an implementing ordinance.
- **Policy RC-5-d: SCS and CAP Conformity Analysis.** Ensure that the City includes analysis of a project's conformity to an adopted regional Sustainable Community Strategy or Alternative Planning Strategy (APS), an adopted Climate Action Plan (CAP), and any other applicable City and regional greenhouse gas reduction strategies in affect at the time of project review.
- **Policy RC-5-e: Ensure Compliance.** Ensure ongoing compliance with GHG emissions reduction plans and programs by requiring that air quality measures are incorporated into projects' design, conditions of approval, and mitigation measures.
- **Policy RC-5-g: Evaluate Impacts with Models.** Continue to use computer models such as those used by SJVAPCD to evaluate greenhouse gas impacts of plans and projects that require such review.
- **Policy RC 7-a: Water Conservation Program Target.** Maintain a comprehensive conservation program to help reduce per capita water usage in the city's water service area to 243 gallons per capita per day (gpcd) by 2020 and 190 gpcd by 2035, by adopting conservation standards and implementing a program of incentives, design and operation standards, and user fees.
- **Policy RC 7-h: Landscape Water Conservation Standards.** Refine landscape water conservation standards that will apply to new development installed landscapes, building on the State Model Water Efficient Landscape Ordinance and other State regulations.
- **Policy RC 11-a: Waste Reduction Strategies.** Maintain current targets for recycling and re-use of all types of waste material in the city and enhance waste and wastewater management practices to reduce natural resource consumption, including the following measures:
    - Continue to require recyclable material collection and storage areas in all residential development.
    - Expand yard waste collection to divert compostable waste from landfills.

METHODOLOGY

Construction Emissions

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips.

The California Emissions Estimator Model (CalEEMod) Version 2022.1 computer program was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. Construction of the proposed project is anticipated to begin in 2025 and would occur for approximately three years, which was included in CalEEMod. The proposed project would require the import of 11,310 cubic yards of soil, which was also included in CalEEMod. This analysis also assumes use of Tier 2 construction equipment. The proposed project would also comply with the SJVAPCD Regulations VIII measures for fugitive dust.[23] Other detailed construction information is currently unavailable; therefore, this analysis utilizes CalEEMod default assumptions.

Construction Health Risk Assessment

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project, and the analysis is presented below. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the USEPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data.

Operational Emissions

The air quality analysis includes estimating emissions associated with long-term operation of the proposed project. Consistent with the SJVAPCD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project.

As discussed previously in the Project Description section, the proposed project would include the construction of 203 single-family residential units and associated site improvements. The proposed project analysis was conducted using land use codes *Single Family Housing* and *Recreational City*

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[23] SJVPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

Park. Trip generation rates used in CalEEMod for the project were based on the traffic study conducted for the proposed project, which identifies that the proposed project would generate approximately 1,914 average daily trips.[24] In addition, consistent with SJVAPCD Rule 4901,[25] this analysis assumes that the proposed project would not include any wood burning (or natural gas) fireplaces. Where project-specific data were not available, default assumptions (e.g., energy usage, water usage, and solid waste generation) from CalEEMod were used to estimate project emissions. CalEEMod output sheets are included in Attachment B.

Energy Use

The analysis focuses on the four sources of energy that are relevant to the proposed project: natural gas, electricity, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amounts of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to that consumed in Fresno County. The electricity and natural gas uses of the proposed project are analyzed on an annual basis. Electricity and natural gas uses were estimated for the project using default energy intensities by land use type in CalEEMod.

Greenhouse Gas Emissions

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term GHG emissions associated with project-related area sources, energy consumption, water conveyance and treatment, and waste generation.

THRESHOLDS OF SIGNIFICANCE

Air Quality

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or State ambient air quality standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

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24 Crawford & Bowen Planning, Inc. 2024. *Fresno Residential Trip Generation.* May.

25 SJVPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

Regional Emissions Thresholds

The SJVAPCD defines emissions thresholds in the GAMAQI, established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. The related impacts are discussed further in the Project Impacts section. The SJVAPCD regional emission thresholds for construction and operation are shown in Table D.

Table D: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (Tons per Year)					
	CO	NO_X	ROG	SO_X	PM_{10}	$PM_{2.5}$
Construction	100	10	10	27	15	15
Operations	100	10	10	27	15	15

Source: *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015).
CO = carbon monoxide
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxides

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the SJVAB, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm
- California State 8-hour CO standard of 9 ppm

Health Risk Thresholds

Both the State and federal governments have established health-based ambient air quality standards (AAQS) for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual health risk exceeds a threshold considered to be a prudent risk management level.

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the SJVAB:

- **MICR:** MICR is the estimated probability of a maximum exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 70 years for adults and 9 years for children in residential locations, 350 days per year. The SJVAPCD's *Update to the District's Risk*

Management Policy to Address the OEHHA Revised Risk Assessment Guidance Document states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 20 in 1 million.[26]

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multi-pathway consideration when applicable. The project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level. The project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

Energy

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse impact related to energy if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Greenhouse Gas Thresholds

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse greenhouse gas emission impact if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Section 15064.4 of the *State CEQA Guidelines* states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the project may increase or reduce GHG emissions as compared to the existing

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[26] SJVAPCD. 2020. *Update to the District's Risk Management Policy to Address the OEHHA Revised Risk Assessment Guidance Document.* Website: https://ww2.valleyair.org/media/0shm0mlk/apr-1906.pdf#RiskManagement (accessed December 2024).

environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

In the absence of any City or SJVAPCD specific guidelines or thresholds, this analysis evaluates the proposed project for consistency with the Bay Area Air Quality Management District (BAAQMD) *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (Justification Report).[27]

In April 2022, the BAAQMD adopted the Justification Report[28] document, which identifies applicable GHG significance thresholds. These thresholds establish whether a project would be consistent with California's efforts to meet long-term climate goals, including achieving carbon neutrality by 2045. If a project is designed and built to incorporate design elements related to natural gas, energy, VMT, and EVs, then it would contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project would not make a cumulatively considerable contribution to global climate change.

The Justification Report provides substantial evidence supporting the use of their thresholds for projects throughout California because the thresholds are applicable to meeting the State's established GHG reduction goals. In the absence of any City or SJVAPCD specific guidelines or thresholds, this analysis evaluates the proposed project for consistency with the identified project design elements as the applicable thresholds of significance to establish if the proposed project is achieving its "fair share" of emission reductions to support long-term State goals for GHG emissions and carbon neutrality.

According to the Justification Report, a project would have a less than significant impact related to GHG emissions if it would include the following project design elements:[29]

1. Buildings

    a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

    b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

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[27] Bay Area Air Quality Management District (BAAQMD). 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. April.

[28] Ibid.

[29] Ibid.

2. Transportation

    a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:

        1. Residential projects: 15 percent below the existing VMT per capita
        2. Office projects: 15 percent below the existing VMT per employee
        3. Retail projects: no net increase in existing VMT

    b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

The City of Fresno adopted *CEQA Guidelines for Vehicle Miles Traveled Thresholds* (VMT Guidelines)[30] that identify specific screening criteria for projects, as well as establishing City thresholds as 14.1 VMT per capita threshold for residential land uses and a 22.3 VMT per employee threshold for employee-based land uses. The screening criteria included in the VMT Guidelines are utilized in this analysis.

These project design elements are utilized in the following analysis as the thresholds of significance to evaluate the project's potential GHG emissions impact, given the absence of City or SJVAPCD specified thresholds. The proposed project is also evaluated for consistency with the CARB 2022 Scoping Plan and the Fresno COG RTP/SCS.[31]

PROJECT IMPACTS

This section identifies the air quality, GHG, and energy impacts associated with implementation of the proposed project.

Air Quality

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed land uses.

Consistency with Applicable Air Quality Plans

The proposed project is in a region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air

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30 City of Fresno. 2020. *CEQA Guidelines for Vehicle Miles Traveled Thresholds*. Website: https://www.fresno.gov/wp-content/uploads/2023/03/CEQA-Guidelines-for-Vehicle-Miles-Traveled-Final-Adopted-Version.pdf (accessed November 2024).

31 Fresno COG. 2022. Regional Transportation Plan and Sustainable Communities Strategy. Website: https://www.fresnocog.org/project/regional-transportation-plan/ (accessed November 2024).

quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD adopted the *2022 Plan for the 2015 8-Hour Ozone Standard* in December 2022 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.[32]

To ensure the SJVAB's continued attainment of the USEPA PM_{10} standard, the SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007.[33] The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards in November 2018 to address the USEPA 1997 annual $PM_{2.5}$ standard of 15 µg/m^3 and 24-hour $PM_{2.5}$ standard of 65 µg/m^3, the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m^3, and the 2012 annual $PM_{2.5}$ standard of 12 µg/m^3.[34]

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Therefore, the proposed project would not conflict with or obstruct implementation of SJVAPCD air quality plans.

Criteria Pollutant Analysis

The SJVAB is currently designated nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the SJVAB is in nonattainment for the PM_{10} standard. The SJVAB's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential construction- and operation-related air quality impacts.

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32 SJVAPCD. 2016. *2016 Plan for the 2008 8-Hour Ozone Standard*. June 16. Website: www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm (accessed November 2024).

33 SJVAPCD. 2007. *2007 PM_{10} Maintenance Plan and Request for Redesignation*. Website: www.valleyair.org/Air_Quality_Plans/docs/Maintenance%20Plan10-25-07.pdf (accessed November 2024).

34 SJVAPCD. 2018. *2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards*. November 15. Website: http://valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf (accessed November 2024).

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by excavation activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, reactive organic gases (ROGs), directly emitted $PM_{2.5}$ or PM_{10}, and TACs (e.g., DPMs).

Project construction would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has established Regulation VIII measures for reducing fugitive dust emissions (PM_{10}).[35] With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO_x), NO_x, ROGs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod and are summarized in Table E.

[35] SJVAPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

Table E: Short-Term Regional Construction Emissions

Construction Year	Annual Pollutant Emissions (Tons per Year)					
	ROG	NO_x	CO	SO_X	Total PM_{10}	Total $PM_{2.5}$
2025	0.1	4.5	3.4	<0.1	0.6	0.3
2026	0.1	2.5	2.2	<0.1	0.2	0.1
2027	0.1	2.5	2.1	<0.1	0.2	0.1
2028	1.3	1.6	1.3	<0.1	0.1	0.1
Maximum Emissions	1.3	4.5	3.4	<0.1	0.6	0.3
SJVAPCD Threshold	**10.0**	**10.0**	**100.0**	**27.0**	**15.0**	**15.0**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (2024).
CO = carbon monoxide
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_x = sulfur oxides

As shown in Table E, construction emissions associated with the proposed project would not exceed the SJVAPCD's thresholds for ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during construction.[36] Implementation of Regulatory Compliance Measure (RCM) AIR-1 would ensure that the proposed project complies with Regulation VIII.

RCM AIR-1 Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM_{10} Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, that are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant or covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.

[36] SJVAPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/ suppressant.

Construction emissions associated with the proposed project would be less than significant with implementation of RCM AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.

Operational Air Quality Impacts. Long-term air pollutant emission impacts associated with the proposed project are those related to mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

Mobile source emissions include ROG and NO_X emissions that contribute to the formation of ozone. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table F provides the proposed project's estimated operational emissions.

The results shown in Table F indicate the proposed project would not exceed the significance criteria for annual ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Table F: Project Operational Emissions

Emission Type	Pollutant Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	Total PM_{10}	Total $PM_{2.5}$
Mobile Sources	1.1	1.0	6.7	<0.1	1.6	0.4
Area Sources	1.8	<0.1	1.0	<0.1	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Total Project Emissions	**2.9**	**1.1**	**8.3**	**<0.1**	**1.6**	**0.4**
SJVAPCD Threshold	10.0	10.0	100.0	27.0	15.0	15.0
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (2024).
Note: Some values may not appear to add correctly due to rounding.
CO = carbon monoxide
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxides

Long-Term Microscale (CO Hot Spot) Analysis. Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at Fresno-Garland station, the closest station to the project site, showed a highest recorded 1-hour concentration of 2.2 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.8 ppm (the State standard is 9 ppm) during the past 3 years. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

As described in the Project Description section, the proposed project is estimated to generate 1,914 average daily trips, including 142 trips during the peak a.m. hour and 191 trips during the peak p.m. hour.[37] Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections after the implementation of mitigation, project-related

[37] Crawford & Bowen Planning, Inc. 2024. *Fresno Residential Trip Generation.* May.

vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. The project site is surrounded primarily by residential and agricultural uses. The closest sensitive receptors to the project site include a single-family home located east of the project site within 135 feet. The nearest worker receptor to the project site is located approximately 2,000 feet southeast of the project site. The nearest school receptor to the project site is located approximately 1,700 feet south of the project site, across North South Armstrong Avenue.

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. Table G, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment as proposed by the project. Model snapshots of the sources are shown in Attachment C.

Table G: Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	11.57	<0.01	0.000
Worker Receptor Risk	<0.01	<0.01	0.000
School Receptor	0.04	<0.01	0.000
SJVAPCD Significance Threshold	**20.0 in one million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: Compiled by LSA (December 2024).
SJVAPCD = San Joaquin Valley Air Pollution Control District

As shown in Table G, the maximum cancer risk for the residential receptor MEI would be 11.57 in one million, which would not exceed the SJVAPCD cancer risk threshold of 20 in one million. The worker receptor risk would be less than 0.01 in 1 million and the school receptor MEI would be 0.04 in 1 million, which would not exceed the SJVAPCD cancer risk thresholds. The total chronic HI would be less than 0.01 all receptors, which is below the threshold of 1.0. In addition, the total acute HI would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

Furthermore, the proposed project would include the construction of a 203-unit, single-family residential development. As identified in Table F, project operational emissions of criteria pollutants would be below SJVAPCD significance thresholds; thus, they are not likely to have a significant impact on sensitive receptors. In addition, the proposed project would be required to implement

District Rule 9510, Indirect Source Review (ISR).[38] Implementation of Rule 9510 would reduce operational emissions of NO_X and PM_{10} by 33.3 percent and 50 percent, respectively. Compliance with SJVAPCD rules would further limit doses and exposures, reducing potential health risk related to gasoline vapors to a level that is not significant. Once the proposed project is constructed, the proposed project would not be a source of substantial emissions and would not result in new sources of TACs. Therefore, the project would not expose sensitive receptors to substantial levels of TACs.

Odors

The SJVAPCD addresses odor criteria within the GAMAQI. The district has not established a rule or standard regarding odor emissions, rather, the district has a nuisance rule: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact."[39]

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed uses are not anticipated to emit any objectionable odors. Any odors in general would be confined mainly to the project site and would readily dissipate. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Naturally Occurring Asbestos

The project is in Fresno County, which is among the counties found to have serpentine and ultramafic rock in their soils.[40] However, according to the California Geological Survey, no such rock has been identified in the project vicinity. When demolition is proposed during construction, the demolition of existing buildings may expose asbestos used in building materials. However, the proposed project would not involve any demolition or renovation as no current development exists on the project site. Therefore, the potential risk for naturally occurring asbestos during project construction is small and would not be significant.

Valley Fever

The project site is surrounded primarily by residential uses. The closest sensitive receptors to the project site include a single-family home located east of the project site within 125 feet. Except under high wind conditions, this distance is sufficient that particulate matter would settle prior to reaching the nearest sensitive receptor. In addition, crosswinds influenced by the adjacent roadways would help dissipate any particulate matter associated with the construction phase of the project. Therefore, any Valley fever spores suspended with the dust would not be anticipated to reach the sensitive receptors. However, during project construction, it is possible that workers could be exposed to Valley fever through fugitive dust. Dust control measures, consistent with SJVAPCD

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38 SJVAPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

39 Ibid.

40 California Department of Conservation (DOC). n.d. California Geological Survey. Asbestos. Website: https://www.conservation.ca.gov/cgs/minerals/mineral-hazards (accessed November 2024).

Regulation VIII,[41] would reduce the exposure to the workers and sensitive receptors. Therefore, dust from the construction of the project is not anticipated to significantly add to the existing exposure of people to Valley fever.

Energy Use

This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

Construction

The anticipated construction schedule assumes that the proposed project would be built in approximately three years. Construction-specific phases were assessed for their energy consumption under each construction sub-phase: grading, site preparation, building construction, paving, and architectural coating activities.

Construction would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from nonrenewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources.

Operation

Energy use associated with the proposed project would consist of natural gas, electricity, and vehicle fuel use associated with project operations.

Table H shows the estimated potential increased electricity, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, and the gasoline and diesel rates are based on the traffic analysis in conjunction with USDOT fuel efficiency data and use the USEPA's fuel economy estimates for 2020 and the California diesel fuel economy estimates for 2021. Energy and Fuel Calculations output sheets are included in Attachment D.

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41 SJVAPCD. 2024. Current District Rules and Regulations. Website: ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations (accessed November 2024).

Table H: Estimated Annual Energy Use of Proposed Project

	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Gasoline (gallons per year)	Diesel (gallons per year)
Proposed Project	1,897,356	0	159,991	122,720

Source: Compiled by LSA (2024).
kBTU = thousand British thermal units
kWh = kilowatt hours

As shown in Table H, the estimated increase in electricity demand associated with the operation of the proposed project would be 1,897,356 kWh per year. Total electricity consumption in Fresno County in 2022 was 8,384,408,687 kWh;[42] therefore, operation of the proposed project would negligibly increase the annual electricity consumption in Fresno County by approximately less than 0.1 percent.

As shown in Table H, there would not be an increase in natural gas use as the project is all electric. Therefore, operation of the proposed project would not increase the annual natural gas consumption in Fresno County.

In addition, the project would result in energy usage associated with motor vehicle gasoline to fuel project-related trips. As shown above in Table H, the proposed project would result in the consumption of 159,991 gallons of gasoline and 122,720 gallons of diesel per year. Based on fuel consumption obtained from EMFAC2021, approximately 337.0 million gallons of gasoline and approximately 154.4 million gallons of diesel will be consumed from vehicle trips in Fresno County in 2028. Therefore, vehicle trips associated with the proposed project would increase the annual fuel use in Fresno County by approximately less than 0.1 percent for gasoline fuel usage and approximately less than 0.1 percent for diesel fuel usage. The proposed project would result in fuel usage that is a small fraction of current annual fuel use in Fresno County, and fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

Furthermore, the proposed project would be constructed using energy efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings.

[42] CEC. 2022. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed December 2024).

PG&E is the private utility that would supply the proposed project's electricity. In 2021, a total of 50 percent of PG&E's delivered electricity came from renewable sources, including solar, wind, geothermal, small hydroelectric, and various forms of bioenergy.[43] PG&E reached California's 2020 renewable energy goal in 2017 and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in SB 100. In addition, PG&E plans to continue to provide reliable service to its customers and upgrade its distribution systems as necessary to meet future demand. As such, the proposed project would not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

Conflict with or Obstruction of a State or Local Plan for Renewable Energy or Energy Efficiency

The CEC recently adopted the 2023 Integrated Energy Policy Report.[44] The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the region's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed project would not lead to new or substantially more severe energy impacts.

Greenhouse Gas Emission Impacts

Generation of Greenhouse Gas Emissions

The following sections describe the proposed project's construction- and operation-related GHG impacts and consistency with applicable GHG reduction plans.

Construction Greenhouse Gas Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder

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43 PG&E. 2021. *Exploring Clean Energy Solutions*. Website: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page?WT.mc_id=Vanity_cleanenergy (accessed December 2024).

44 CEC. 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that the total emissions associated with construction of the proposed project would be approximately 1,562.8 metric tons (MT) of CO_2e. Construction GHG emissions were amortized over the life of the project (assumed to be 30 years) and added to the operational emissions. When annualized over the life of the project, amortized construction emissions would be approximately 52.1 MT CO_2e per year.

Operational Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

GHG emissions for operation of the project were calculated using CalEEMod. Based on the analysis results, summarized in Table I, the proposed project would result in emissions of approximately 2,018.7 MT CO2e per year. These estimated emissions are provided for informational purposes, and the significance of the proposed project is further analyzed below.

Table I: Greenhouse Gas Emissions

Emission Type	Operational Emissions (metric tons per year)			
	Total CO_2	CH_4	N_2O	CO_2e
Mobile Sources	1,684.7	0.1	0.1	1,716
Area Sources	2.5	<0.1	<0.1	2.5
Energy Sources	175.6	<0.1	<0.1	177
Water Sources	6.1	0.3	<0.1	14.7
Waste Sources	16.1	1.6	0.0	56.4
Amortized Construction Emissions				52.1
Total Operational Emissions				**2,018.7**

Source: Compiled by LSA (2024).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

As discussed above, the SJVAPCD has not established a numeric threshold for GHG emissions, and the City does not have a current GHG Reduction Plan. In the absence of any City or SJVAPCD specific guidelines or thresholds, this analysis evaluates the proposed project for consistency with the BAAQMD Justification Report,[45] which identifies project design elements as the applicable thresholds of significance. If a project is designed and built to incorporate design elements related to natural gas, energy, VMT, and EVs, then it would contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project would not make a cumulatively considerable contribution to global climate change.

Per the significance thresholds described above, a less than significant GHG impact would occur if the project were consistent with the identified design standards, as evaluated below.

Natural Gas Usage. A less than significant GHG impact would occur if the project does not include natural gas appliances or natural gas plumbing. The proposed project would not include natural gas. Therefore, the proposed project would be consistent with this design element.

Energy Usage. Under this design criterion, the project must not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*. Energy use consumed by the proposed project would be associated with electricity consumption associated with the project. Energy consumption was estimated for the project using default energy intensities by land use type in the CalEEMod output, which is included in Attachment B.

As shown in Table H above, the estimated potential increase in electricity demand associated with the operation of the proposed project is 1,897,356878,579 kWh per year. Total electricity consumption in Fresno County in 2022 was 8,384,408,687 kWh. Therefore, operation of the proposed project would increase the annual electricity consumption in Fresno County by approximately 0.1 percent.

In addition, the proposed project would be constructed to current Title 24 standards, which would require energy-saving building features. As such, based on this analysis, as required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy and energy efficiency measures into the building design, equipment use, and transportation. As such, the proposed project would be consistent with this design element.

Vehicle Miles Traveled. As discussed above, development that meets a locally adopted SB 743 VMT target would be considered to have a less than significant GHG emissions impact from transportation sources. A project specific VMT analysis was conducted for the project utilizing the VMT Calculator tool developed by the City of Fresno and the project was found to be less than the

[45] BAAQMD. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans*. April.

screening thresholds established by the City to evaluate project consistency with the City's SB 743 VMT significance thresholds.[46] Therefore, the proposed project would be consistent with this project design element.

Electric Vehicle Requirements. The final project design element that the proposed project should include to ensure that it is achieving its "fair share" of GHG emission reductions is compliance with off-street EV requirements in the most recently adopted version of the CALGreen Code Tier 2 measures. The proposed project would include an EV charging station for each home, consistent with CALGreen Tier 2 standards. Therefore, the proposed project would be consistent with this design element.

The proposed project would be consistent with the project design elements related to natural gas, energy, VMT, and EVs. Therefore, the proposed project would be consistent with the GHG emission thresholds identified for this project. As such, the proposed project would not result in the generation of GHG emissions that would have a significant impact on the environment.

Consistency with Greenhouse Gas Reduction Plans

The proposed project is further analyzed for consistency with the City of Fresno General Plan policies, the 2022 Scoping Plan, and Fresno COG's RTP/SCS.

City of Fresno General Plan. The City's General Plan, including the Resources Conservation and Resilience Element as well as land use policies, includes objectives and policies that work to achieve and maintain reductions in GHG emissions and all strategies that reduce the causes of climate change.[47] A consistency analysis with the applicable policies from the Resources Conservation and Resilience Element and other relevant General Plan policies and objectives is presented below.

The proposed project would be consistent with policies RC-5-a, RC-5-b, RC-5-c, RC-5-d, RC-5-e, RC-5-g, RC 7-a, RC 7-h, and RC 11-a. The proposed project would construct a 203-unit single-family development in a vacant lot and would provide infill development to an already established neighborhood in the City. Thus, the project would be consistent with land use policies and strategies established in the General Plan including UF 12, UF 12-a, and RC 2-a. In addition, the proposed project would comply with the 2022 CALGreen Code building measures and Title 24 standards for solar and EVs. Thus, the proposed project would incorporate the appropriate energy and water conservation standards, facilitate incentives for the incorporation of bicycle and pedestrian amenities, and would encourage the use of alternative modes of transportation.

The proposed project would also provide complete streets for all internal roadway improvements, which would increase connectivity with the surrounding land uses and neighborhoods. Therefore, the proposed project would also be consistent with the applicable strategies under policy RC-5-c and

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46 DKB. 2024. City of Fresno- Uban Form VMT Calculator. Received via email correspondence from Emily Bowen, dated December 4, 2024.

47 City of Fresno. 2014. *Fresno General Plan.* December 18. Website: https://www.fresno.gov/wp-content/uploads/2023/03/upload_temp_Consolidated-GP-10-13-2022_compressed.pdf (accessed November 2024).

policies related to energy conservation, land use planning, and transportation demand outlined in the General Plan such as MT 4, MT 4-c, MT 5, MT 6, MT 8, and MT 8-b. Moreover, the proposed project would provide recycling canisters and would implement techniques for solid waste segregation, disposal, and reduction, consistent with the CalRecycle Waste Diversion and Recycling Mandate. Therefore, the proposed project would be consistent with waste diversion and recycling strategies under RC 11-a.

As further discussed in the following section, the proposed project would also be consistent with the goals outlined in the Fresno COG 2022 RTP/SCS[48] and would not interfere with the Fresno COG's ability to achieve the region's GHG reductions. Therefore, the project would also be consistent with policy RC-5-d. Furthermore, PG&E is the private utility that would supply the proposed project's electricity. Future residents would have the option to join an energy savings program, which would help educate homeowners on green energy. Therefore, the proposed project would be consistent with policy RC-5-f. The analysis presented is conducted with the latest CalEEMod version, consistent with policy RC-5-g.

Through consistency with supporting and implementing the General Plan objectives and policies, the proposed project is consistent with and would not conflict with or obstruct the implementation of the City's General Plan.

2022 Scoping Plan. The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan,[49] EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[50] to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others and is designed to meet the State's long-term

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48 Fresno COG. 2022. Regional Transportation Plan and Sustainable Communities Strategy. Website: https://www.fresnocog.org/project/regional-transportation-plan/ (accessed November 2024).

49 CARB. 2022. *2022 Scoping Plan Update*. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed December 2024).

50 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed in the Energy section of this document, the proposed project would not result in the wasteful or inefficient use of energy. The proposed project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The project would comply with the CALGreen Code, which includes a variety of different measures, including the reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley II (LEV III) Advanced Clean Cars Program will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to and from the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Fresno COG's 2022 RTP/SCS. The Fresno COG RTP/SCS reflects transportation planning for Fresno County through 2046.[51] The vision, goals, and policies in the 2022 RTP are intended to serve as the foundation for both short and long-term planning and guide implementation activities. The core vision in the 2022 RTP is to create a region of diverse, safe, resilient, and accessible transportation options that improve the quality of life for all residents by fostering sustainability, equity, a vibrant economy, clean air, and healthy communities. The 2022 RTP contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The actions in the 2022 RTP address all transportation modes (e.g., highways, local streets and roads, mass transportation, rail, bicycle, and aviation facilities and services) and consists of short and long-term activities that address regional transportation needs. While the actions are organized by the five key policy areas, many of them support multiple goals and policies. Some actions are intended to support the SCS and reduce GHG emissions directly, while others are focused on the RTP's broader goals. The 2022 RTP does not require that local General Plans, Specific Plans, or zoning be consistent with the 2022 RTP, but provides incentives for consistency for governments and developers.

The proposed project would not interfere with the Fresno COG's ability to achieve the region's GHG reductions. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206, and it would not conflict with the 2022 RTP targets because those targets were established and are applicable on a regional level. While the proposed project site would require rezoning for the proposed land use, the proposed project would result in a baseline VMT well above the per-capita threshold established by the City to support the region achieving the State's GHG reductions included under SB 743. Based on the average number of residents per household in Fresno of 2.96,[52] the proposed project would result in an estimated population increase of approximately 601 residents, well within the estimated population growth of 647,980 residents in 2030 as included in the 2022 RTP. Therefore, it is anticipated that implementation of the proposed project would not interfere with Fresno COG's ability to implement the regional strategies outlined in the 2022 RTP. The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 RTP and would be consistent with applicable State plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

CONCLUSION

Based on the analysis presented above, with implementation of RCM AIR-1, construction and operational activities associated with the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. In addition, the proposed project is not expected to produce significant emissions that would affect nearby sensitive

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51 Fresno COG. 2022. Regional Transportation Plan and Sustainable Communities Strategy. Website: https://www.fresnocog.org/project/regional-transportation-plan/ (accessed November 2024).

52 United States Census Bureau. 2020. Census Data. Fresno City. Residential Population. Household and Family. Website: https://data.census.gov/table/ACSST1Y2023.S1101?q=residents%20per%20household&g=160XX00US0627000 (accessed December 2024).

receptors. The proposed project would also not result in objectionable odors affecting a substantial number of people.

The proposed project would also not result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency. The project would not result in the emission of substantial GHG emissions. Additionally, the project would not conflict with local or regional plans and policies for GHG emission reductions, nor with the State's GHG emissions reductions objectives embodied in the 2022 Scoping Plan. Therefore, the proposed project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable.

Attachments: A: Figures
B: CalEEMod Outputs
C: HRA Model Snapshots and Output
D: Energy and Fuel Calculations and Output

ATTACHMENTS

For additional documentation, click or copy the link below to access Figures and Attachments:

https://cityoffresno.sharefile.com/public/share/web-sf8deb80d8abe4530a6d625adf08b7cd3

H. T. HARVEY & ASSOCIATES
Ecological Consultants

April 15, 2021

Zach Gomes, Vice President of Operations
KB Home Central California
744 P Street, Third Floor, Suite 321
Fresno, CA 93721

Subject: Simonian Project, Fresno, California—Biological Due Diligence

Dear Mr. Gomes:

In support of the Simonian Project, H. T. Harvey & Associates conducted a site survey for an approximately 38.8-acre residential development identified as APN 316-160-16S, 17S, 43S, 59S and 61S located on the west side of south Armstrong Ave, between the San Joaquin Valley Railroad and East Pitt Ave, in the Fresno County, California. This survey was requested by KB Home Central California in due diligence to assess whether any species federally or state listed as threatened, endangered, or candidate or any state species of special concern (collectively referred to as special-status species) occur or are likely to occur on the project site.

A qualified H. T. Harvey & Associates ecologist performed a biological survey of the project site on March 25, 2021, to determine the potential presence of special-status plant and wildlife species. The ecologist surveyed the entire site by walking east-west transects spaced approximately 100 feet (ft.) apart. This provided full visual coverage of the project site for assessing habitat composition and species presence. In addition, the ecologist visually surveyed all areas within a quarter-mile of project site boundaries for signs of current or prior nesting (e.g., existing nests) by raptors species.

The site consists of loose, recently-disked soil, except for two residence located on the property. Approximately 11 acres in the southwest corner and along the central part of the southern border have been disked since the spring 2020 growing season and are sparsely vegetated. The remainder of the site also shows signs of recent disking, but currently is approximately 95% covered in vegetation, with the remainder consisting of bare soil. Garbage is relatively abundant, especially in the northwest corner. Overall, the site conditions are currently unsuitable for special-status plant species. Vegetation on the site is comprised mostly of grasses, but some low-growing forbs are also present. Plant height is currently low, with grasses and forbs 1-6 inches tall. The site can be characterized as annual grassland in the process of re-establishment. As a result of past ground disturbance, the project site is highly suitable for nonnative invasive plants. We understand that all vegetation in construction areas will be cleared and that the use of site-specific best management practices will minimize the dispersal of nonnative invasive plants.

The project site is relatively far from recent records of special-status species. A query of California Natural Diversity Database (CNDDB 2021[1]) records occurring within 5 miles (mi) of the project site revealed seven special-status species occurrences, two of which are for Swainson's hawk (*Buteo swainsoni*). The site falls within the extent of a Swainson's hawk occurrence mapped over Fresno that has not been reconfirmed since 1956. The other Swainson's hawk occurrence is based on observations from 2016 and is located 3.5 miles (mi.) southwest of the project site. In addition, there are two occurrences of burrowing owls (*Athene cunicularia*), one located 4.2 mi. to the north at Fresno Yosemite International Airport and another located 4.0 mi. to the northwest in Clovis. Also, double-crested cormorant (*Phalacrocorax auritus*) was documented at a collection of ponds 4.8 mi. to the north-northwest in 2012. The remaining records (for least Bell's vireo [*Vireo bellii pusillus*] and western yellow-billed cuckoo [*Coccyzus americanus occidentalis*]) are both over 3.5 mi. away from the site and have not been reconfirmed within the last 108 years.

The annual grassland in the Project area potentially provides habitat for common, rural and urban-adapted wildlife species, such as ground-foraging and -nesting birds, California ground squirrels (*Otospermophilus beecheyi*), pocket gophers (*Thomomys bottae*), and desert cottontail (*Sylvilagus audobonii*). Wildlife directly observed on the project site consisted of common bird species and the remains of two California ground squirrels. Several individuals of each of four common bird species (mourning dove [*Zenaida macroura*], California scrub-jay [*Aphelocoma californica*], dark-eyed junco [*Junco hyemalis*], and European starling [*Sturnus vulgaris*]) were observed perched on and flying around the line of trees on the southern border of the Project site.

Numerous small mammal burrows occur on the Project site. Several active pocket gopher burrows were found scattered across the site. The site also currently supports a large population of California ground squirrels. Their burrows were abundant at the edge and along the slopes of the detention pond and were moderately abundant throughout the rest of the site. The California ground squirrel remains were located within 1 ft. of burrows of this species and represent predation and/or scavenging, perhaps by red-tailed hawks or other raptors. No signs of mammalian predators (e.g. coyotes [*Canis latrans*]) were observed. All animal species observed directly on or near (i.e., within 0.25 mi.) the project site are listed in Appendix A.

Many of the California ground squirrel burrows are large (about 3-5 inches in diameter), with large, unvegetated aprons, and thus are potentially suitable for use by burrowing owls, which is listed as Species of Special Concern by the State of California. No burrowing owls or signs of this species (e.g. pellets, feathers, or wash) were observed. However, the survey was conducted during conditions of light to moderately heavy rain in the middle of a rain event lasting several days. Any owls present would have been underground in their burrows, and their wash would have been rinsed away. The occurrence of potentially suitable burrows suggests that burrowing owls might be present.

No direct evidence of special-status animal or plant species was observed and the site provides little or no value to sensitive plant and wildlife species with the exception of burrowing owl. The presence of burrowing owls on the

[1] [CNDDB] California Natural Diversity Database. 2021. Results of electronic records search. Rarefind 5. California Department of Fish and Wildlife. <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed January 2021.

property could constrain the development of the parcel or result in project delays. Burrowing owls, and their nests are protected under state laws and regulations, including the California Fish and Game Code Section 3503.5.

Based on our understanding of burrowing owl distribution in the Central Valley, burrowing owls are unlikely to occupy this site. The size of the parcel and the adjacent similar parcel west combined with the number of suitable burrows on the site, however, warrant a cautious approach. We recommend implementation of the measures included in the Staff Report on Burrowing Owl Mitigation (CDFG 2012[2]) including surveys of the project site.

In addition to implementation of the measures included in the Staff Report on Burrowing Owl Mitigation (CDFG 2012, if construction activities occur during the avian nesting season (generally, February 1 through August 31), preconstruction surveys for nesting birds by a qualified ornithologist should be conducted to ensure that no active nests are disturbed during construction. The survey should be conducted no more than 7 days before construction activities begin. During this survey, all potential nesting areas should be inspected in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist should determine the extent of a construction-free buffer zone to be established around the nest (typically, 300 ft. for raptors and 25–100 ft. for other species) to ensure that no active nests of species protected by the California Fish and Game Code would be disturbed during project construction.

Please feel free to contact me at 559.960.0849 or jseay@harveyecology.com regarding these survey results.

Sincerely,

Jeff Seay
Senior Wildlife Ecologist

[2] [CDFG] California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March 7.

Appendix A. Animal Species Observed On or Within 0.25 Mile of the Simonian Project Site

Common Name	Scientific Name
Birds	
Mourning dove	*Zenaida macroura*
Red-tailed hawk	*Buteo jamaicensis*
California scrub-jay	*Aphelocoma californica*
Unidentified swallow species	Family Hirundinidae
Dark-eyed junco	*Junco hyemalis*
European starling	*Sturnus vulgaris*
Mammals	
California ground squirrel	*Otospermophilus beecheyi*

Note: None of the observed species are special-status species.

A
PHASE I CULTURAL RESOURCE SURVEY, SW CORNER OF ARMSTRONG AVENUE AND THE SAN JOAQUIN VALLEY RAILROAD RIGHT-OF-WAY, TRACT 6376, CITY OF FRESNO, CALIFORNIA

Submitted to:
Crawford and Bowen Planning
113 N. Church Street #302
Visalia, California 93291

Keywords:
Malaga 7.5' Quadrangle, City of Fresno,
California Environmental Quality Act

Submitted by:
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November 2024

Management Summary

At the request of Crawford and Bowen Planning, a Phase I Cultural Resource Survey was conducted at the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad Right-of-Way, in the City of Fresno, California for Tract 7376. The Phase I Cultural Resource Survey consisted of a cultural resource survey and a cultural resource record search.

No cultural resources were identified; however, three homes were located on the property as recently as 2022, on the west side of Armstrong Avenue. No remains from these three homes survive demolition, except for a non-historic concrete block retaining wall along Armstrong Avenue. No further work is required. If archaeological resources are encountered during the course of construction, a qualified archaeologist should be consulted for further evaluation.

If human remains or potential human remains are observed during construction, work in the vicinity of the remains will cease, and the remains will be treated in accordance with the provisions of State Health and Safety Code Section 7050.5. The protection of human remains follows California Public Resources Codes, Sections 5097.94, 5097.98, and 5097.99.

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1.0 Introduction

At the request of Crawford and Bowen Planning, *Hudlow Cultural Resource Associates* conducted a Phase I Cultural Resource Survey in accordance with the California Environmental Quality Act for a proposed single-family residential development. The property, Tract 7376, is located at the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad right-of-way in the City of Fresno, California. This parcel totals 40 acres. The Phase I Cultural Resource Survey consisted of a pedestrian survey and a cultural resource record search. This project is being undertaken in accordance with the California Environmental Quality Act (CEQA) with the City of Fresno responsible as Lead Agency to implement CEQA. The Phase I Cultural Resource Survey consisted of a pedestrian survey and a cultural resource record search.

CEQA is a California statute passed in 1970. Governor Ronald Reagan signed it into law, after the federal government passed the National Environmental Policy Act (NEPA). CEQA institutes a statewide policy of environmental protection. CEQA does not directly regulate land uses, but instead requires state and local agencies within California to follow a protocol of analysis and public disclosure of environmental impacts of proposed projects and, in a departure from NEPA, adopt all feasible measures to mitigate those impacts. CEQA makes environmental protection a mandatory part of every California state and local agency's decision making process.

CEQA was signed into law in 1970, in a time of increasing public concern for the environment. The statute required that for any public project, the government must conduct an environmental study to examine what impacts the project might have on things like air/water quality, noise, transportation, biological resources, or cultural resources, and generate an Environmental Impact Report (EIR) documenting the impacts as well as any potential and planned mitigations. In 1972, state courts interpreted a public project as a development project that needed government approval.

In 1969, NEPA passed into law. It is similar to CEQA in that both statutes set forth a policy of environmental protection, and a protocol by which all agencies in their respective jurisdictions make environmental protection part of their decision making process. NEPA is narrower in scope than CEQA. NEPA applies only to projects receiving federal funding or approval by federal agencies, while CEQA applies to projects receiving any form of state or local approval, permit, or oversight. Thus, development projects in California funded only by private sources and not requiring approval by a federal agency would be exempt from NEPA; but would likely be subject to CEQA.

The CEQA statute, California Public Resources Code § 21000 et seq., codifies a statewide policy of environmental protection. According to CEQA, state and local agencies must give consideration to environmental protection in regulating public and private activities and should not approve projects for which feasible and environmentally superior mitigation measures or alternatives exist.

CEQA mandates actions that all state and local agencies must do to advance this policy. Specifically, for any project under CEQA's jurisdiction with potentially significant

environmental impacts, agencies must identify mitigation measures and alternatives by preparing an Environmental Impact Report and must approve projects with feasible mitigation measures and the environmentally superior alternative. The California Natural Resources Agency promulgates the CEQA Guidelines, California Code of Regulations Title 14 § 15000 et seq., which detail the protocol by which state and local agencies must comply with CEQA requirements. CEQA originally applied to only public projects, but California Supreme Court interpretation of the statute, as well as later revisions, expanded CEQA's jurisdiction to nearly all projects within California, including those proposed by private businesses and individuals. § 21002.1 states "Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." For private projects, CEQA applies when a discretionary government permit or other entitlement for use is necessary.

For purposes of this section, the term "historical resources" shall include the following: **(1)** A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 14 CCR, Section 4850 et seq.). **(2)** A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant. **(3)** Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 14 CCR, Section 4852) including the following:

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

(B) Is associated with the lives of persons important in our past;

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

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

The lead agency, the City of Fresno, is responsible for conducting the CEQA review and has final approval of the project. The City of Fresno is also responsible for coordinating with the project applicant, public, and associated agencies during the CEQA process.

2.0 Project Location

The project area is in the City of Fresno. This project area at the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad Right-of Way. The project area is the NE ¼ of the NW ¼ of Section 15, T.14S., R.21E., Mount Diablo Baseline and Meridian, as displayed on the United States Geological Survey (USGS) Malaga 7.5-minute quadrangle map (Figure 1). The proposed single-family development is located at the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad Right-of Way in the City of Fresno, California.

3.0 Record Search

A record search of the project area and the environs within one half-mile was conducted at the Southern San Joaquin Information Center. Information Center staff conducted the record search, RS# 24-299, on July 8, 2024. The record search revealed that one cultural resource survey has been conducted within one half-mile of the project area. No cultural resource surveys have previously addressed the parcel in question. No cultural resources have been located on the current project area; however, one cultural resource has been recorded within one half-mile of the current project area, the former Southern Pacific Railroad line, which is operated by the San Joaquin Valley Railroad, which is directly on the project's northern boundary.

4.0 Environmental Background

The project area is located at an elevation of 320 feet above mean sea level in the Great Central Valley, which is composed of two valleys-the Sacramento Valley and the San Joaquin Valley. The parcel is located south of Fancher Creek, a branch of the Kings River. The former agricultural field is now fallow and was covered in alfalfa straw. No native vegetation survives (Figures 2 and 3).

5.0 Prehistoric Archaeological Context

A limited amount of archaeological research has been conducted in the southern San Joaquin Valley. Thus, consensus on a generally agreed upon regional cultural chronology has yet to be developed. Most cultural sequences can be summarized into several distinct time periods: Early, Middle, and Late. Sequences differ in their inclusion of various "horizons," "technologies," or "stages." A prehistoric archaeological summary of the southern San Joaquin Valley is available in Moratto (Moratto 1984).

Despite the preoccupation with chronological issues in most of the previous research, most suggested chronological sequences are borrowed from other regions with minor modifications based on sparse local data.

The following chronology is based on Parr and Osborne's Paleo-Indian, Proto-Archaic, Archaic, Post-Archaic periods (Parr and Osborne 1992:44-47). Most existing chronologies focus on stylistic changes of time-sensitive artifacts such as projectile points and beads rather than addressing the socioeconomic factors, which produced the myriad variations. In doing so,

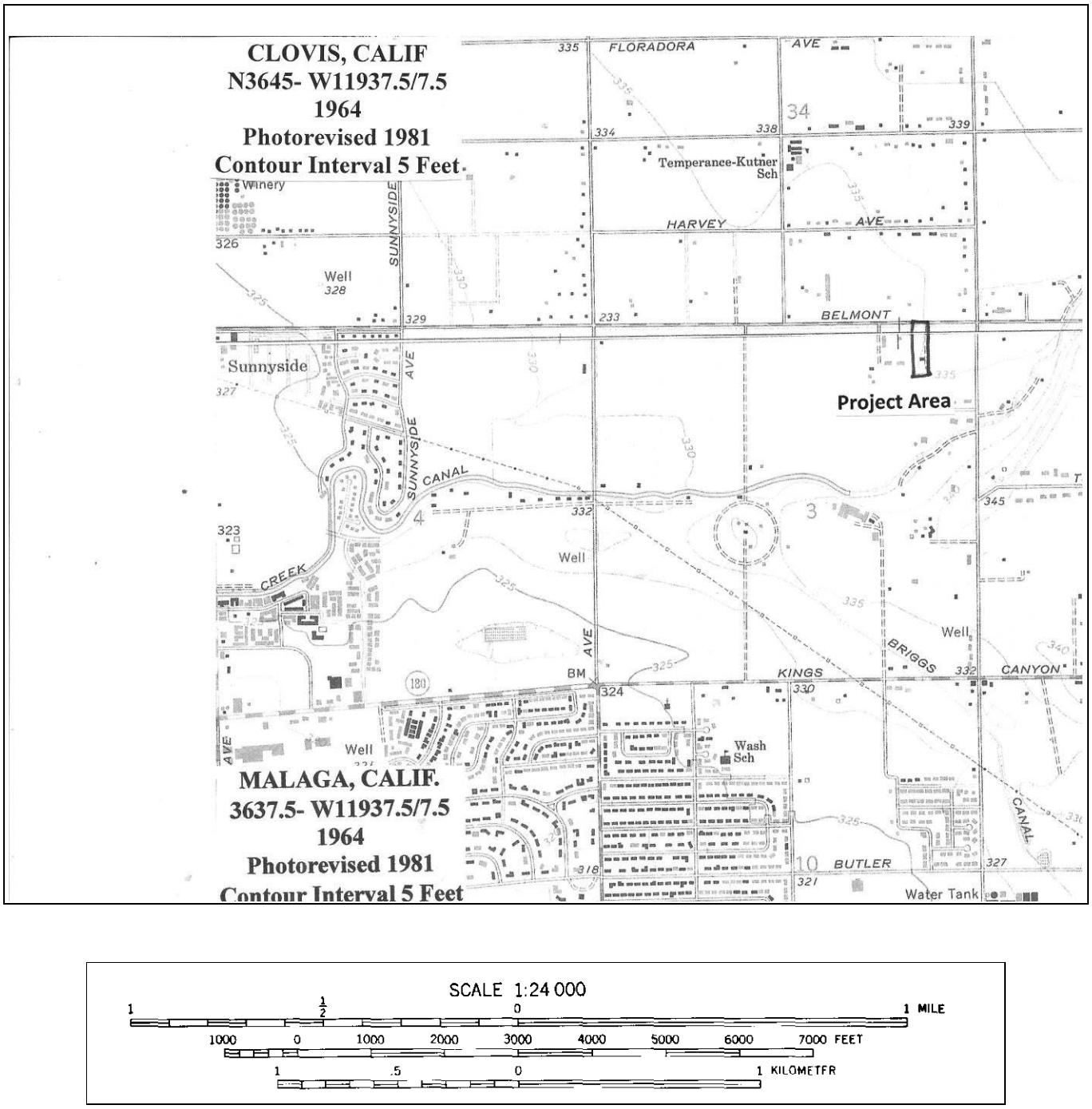


Figure 1
Project Area Location Map

these attempts have encountered similar difficulties. These cultural changes are implied as environmentally determined, rather than economically driven.

Paleo-Indians, whom roamed the region approximately 12,000 years ago, were highly mobile individuals. Their subsistence is assumed to have been primarily big game, which was more plentiful 12,000 years ago than in the late twentieth century. However, in the Great Basin and California, Paleo people were also foragers who exploited a wide range of resources. Berries, seeds, and small game were also consumed. Their technology was portable, including manos (Parr and Osborne 1992:44). The paleo period is characterized by fluted Clovis and Folsom points, which have been identified throughout North America. The Tulare Lake region in Kings County has yielded several Paleo-Indian sites, which have included fluted points, scrapers, chipped crescents, and Lake Mojave-type points (Morratto 1984:81-2).

The Proto-Archaic period, which dates from approximately 11,000 to 8,000 years ago, was characterized by a reduction in mobility and conversely an increase in sedentism. This period is classified as the Western Pluvial Lake Tradition or the Proto-Archaic, of which the San Dieguito complex is a major aspect (Moratto 1984: 90-99; Warren 1967). An archaeological site along Buena Vista Lake in southwestern Kern County displays a similar assemblage to the San Dieguito type site. Claude Warren proposes that a majority of Proto-Archaic southern California could be culturally classified as the San Dieguito Complex (Warren 1967). The Buena Vista Lake site yielded manos, millingstones, large stemmed and foliate points, a mortar, and red ochre. During this period, subsistence patterns began to change. Hunting focused on smaller game and plant collecting became more integral. Large stemmed, lancelote (foliate) projectile points represents lithic technology. Millingstones become more prevalent. The increased sedentism possibly began to create regional stylistic and cultural differences not evident in the paleo period.

The Archaic period persisted in California for the next 4000 years. In 1959, Warren and McKusiak proposed a three-phase chronological sequence based on a small sample of burial data for the Archaic period (Moratto 1984:189; Parr and Osborne 1992:47). It is distinguished by increased sedentism and extensive seed and plant exploitation. Millingstones, shaped through use, were abundant. Bedrock manos and metates were the most prevalent types of millingstones (Parr and Osborne 1992:45). The central valley began to develop distinct cultural variations, which can be distinguished by different regions throughout the valley, including Kern County.

In the Post-Archaic period enormous cultural variations began manifesting themselves throughout the entire San Joaquin Valley. This period extends into the contact period in the seventeenth, eighteenth and nineteenth centuries. Sedentary village life was emblematic of the Post-Archaic period, although hunting and gathering continued as the primary subsistence strategy. Agriculture was absent in California, partially due to the dense, predictable, and easily exploitable natural resources. The ancestral Yokuts have possibly been in the valley for the last three thousand years, and by the eighteenth century were the largest pre-contact population, approximately 40,000 individuals, in California (Moratto 1984).

Figure 2
Project Area, View towards the Southeast

Figure 3
Project Area, View towards the Northwest

6.0 Ethnographic Background

The Yokuts are a Penutian-speaking, non-political cultural group. Penutian speakers inhabit the San Joaquin Valley, the Bay Area, and the Central Sierra Nevada Mountains. The Yokuts are split into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts.

The southern San Joaquin Valley in the Fresno area was home to the Yokuts tribelet, Choinumne. The tribelet had approximately 500 people, had a special name for themselves, and spoke a unique dialect of Yokuts. Land was owned collectively, and every group member enjoyed the right to utilize food resources. The Choinumne occupied the west bank of the Kings River, south of Dry Creek (Latta 1999).

The Southern Valley Yokuts had a mixed economy emphasizing fishing, hunting, fowling, and collecting shellfish, roots, and seeds. Fish were the most prevalent resource and was a productive activity throughout the entire year. Fish were caught in many different manners, including nets, conical basket traps, catching with bare hands, shooting with bows and arrows, and stunning fish with mild floral toxins. Geese, ducks, mud hens and other waterfowl were caught in snares, long-handled nets, stuffed decoys, and brushing brush to trick the birds to fly low into waiting hunters. Mussels were gathered and steamed on beds of tule. Turtles and dogs were consumed (Wallace 1978:449-450).

Wild seeds and roots provided a large portion of the Yokuts' diet. Tule seeds, grass seeds, fiddleneck, alfilaria were also consumed. Acorns, the staple crop for many California native cultures, were not common in the San Joaquin Valley. Acorns were traded into the area. Land mammals, such as rabbits, ground squirrels, antelope and tule elk, were not taken often (Wallace 1978:450).

The Yokuts occupied permanent structures in permanent villages for most of the year. During the late and early summer, families left for several months to gather seeds and plant foods, shifting camp locations when changing crops. Several different types of fiber-covered structures were common in Yokuts settlements. The largest was a communal tule mat-covered, wedge-shaped structure, which could house upward of ten individuals. These structures were established in a row, with the village chief's house in the middle and his messenger's houses were located at the ends of the house row. Dance houses and assembly buildings were located outside the village living area (Nabokov and Easton 1989:301).

The Yokuts also built smaller, oval, single-family tule dwellings. These houses were covered with tall mohya stalks or with sewn tule mats. Bent-pole ribs that met a ridgepole held by two crotched poles framed these small houses. The Yokuts also built a cone-shaped dwelling, which was framed with poles tied together with a hoop and then covered with tule or grass. These cone-shaped dwellings were large enough to contain multiple fireplaces (Nabokov and Easton 1989:301). Other structures included mat-covered granaries for storing food supplies, and a dirt-covered, communally owned sweathouse.

Clothing was minimal, men wore a breechclout or were naked. Women wore a narrow-fringed apron. Cold temperatures brought out rabbitskin or mud hen blankets. Moccasins were worn in certain places; however, most people went barefoot. Men wore no

head coverings, but women wore basketry caps when they carried burden baskets on their heads. Hair was worn long. Women wore tattoos from the corners of the mouth to the chin; both men and women had ear and nose piercings. Bone, wood or shell ornaments were inserted (Wallace 1978:450-451).

Tule dominated the Yokut's material culture. It was used for many purposes, including sleeping mats, wall coverings, cradles, and basketry. Ceramics are uncommon to Yokuts culture as is true throughout most California native cultures. Basketry was common to Yokuts culture. Yokuts made cooking containers, conical burden baskets, flat winnowing trays, seed beaters, and necked water bottles. Yokuts also manufactured wooden digging sticks, fire drills, mush stirrers, and sinew-backed bows. Knives, projectile points, and scraping tools were chipped from imported lithic materials including obsidian, chert, and chalcedony. Stone mortars and pestles were secured in trade. Cordage was manufactured from milkweed fibers, animal skins were tanned, and awls were made from bone. Marine shells, particularly olivella shells, were used in the manufacture of money and articles of personal adornment. Shells were acquired from the Chumash along the coast (Wallace 1978:451-453).

The basic social and economic unit was the nuclear family. Lineages were organized along patrilineal lines. Yokuts fathers transmitted totems, particular to each paternal lineage, to each of his children. The totem was an animal or bird that no member would kill or eat and that was dreamed of and prayed to. The mother's totem was not passed to her offspring; but was treated with respect. Families sharing the same totem formed an exogamous lineage. The lineage had no formal leader nor did it own land. The lineage was a mechanism for transmitting offices and performing ceremonial functions. The lineages formed two moieties, East and West, which consisted of several different lineages. Moieties were customarily exogamous. Children followed the paternal moiety. Certain official positions within the villages were associated with certain totems. The most important was the Eagle lineage from which the village chief was appointed. A member of the Dove lineage acted as the chief's assistant. He supervised food distribution and gave commands during ceremonies. Another hereditary position was common to the Magpie lineage, was that of spokesman or crier.

7.0 Historical Overview

Fresno County was settled in the 1850s, soon after California joined the United States after the passage of the Compromise of 1850. The Compromise of 1850 allowed California to join the Union as a free state even though a major portion of the state lied beneath the Missouri Compromise line; and was potentially subject to southern settlement and slavery. Americans had long been visiting and working in California prior to the admission of California into the Union.

The Spanish moving north from Baja California into Alta California began European settlement of California 1n 1769. Father Junipero Serra, a Franciscan friar founded Mission San Diego de Alcala, beginning California active European settlement. However, Spanish mission efforts were focused on California's coastal regions. Spanish exploration of the San Joaquin Valley region begins in the 1770s. In 1772, Pedro Fages arrived in the San Joaquin Valley searching for army deserters. Father Francisco Garces, a Franciscan priest, soon visited the vicinity in 1776. The Spanish empire collapsed in 1820, all of Spain's former Central and South American colonies became independent nations. As a result, California became Mexican

territory. California stayed in Mexican hands until the Mexican-American War. Mexican California remained a coastal society with little interest in settling in California's hot, dry interior valleys.

American exploration of the San Joaquin Valley begins in the 1820s with Jedediah Smith, Kit Carson, and Joseph Walker looking for commercial opportunities. The United States government began exploring California in the 1830s. Soon, the Americans will be searching for intercontinental railroad routes to link the eastern and western halves of the continent.

The defeat of the Mexicans during the Mexican-American War and the subsequent discovery of gold will drastically alter the complicated political realities of the west. The Mexican-American War was ostensible fought to settle a boundary dispute with the Mexicans over the western boundary of the newly-annexed state of Texas, which had fought a successful rebellion against the Mexican Army in the mid 1830s. The Republic of Texas was an independent country for nine years until Texas was annexed by the United States in 1845. One major outcome of the Mexican-American War was that Mexico rescinded its claims to much of the American southwest. In 1848 these territories were folded into the United States, including California.

In January 1848, the discovery of gold in Coloma, California changed the settlement of California, forever. In the summer of 1848, when the gold strike was publicly announced, the overnight settlement of California began. The Mexican population of California was small and limited to the coasts and a few of southern California's interior valleys. A sizable native population settled the remainder of California; Fresno County was Yokuts territory. The Gold Rush tipped the balance of native communities throughout California, as many of California's natives were decimated.

In 1856, Fresno County was created from the northern half of Tulare County. The first county seat was at Millerton. Anthony Easterby established a wheat farm in 1867 in what would become Fresno. By 1871, he created an irrigation system and in 1872, the Central Pacific Railroad established a nearby rail stop. By 1885, Fresno had grown to the point that it incorporated as a city.

While farmers were settling the valley, cattle ranchers, timber mill operators, and resort operators settled the heavily timbered highlands of the southern Sierra Mountains. Road builders, such as John Jordan, opened the mountains, following native (Yokuts) trails into the mountains. By 1865, timber mills were found in the general vicinity, and were responsible for opening areas for settlement and for providing lumber to fuel the local economy. Cattle ranchers and shepherds grazed their animals throughout the region until 1903, when the laws changed.

As access to the San Joaquin Valley was secured via new and better roads, the mountains opened to permanent settlements. Small towns were established, such as Springville. Avon M. Coburn founded Springville in 1890. Coburn established a box factory and sawmill along the Tule River, near where Bear Creek empties into the middle fork of the Tule River. Springville flourished connecting the Tule River valley to the San Joaquin Valley via the wagon road to Porterville, which had been established in 1864.

As the areas to the west grew, the need for steady economical power arose. Albert Wishon, a local real estate agent, convinced the new (1895) San Joaquin Power Company, (later the San Joaquin Light and Power Company), which later merged with Pacific Gas and Electric Company in 1930, to build a hydroelectric dam on the Tule River in 1900. The pack road east of Springville was upgraded to a wagon road, and Camp Wishon was established as a construction camp, located below the Doyle Ranch. Construction on the power plant began in 1904. The power plant not only provided reliable power to the San Joaquin Valley to the west, but also opened areas to the east.

8.0 Field Procedures and Methods

On November 12-13, 2024, Scott M. Hudlow (for qualifications see Appendix I) conducted a pedestrian archaeological survey of the entire proposed project area. Hudlow surveyed in north/south transects across the lot in 10-meter (33 feet) intervals.

9.0 Report of Archaeological Findings

No cultural resources were identified.

10.0 Management Recommendations

At the request of Crawford and Bowen Planning, a Phase I Cultural Resource Survey was conducted at the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad Right-of-Way, in the City of Fresno, California for Tract 7376. The Phase I Cultural Resource Survey consisted of a cultural resource survey and a cultural resource record search.

No cultural resources were identified; however, three homes were located on the property as recently as 2022, on the west side of Armstrong Avenue. No remains from these three homes survive demolition, except for a non-historic concrete block retaining wall along Armstrong Avenue. No further work is required. If archaeological resources are encountered during the course of construction, a qualified archaeologist should be consulted for further evaluation.

If human remains or potential human remains are observed during construction, work in the vicinity of the remains will cease, and the remains will be treated in accordance with the provisions of State Health and Safety Code Section 7050.5. The protection of human remains follows California Public Resources Codes, Sections 5097.94, 5097.98, and 5097.99.

11.0 References

Latta, Frank F.
1999 *Handbook of Yokuts Indians*. Coyote Press, Salinas, California.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Orlando, Florida.

Nabokov, Peter and Robert Easton
1989 *Native American Architecture*. Oxford University Press, New York, New York.

Parr, Robert E. and Richard Osborne
1992 *Route Adoption Study for Highway 58, Kern County, California.* Report on file, Southern San Joaquin Archaeological Information Center, California State University, Bakersfield, Bakersfield, California.

Wallace, William J.
1978 "Southern Valley Yokuts" in *Handbook of North American Indians*. Vol. 8, California, Robert F. Heizer, ed. Washington, D.C.: Smithsonian Institution, pp. 437-445.

Warren, Claude N. and M. B. McKusiak
1959 A Burial Complex from the southern San Joaquin Valley. Los Angeles: *University of California, Los Angeles, Archaeological Survey Annual Report, 1959*: 17-26.

Warren, Claude N.
1967 "The San Dieguito Complex: A Review and Hypothesis" *American Antiquity* 32(2): 168-185.

Appendix I

Scott M. Hudlow
1405 Sutter Lane
Bakersfield, California 93309
(661) 834-9183

Education

The George Washington University
M.A. American Studies, 1993
Specialization in Historical Archaeology
and Architectural History

University of California, Berkeley
B.A. History, 1987
B.A. Anthropology, 1987
Specialization in Historical Archaeology
and Colonial History

Public Service

3/94-12/02 *Historic Preservation Commission.* City of Bakersfield, Bakersfield, California 93305.

7/97-12/01 *Newsletter Editor. California History Action,* newsletter for the California Council for the Promotion of History.

Relevant Work Experience

8/96- *Adjutant Faculty.* Bakersfield College, 1801 Panorama Drive, Bakersfield, California, 93305. Teach History 17A, Introduction to American History and Anthropology 5, Introduction to North American Indians.

Owner, Sole Proprietorship. Hudlow Cultural Resource Associates. 1405 Sutter Lane, Bakersfield California 93309. Operate small cultural resource management business. Manage contracts, respond to RFP's, bill clients, manage temporary employees. Conduct Phase I archaeological and architectural surveys for private and public clients; including the cultural resource survey, documentary photography, measured drawings, mapping of structures, filing of survey forms, historic research, assessing impact and writing reports. Evaluated archaeological and architectural sites and properties in lieu of their eligibility for the National Register of Historic Places in association with Section 106 and 110 requirements of the National Historic Preservation Act of 1966 and CEQA (California Environmental Quality Act).

Full resume available upon request.

Appendix II

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

7/8/2024

Robert Gerry
Peak & Associates
3941 Park Drive, Suite 30-329
El Dorado Hills, CA 95762

Re: Bonadelle Armstrong
Records Search File No.: 24-299

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on Malaga USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.25 mile radius:

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

Resources within project area:	None
Resources within 0.25 mile radius:	P-10-003930
Reports within project area:	None
Reports within 0.25 mile radius:	FR-02714

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 Built Environment Resources 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: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

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. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

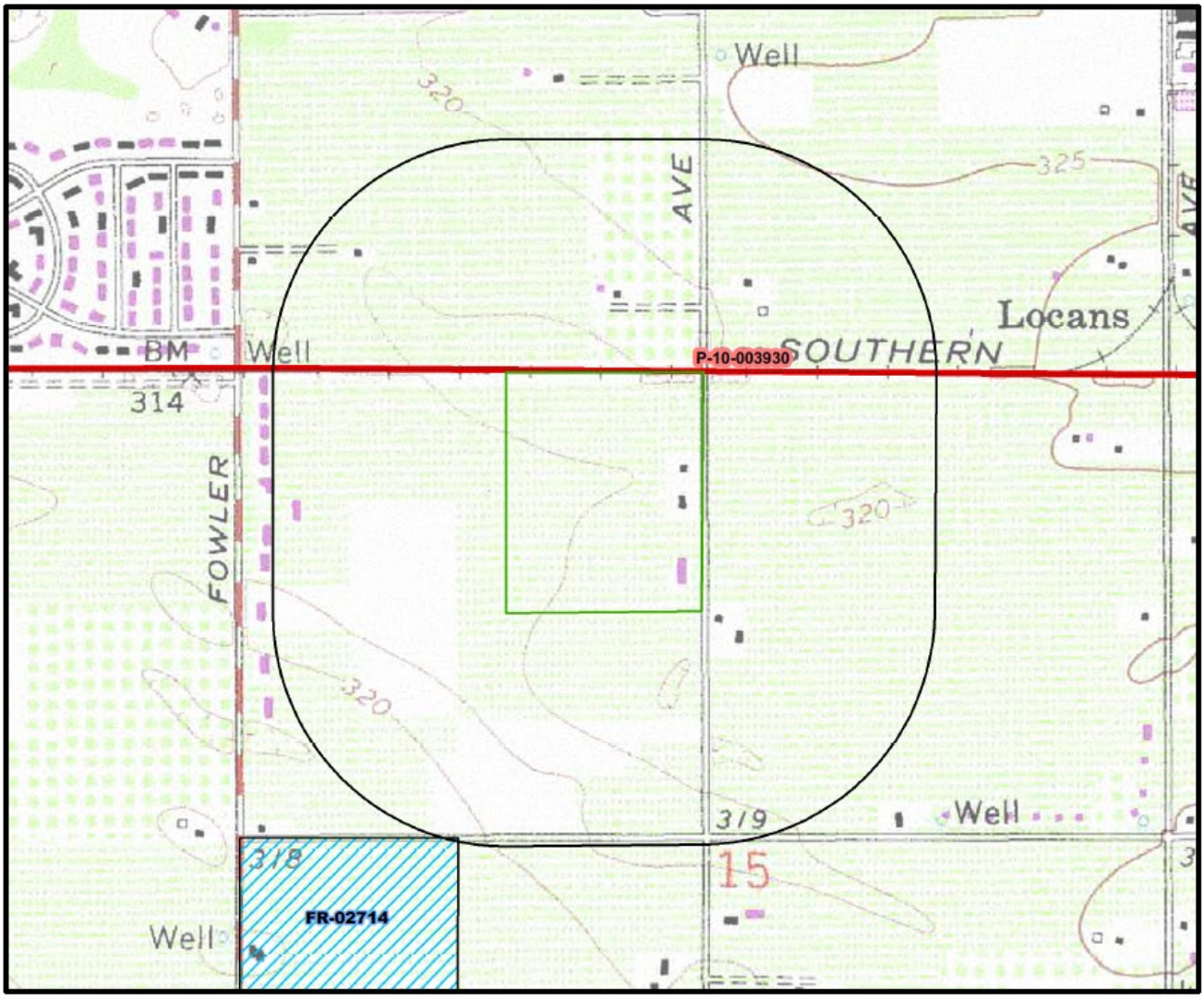
Sincerely,

Celeste M. Thomson
Coordinator

California
Historical
Resources
Information
System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic



May depict confidential cultural resource locations. Do not distribute.
Map pages depicting no data have been excluded.

Project Area
Record Search radius

N W E S

0 0.05 0.1 0.2 Miles
0 0.05 0.1 0.2 Kilometers

SSJV Information Center Record Search 24-299
Requester: Robert Gerry, Peak & Associates, Inc.
Project Name: Bonadelle Armstrong
USGS 7.5' Quad(s): Malaga
County: Fresno

Resource List

SSJVIC Record Search 24-299

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-10-003930	CA-FRE-003109H	Resource Name - Southern Pacific Railroad	Structure	Historic	AH07; HP11	1998 (W.L. Norton, Jones & Stokes); 1999 (S. Hooper, S. Flint, Applied EarthWorks, Inc.); 2002 (Peggy B. Murphy, Three Girls and a Shovel); 2004 (Bryan Larson, Cindy Toffelmier, JRP Historical Consulting); 2009 (Joseph Freeman, Rebecca Flores, JRP Historical Consulting); 2009 (Joseph Freeman, Rebecca Flores, JRP Historical Consulting); 2009 (Joseph Freeman, Rebecca Flores, JRP Historical Consulting); 2010 (Michael Hibma, LSA Associates); 2013 (Randy Baloian, Applied Earthworks, Inc.); 2015 (Randy Baloian, Applied EarthWorks, Inc.); 2015 (Randy Baloian, Applied Earthworks, Inc.); 2016 (J. Tibbet, Applied EarthWorks, Inc.); 2018 (Annie McCausland, Applied EarthWorks, Inc.); 2018 (Jessica Jones, Applied EarthWorks, Inc.); 2021 (Morgan Bird, SWCA Environmental Consultants)	FR-00238, FR-01770, FR-01771, FR-01772, FR-02642, FR-02726, FR-02769, FR-02847, FR-02942, FR-03037, FR-03103

Report List

SSJVIC Record Search 24-299

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
FR-02714		2014	Armstrong, Matthew D., Smallwood, Josh, and Baloian, Randy	Cultural Resources Survey and Eligibility Evaluation for the Sanger Unified School District Educational Center, Fresno County, California	Applied Earthworks	10-006517, 10-006518, 10-006519, 10-006520

RMA GeoScience
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PHASE I ENVIRONMENTAL SITE ASSESSMENT
FOR
SIMONIAN ESTATES
APNS: 316-160-16S, -17S, -43S, -59S, AND -61S
1099, 1139, AND 1183 SOUTH ARMSTRONG AVENUE
FRESNO, CALIFORNIA 93727

for

KB Home Central California
744 P Street, Suite 321
Fresno, California 93721

October 27, 2023

Project Number 07-230797-1

RMA GeoScience
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October 27, 2023 Project No. 07-230797-1

KB Home Central California
744 P Street, Suite 321
Fresno, California 93721

Attention: Mr. Zach Gomes
zgomes@kbhome.com

Subject: **Phase I Environmental Site Assessment**
Simonian Estates
APNs: 316-160-16s, -17s, -43s, -59s, and -61s
1099, 1139, and 1183 South Armstrong Avenue
Fresno, California 93727

Dear Mr. Gomes;

Pursuant to your request and authorization, a Phase I Environmental Site Assessment has been performed at the subject property in accordance with the current Standard of Practice for Phase I Environmental Site Assessments per the ASTM: E1527-21 guidelines. This report is presented for the sole use of the KB Home Central California and their representatives and/or associates to use as an indication whether hazardous materials and or soil contamination may be present on the subject property. This report may not contain sufficient information for other uses.

If you have any questions regarding the information presented in this report, please do not hesitate to contact our office. We appreciate the opportunity to be of service to you.

Sincerely,
RMA GeoScience, Inc.

Jim Vue, GIT
Staff Geologist

Josue A. Montes, GE 2904
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
JOSUE A. MONTES, JR.
No. GE2904
Exp. 12-31-24
GEOTECHNICAL
STATE OF CALIFORNIA

Distribution: Addressee (1 pdf copy to zgomes@kbhome.com)

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1.0 INTRODUCTION

1.1 Purpose

A Phase I Environmental Site Assessment (ESA) was performed for five parcels located to the west of South Armstrong Avenue and East California Avenue in Fresno, California (subject property). The purpose of the assessment was to identify to the extent feasible any recognized environmental conditions in connection with the aforementioned property. The American Society for Testing and Materials (ASTM) E1527-21 defines recognized environmental conditions as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions. De minimis conditions generally do not present a material risk of harm to public health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.2 Site Location and Description

The subject property is located to the west of South Armstrong Avenue and East California Avenue in Fresno, California (Figure 1). The subject property is comprised of five parcels and has a total area of approximately 37.92-acres (Figure 2). The subject property is at or near street grade and is currently vacant land.

Its central geographic position is 36.7212° north latitude and 119.6754° west longitude.

APN	Acreage	Current Subject Property Address
316-160-16s	0.48	1099 South Armstrong Avenue
316-160-17s	17.59	Not available
316-160-43s	0.98	1183 South Armstrong Avenue
316-160-59s	0.50	1139 South Armstrong Avenue
316-160-61s	18.37	1139 South Armstrong Avenue

1.3 Scope of Work

Our work was performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E:1527-21. In order to complete this report, the following scope of work was completed.

a. A visual reconnaissance of the subject property and surrounding area to visually evaluate the potential for site contamination and to identify the current land use

b. A review of the regional geologic maps and geologic references pertinent to the subject property

c. A review of historical aerial photographs and topographic maps to assess the subject property's historical land use, and for indications of potential contamination or sources of contamination

d. A database search of federal, state, and local regulatory agencies obtained by Environmental Data Resource (EDR), which is included with this report

e. Review of local governmental databases and files

f. Identify key personnel, local officials, and current owners of the subject property to conduct interviews with persons knowledgeable of the subject property and surrounding areas

g. Preparation of this report

1.4 General Limitations and Exceptions

This report was completed in substantial conformance with the scope and practice set forth by the ASTM Standard E1527-21 with a level of care and skill ordinarily exercised by members of our profession currently practicing in California. No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions. This assessment is not, and should not be construed as, a warranty or guarantee concerning the presence or not of hazardous substances which may affect the subject property. All information presented in this report is based on visual observations, research of publicly available information, review of maps and literature, experience, and professional judgment. The ASTM standard defines reasonably ascertainable information as information that is publicly available with reasonable time and cost constraints and yields relevant information without the need for extraordinary analysis of irrelevant data.

The subject property was accessible on foot.

The following are considered non-scope items and are not included in the scope of this report:

* Asbestos Containing Building Materials
* Biological Agents
* Cultural and Historical Resources
* Ecological Resources
* Endangered Species
* Health and Safety
* Indoor Air Quality
* Industrial Hygiene
* Lead-Based Paint
* Lead in Drinking Water
* Mold or Microbial Growth Conditions
* PCB Containing Building Materials
* Naturally Occurring Radon
* Regulatory Compliance
* Substances not defined as hazardous substances (including some substances sometime generally referred to as emerging contaminants) unless or until such substances are classified as a CERCLA hazardous substance
* Wetlands

1.5 Special Terms and Conditions

This report is intended for the sole use of KB Home Central California (User). Its contents are considered to be privileged and confidential. The contents should not be relied upon by any party other than the aforementioned without the express written consent of RMA GeoScience, Inc. and KB Home Central California.

An environmental liens and activity and use limitations (AULs) search was not included with the scope of this report, as per the direction of the User. In order to satisfy the ASTM E1527-21 requirements for a Phase I ESA, a search for environmental liens and AULs must be appended.

1.6 User Provided Information

A User Questionnaire was sent to Mr. Zach Gomes, the Vice President, South Valley Business Unit of KB Home Central California, identified user or party seeking to complete an environmental site assessment of the subject property. The User Questionnaire serves to assist the environmental professional in gathering information from the user that may be material to identifying recognized environmental conditions. As of the date of this report, the User Questionnaire has not been completed by Mr. Zach Gomes.

2.0 SITE OVERVIEW

2.1 Site Observations

Our visual site reconnaissance was conducted on October 6, 2023. The purpose of our reconnaissance was to visually assess the subject property and surrounding area for any recognized environmental conditions. Photographs of the subject property during site reconnaissance are included with this report.

2.1.1 Exterior Observations

Item	Observed or Suspected	Not Observed or Suspected
Hazardous substances & Petroleum products		X
Above Ground Storage Tanks		X
Underground Storage Tanks	X	
Odors		X
Standing water or pools of liquids		X
Drums, hazardous substance, or petroleum containers		X
Unidentified substance containers		X
Electrical or hydraulic equipment known or likely to contain PCBs		X
Pits, ponds, or lagoons		X
Stained soil or pavement		X
Stresses vegetation (other than from insufficient water)		X
Solid waste, mounds or depressions suggesting trash or soil waste disposal	X	
Wastewater or storm water discharge into a drain, ditch, stream, or adjacent property		X
Wells (active, inactive, or abandoned)	X	
Sewage disposal system	X	
Roads		X
Railroad lines or spurs		X

2.2 Hazardous Substances & Petroleum Containers/Products

Hazardous substances or petroleum products containers for liquids are generally less than 5 gallons and may be made of metal, glass, or plastic. Containers may also contain solids and gasses and may be made of paper, plastic, cardboard, or metal. Hazardous substances or petroleum products can be contained in equipment such as elevator and hoist pistons, machinery, forklifts, and other equipment.

During our site reconnaissance, no hazardous substances & petroleum containers or products were observed on the subject property.

2.3 Aboveground Storage Tanks (ASTs)

During our site reconnaissance, no features associated with ASTs were observed on the subject property.

2.4 Underground Storage Tanks (USTs)

During our site reconnaissance, no features associated with USTs were observed on the subject property. However, a 350-gallon fuel and an unknown capacity fuel USTs are listed under the subject property addresses and further discussed in the sections below.

2.5 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyl's (PCBs) were once widely used in dielectric and coolant oils in transformers and capacitors. PCB production was banned in the US in 1979 but some older transformers and electrical equipment may still contain PCBs. Many fluorescent light ballasts manufactured before 1979 also contained small quantities of PCBs. An inventory and inspection of fluorescent light ballasts was not conducted as part of this investigation.

During our site reconnaissance, no pad- or pole-mounted transformers were observed on the subject property.

2.6 Stressed Vegetation, Pits, Ponds and Lagoons and Standing Water

During our site reconnaissance, no stressed vegetation, pits, ponds, lagoons, or standing water were observed on the subject property.

2.7 Solid Waste, Mounds, or Depressions Suggesting Trash or Solid Waste Disposal

During our site reconnaissance, no mounds or depressions suggesting trash or solid waste disposal were observed on the subject property. However, debris were observed on the southern boundary of the subject property.

2.8 Wastewater or Stormwater

During our site reconnaissance, no stormwater retention basins are on or adjacent to the subject property. No industrial wastewater exists on the subject property and there are no wastewater treatment facilities located on or near the subject property.

2.9 Existing or Abandoned Oil and Water Wells

According to the database maintained by the Department of Oil, Gas, and Geothermal Resources there are no oil wells located at or in the near vicinity of the subject property. During our site reconnaissance, one abandoned water well was observed on the subject property.

2.10 Septic Systems

During our site reconnaissance, no features associated with a septic system were observed on the subject property. The agency that provides sewer service in the area is the City of Fresno.

2.11 Railroad Lines or Spurs

During our site reconnaissance and review of the standard historical resources (aerial photograph, Sanborn maps, topographic maps, etc.), no railroad lines or spurs were observed on the subject property.

2.12 Site Reconnaissance of Adjacent Properties

Properties immediately adjacent to the subject property consist of the following:

- To the north – Residential development / ponding basin
- To the east – Residential development / ponding basin
- To the south – Agricultural land
- To the west – Vacant land

2.13 Current Site Use

The subject property is currently vacant land.

2.14 Drains and Sumps

During our site reconnaissance, no drains or sumps were observed on the subject property.

3.0 GEOLOGY AND HYDROGEOLOGY

3.1 Geology

The subject property is located in the east-central San Joaquin Valley, which comprises the southern half of the Great Valley geomorphic province. The valley is a westward-tilting trough which forms a broad alluvial fan, approximately 200 miles long and 50 to 70 miles wide, were the eastern flank is broad and gently inclined, as opposed to the western flank which is relatively narrow (Bartow, 1991; Page, 1968). The Central Valley consists of the Great Valley Sequence, overlain by Cenozoic alluvium. Underlying the Great Valley Sequence are the Franciscan Assemblage to the west and the Sierra Nevada batholith to the east (Bailey, Irwin, and Jones, 1964).

The Franciscan Assemblage, made up of deformed and high pressure and low temperature metamorphosed mafic and ultramafic rocks, was formed around the Late Jurassic through the Miocene (160 to about 20 million years ago) by the offscraping of rocks from a subducting plate dipping to the east (Wakabayashi, 1992; Wakabayashi, 2010).

The Sierra Nevada started to form during the Early Jurassic (around 200 million years ago) when the Farallon Plate began subducting under the North American Plate. This subduction resulted in several orogenies, or mountain building events, that created the granitic Sierra Nevada Batholith deep below the surface. During the Miocene (around 10 million years ago), vertical movement along the Sierra Nevada Frontal Fault Zone (part of the Eastern California Shear Zone) began to uplift the Sierra Nevada. This uplift and erosion exposed the batholiths to the surface. From the Pleistocene (commonly known as the last Ice Age) to the present, glaciers have been carving out many parts of the Sierras. The current uplift of the Sierra Nevada is 1 - 2mm per year (Hammond, et al. 2012).

The Great Valley Sequence is a 40,000-foot sequence of marine shale, sandstone, and conglomerate beds, deposited in a deep marine environment during the Late Jurassic through the Cretaceous (150 – 65 million years ago). Overlying the Great Valley Sequence is several thousand feet of Cenozoic alluvium, deposited by: streams and rivers draining from the mountains and creating alluvial fans; by lakes that covered parts of the valley floor from time to time; flooding; and marsh environments (Page, 1986). In some places, it is thousands of feet thick, and more than half of this thickness is composed of fine grained fluvial and lacustrine deposits. Holocene deposition consists mainly of episodic deposition of alluvial sediments (Bartow, 1991; Page, 1986). The subject property is situated on Quaternary fan deposits that are several hundred feet deep.

3.2 Hydrogeology

The subject property is located within the Kings Subbasin within the San Joaquin Valley Groundwater Basin. The Kings Subbasin is bounded by the Madera Subbasin at the north, by the Kaweah and Tulare Lake Subbasins at the south, by the Sierra Nevada at the east, and Delta-Mendota and Westside Subbasins at the west. Groundwater recharge occurs from river and stream seepage, deep percolation of irrigation water, canal seepage, and intentional recharge (Groundwater Bulletin 118, 2003).

According to Groundwater Contour Maps available at California Department of Water Resources website, depth to groundwater in Fall 2022 was at 85 feet below ground surface and direction of groundwater in Fall 2022 flowed to the southwest in the vicinity of the subject property. Groundwater as shallow as 29 feet below ground surface was measured in 1950 in a well located approximately 0.89 miles southwest of the subject property.

The subject property is located within an area zoned by FEMA to be inside of the 0.2% annual chance floodplain.

4.0 RESULTS OF RECORDS SEARCH

4.1 Aerial Photograph Review

1937

Subject property:

The subject property appears to be used for agricultural purposes.

Surrounding properties:

What appears to be agricultural land, residences, and associated outbuildings are visible surrounding the subject property. The existing South Armstrong Avenue is visible to the east of the subject property. The existing railroad track is visible to the north of the subject property.

1946

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1937 photograph.

1950

Subject property:

What appears to be a residence and associated outbuildings are visible on the eastern portion of the subject property.

Surrounding properties:

There is no significant change to the surrounding properties from the 1946 photograph.

1957

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1950 photograph.

1962

Subject property:

What appears to be another residence and associated outbuildings are visible on the eastern portion of the subject property.

Surrounding properties:

There is no significant change to the surrounding properties from the 1957 photograph.

1967

Subject property:

The southeast corner of the subject property appears to be vacant land. Features that appear to be vehicles are visible on the vacant land.

Surrounding properties:

There is no significant change to the surrounding properties from the 1962 photograph.

1973

Subject property:

The southeast corner of the subject property appears to be a ponding basin. What appears to be a structure is visible on the southeast corner of the subject property.

Surrounding properties:

The residence and associated outbuildings are no longer visible to the southwest of the subject property and replaced with the existing residences. The property immediately adjacent to the west of the subject property appears to be used for agricultural purposes.

1979

Subject property:

The ponding basin is no longer visible on the southeast corner of the subject property and replaced with a residence and associated outbuildings.

Surrounding properties:

There is no significant change to the surrounding properties from the 1973 photograph.

1984

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1979 photograph.

1987

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1984 photograph.

1999

Subject property:

There is no significant change to the subject property from the 1987 photograph.

Surrounding properties:

What appears to be the existing Fresno Irrigation District ponding basin is visible to the northwest of the subject property. The existing residence and associated outbuildings are visible to the east of the subject property.

2006

Subject property:

The subject property appears to be fallow land with three residences and associated outbuildings.

Surrounding properties:

What appears to be graded residential lots associated are visible to the north of the subject property.

2009

Subject property:

There is no significant change to the subject property from the 2006 photograph.

Surrounding properties:

What appears to be graded residential lots associated are visible to the east of the subject property.

2012

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 2009 photograph.

2016

Subject property:

There is no significant change to the subject property from the 2012 photograph.

Surrounding properties:

What appears to be the existing residential development and ponding basin are visible to the east of the subject property.

2020

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 2016 photograph.

Copies of the aerial photographs are included with this report.

4.2 Sanborn Map Review

The Sanborn Library collection was searched by EDR. No maps covering the subject property were found.

4.3 Topographic Map Review

1923

Subject property:

There are no structures visible on the subject property.

Surrounding properties:

What appears to be a structure is visible to the north, east, south, and west of the subject property. The existing South Armstrong Avenue is visible to the east of the subject property. The existing railroad track is visible to the north of the subject property.

1946

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1923 topographic map.

1947

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1946 topographic map.

1948

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1947 topographic map.

1964

Subject property:

There are structures visible on the eastern portion of the subject property.

Surrounding properties:

There is no significant change to the surrounding properties from the 1948 topographic map.

1972

Subject property and Surrounding properties:

There is no significant change to the subject property and surrounding properties from the 1964 topographic map.

1981

Subject property:

There is one structure visible on the southeast corner of the subject property.

Surrounding properties:

There are structures visible to the west of the subject property.

2012

Subject property and Surrounding properties:

The 2012 topographic map does not reveal any structures on the subject property or surrounding properties.

2015

Subject property and Surrounding properties:

The 2015 topographic map does not reveal any structures on the subject property or surrounding properties.

2018

Subject property and Surrounding properties:

The 2018 topographic map does not reveal any structures on the subject property or surrounding properties.

Copies of the topographic maps are included with this report.

4.4 Governmental Agency Database Review

A search of available government databases was conducted for RMA GeoScience, Inc. by EDR, an information retrieval service which identifies current and historical environmental risk management information for a specific site (Target Property) and surrounding area. The search included the area within a one-mile radius of the subject property. The search radius used meets or exceeds the standard search distance adopted by ASTM-E:1527-21. Copies of the EDR reports are included with this report. The following is an abridged list of environmental databases that were searched by EDR:

Federal

* Proposed National Priorities List (NPL)
* Delisted National Priorities List (DNPL)
* Federal Superfund Liens
* Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)
* Federal Facility Site Information listing
* CERCLIS No Further Remedial Action Planned (CERCLIS-NFRAP)
* Corrective Action Report (CORRACTS)
* RCRA Treatment Storage and Disposal
* RCRA-LQG RCRA - Large Quantity Generators
* RCRA-CESQG RCRA - Conditionally Exempt Small Quantity Generator
* US ENG CONTROLS Engineering Controls Sites List
* US INST CONTROL Sites with Institutional Controls
* LUCIS Land Use Control Information System
* US BROWNFIELDS A Listing of Brownfields Sites
* Emergency Response Notification System (ERNSCA)
* National Pollutant Discharge Elimination System-Region 9 (NPDSR09)
* PCB Activity Database
* Open Dump Inventory (ODI)
* Toxics Release Inventory (TRI)

State

* Above Ground Storage Tanks (ABST)
* INDIAN LUST Leaking Underground Storage Tanks on Indian Land
* INDIAN UST Underground Storage Tanks on Indian Land
* FEMA UST Underground Storage Tank Listing
* RESPONSE State Response Sites
* Solid Waste Information System (SWIS)
* VCP Voluntary Cleanup Program Properties
* INDIAN VCP Voluntary Cleanup Priority Listing
* Clandestine Drug Labs (CDL)
* State Brownfields Properties Calsites Database
* California Hazardous Material Incident Report System (CHMIRS)
* Dry Cleaner Facilities
* State Cortese List

* California Dept. of Toxic Substances Control Deed Restrictions (DTSCDR)
* California Department of Toxic Substances Control - Envirostor

Local

* Well Investigation Program Case List
* CDEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
* ODI Open Dump Inventory
* WMUDS/SWAT Waste Management Unit Database
* HAULERS Registered Waste Tire Haulers Listing
* INDIAN ODI Report on the Status of Open Dumps on Indian Lands
* HIST Cal-Sites Historical Calsites Database
* SCH School Property Evaluation Program
* Toxic Pits Toxic Pits Cleanup Act Sites
* CDL Clandestine Drug Labs
* US HIST CDL National Clandestine Laboratory Register
* LIENS 2 CERCLA Lien Information
* LIENS Environmental Liens Listing
* DEED Deed Restriction Listing

4.4.1 Target Property Search Results

The following facilities listed by EDR under the subject property addresses are listed in the table below.

Facility Name	Address	Databases
Simonian Family Trust	1099 South Armstrong Avenue	RCRA NonGen / NLR and ECHO
Simonian III	1139 South Armstrong Avenue	HIST UST, SWEEPS UST, and CA FID UST
Simonian 4	1183 South Armstrong Avenue	HIST UST, SWEEPS UST, and CA FID UST

Simonian Family Trust, 1099 South Armstrong Avenue

This facility was located approximately on the subject property and listed in the RCRA NonGen / NLR and ECHO databases. According to the records obtained, there are no violations or evaluations found. Due to this information, we therefore conclude that this facility is not a REC with respect to the subject property.

Simonian III, 1139 South Armstrong Avenue

This facility was located approximately on the subject property and listed in the HIST UST, SWEEPS UST, and CA FID UST databases. According to the records obtained, an unknown size unleaded fuel underground storage tank (UST) is listed at this facility. There are no records of any leaks, spills, or the UST being removed from this facility. The potential that this facility may have negatively impacted the subject property cannot be ruled out at this time.

Simonian 4, 1183 South Armstrong Avenue

This facility was located approximately on the subject property and listed in the HIST UST, SWEEPS UST, and CA FID UST databases. According to the records obtained, a 350-gallon fuel UST is listed at this facility. There are no records of any leaks, spills, or the UST being removed from this facility. The potential that this facility may have negatively impacted the subject property cannot be ruled out at this time.

4.4.2 Surrounding Facilities Search Results

The following facilities listed by EDR within a one-mile radius of the subject property that have or have had known releases of contaminants to the environment are listed in the table below.

Facility Name	Address	Databases	Distance (miles)
Yamamoto	1258 South Armstrong Avenue	HIST UST, SWEEPS UST, and CA FID UST	0.050
Bill Kermoyan Farms / W.L. Kermoyan	901 South Armstrong Avenue	HIST UST, SWEEPS UST, CA FID UST, and CUPA Listings	0.100
Riley Joseh V & Ramona J. / D&J Services	1108 South Fowler Avenue	HIST UST, SWEEPS UST, CA FID UST, and CUPA Listings	0.187
New High School and Middle School	Fowler Avenue/Jensen Avenue	ENVIRSTOR and SCH	0.572
Proposed Sanger Unified School District Elementary	Armstrong Avenue/Jensen Avenue	ENVIROSTOR and SCH	0.767

Yamamoto, 1258 South Armstrong Avenue

This facility was located approximately 0.050 miles southeast of the subject property and listed in the HIST UST, SWEEPS UST, and CA FID UST databases. According to the records obtained, a 550-gallon fuel UST is listed at this facility. There are no records of any leaks, spills, or the UST being removed from this facility. The potential that this facility may have negatively impacted the subject property cannot be ruled out at this time.

Bill Kermoyan Farms / W.L. Kermoyan, 901 South Armstrong Avenue

This facility was located approximately 0.100 miles northeast of the subject property and listed in the HIST UST, SWEEPS UST, CA FID UST, and CUPA Listings databases. According to the records obtained, one 2,000-gallon diesel UST and one 2,000-gallon fuel UST were removed from this facility. A Fresno County letter dated April 10, 2001, revealed that no further action is required. Due to this information, we therefore conclude that this facility is not a REC with respect to the subject property.

Riley Joseh V & Ramona J., 1108 South Fowler Avenue

This facility was located approximately 0.187 miles southwest of the subject property and listed in the HIST UST, SWEEPS UST, CA FID UST, and CUPA Listings databases. According to the records obtained, one 675-gallon gas UST and one 4,000-gallon diesel UST were removed from this facility. A Fresno County letter dated February 12, 1988, stated that Fresno County Health Department “concur with the results and conclusions

of this report based solely on its scope, procedures, and findings submitted by Twinning Labs". Due to this information, we therefore conclude that this facility is not a REC with respect to the subject property.

New High School and Middle School, Fowler Avenue/Jensen Avenue

This facility is located approximately 0.572 miles southwest of the subject property and listed in the ENVIROSTOR and SCH databases. According to the Department of Toxic Substances Control's (DTSC) EnviroStor website, this facility has a "Certified" status. Due to this information, we therefore conclude that this facility is not a REC with respect to the subject property.

Proposed Sanger Unified School District Elementary, Armstrong Avenue/Jensen Avenue

This facility was located approximately 0.767 miles south of the subject property and listed in the ENVIROSTOR and SCH databases. According to the EnviroStor website, this facility has a "No Further Action" status. Due to this information, we therefore conclude that this facility is not a REC with respect to the subject property.

4.5 City Directory Review

A search of available city directories from 1973 to 2020 was conducted for RMA GeoScience, Inc. by EDR, an information retrieval service which identifies current and historical environmental risk management information for a specific site (Target Property) and surrounding area. The following listings for the subject property address and adjacent property's addresses are identified and listed below.

Current subject property address:

1099 South Armstrong Avenue

- 2010 – 2014 Angelica Gonzalez
- 2002 Henry Margaret A

1139 South Armstrong Avenue

- 2010 – 2017 Elisabeth Montgomery
- 2005 Occupant Unknown
- 1995 Alice Simonian

1183 South Armstrong Avenue

- 1992 – 2014 Gary C Simonian

Adjacent property addresses:

1218 South Fowler Avenue

- 1922 – 2020 Not listed

1375 South Armstrong Avenue

- 1922 – 2020 Not listed

6505 – 6519 East Christine Avenue

- 1922 – 2020 Not listed

6265 – 6489 East Dwight Avenue

- 1922 – 2020 Not listed

1129 – 1213 South Filbert Avenue

- 1922 – 2020 Not listed

4.6 State and Local Agencies

California Department of Conservation Division of Oil and Gas and Geothermal Resources

We searched the online databases that are maintained by the California Department of Conservation - Division of Oil and Gas regarding any current or abandoned oil wells located on or near the subject property. There are no oil wells listed on the subject property.

Fresno County Department of Public Health, Division of Environmental Health

Available records for the subject property and adjacent facilities to the subject property were viewed on the Fresno County Department of Public Health, Division of Environmental Health's website on October 4, 2023 and discussed in Section 4.4. Requests for additional information were sent on October 5 and 6, 2023 and discussed in Section 4.4.

City of Fresno Attorney's Office

A request to review available records for the subject property was submitted to this agency on September 20, 2023. We specified that we were looking for building records. According to Ms. Aimee Rios, the Paralegal for Travis R. Stokes, the Assistant City Attorney of the City of Fresno, there are no records for the subject property.

Fresno County Department of Public Works and Planning

A request to review available records for the subject property was submitted to this agency on October 6, 2023. We specified that we were looking for building records. On October 20, 2023, Fresno County provided numerous building records (drainage fee, reroof, repairs residence due to fire damage, wire conversion on 10hp pump, new septic, extend patio cover, new residence and garage, upgrade electrical service for existing residence, ag pump, carport, 2hp pump, and ag exempt) from 1968 to 2015 for the subject property. These records are included at the end of this report.

5.0 INTERVIEWS

5.1 Present Owner

An interview questionnaire was sent to Mr. Greg Simonian, the property owner, with questions pertaining to his knowledge of the subject property. Mr. Simonian indicated that there are no litigation or administrative proceedings relevant to hazardous substances or petroleum and no chemicals, pesticides, or herbicides used, mixed, or formulated on the subject property. Mr. Simonian revealed that three residences and septic systems were removed from the subject property. Mr. Simonian stated in an email that the former USTs

were removed approximately 35-40 years ago and provided the approximate locations of the former USTs. A copy of the questionnaire with Mr. Greg Simonian's response is included with this report.

6.0 FINDINGS

6.1 Recognized Environmental Conditions

ASTM E1527-21 defines recognized environmental conditions (RECs) as "(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."

This assessment has revealed the following RECs in connection with the subject property.

- According to the records obtained, one unknown size fuel and one 350-gallon fuel underground storage tanks (USTs) are listed under the subject property addresses (1139 and 1183 South Armstrong Avenue, respectively). Mr. Greg Simonian, the property owner, stated that the USTs were removed approximately 35-40 years ago and provided the approximate locations of the USTs. Mr. Simonian also stated that he does not have any records of soil samples being collected after the removal of the USTs. It is the opinion of RMA GeoScience that additional investigation is warranted, such as a subsurface investigation (Phase II ESA).

6.2 Controlled Recognized Environmental Conditions

ASTM E1527-21 defines controlled recognized environmental conditions (CRECs) as "a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitation or other property use limitations)."

This assessment has revealed no evidence of CRECs in connection with the subject property.

6.3 Historical Recognized Environmental Conditions

ASTM E1527-21 defines historical recognized environmental conditions (HRECs) as "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations)."

This assessment has revealed no evidence of HRECs in connection with the subject property.

6.4 Business Environmental Risk

ASTM E1527-21 defines business environmental risks (BERs) as "a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate and is not necessarily an issue required to be investigated under this practice. A BER may include one or more of the non-scope issues that were indicated in Section 1.4 of this report.
This assessment has revealed the following BER in connection with the subject property.

- The former residence located on the subject property was constructed before the 1978 ban on the manufacture of friable asbestos containing materials. Therefore, asbestos-containing construction materials may be present in the building materials used for their construction. An asbestos survey was not conducted as part of this investigation, but it is recommended.

- The Consumer Products Safety Commission limited lead content in residential paint in 1978. The use of paint containing lead was also prohibited in areas where consumers have direct access to painted surfaces. Based on the estimated construction dates of the former structures located on the subject property, lead-based paint may be present in or on original building materials. An assessment of lead-based paint in building materials was not conducted as part of this investigation, but it is recommended.

- Much of the subject property has been used for agricultural purposes sometime prior to 1937. It is recommended that prior to development, the subject property be tested for agricultural pesticides.

6.5 De minimis Conditions

ASTM E1527-21 defines de minimis conditions as "a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a de minimis condition is not a REC nor a CREC."

This assessment revealed no evidence of de minimis conditions in connection with the subject property.

6.6 Data Gap and Data Failure

ASTM E1527-21 defines data gaps as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to, site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.)."

ASTM E1527-21 defines data failures as "failure to achieve the historical research objectives even after reviewing standard historical sources that are reasonably attainable and likely to be useful. Data failure is one type of data gap. Data failures can occur when the use of the property was unable to be identified at approximately five-year intervals back to the first use or 1940, whichever is earlier."

This assessment has revealed the following data gaps or data failures in connection with the subject property.

- Records of ownership of the subject property may be incomplete. The ownership record obtained during this assessment is based on reasonably attainable information and does not constitute a title search.

- Data gaps in excess of five years were encountered during the review of the standard historical sources.

- Interviews were not conducted with past owners, past operators, or past occupants.

- As of the date of this report, the User Questionnaire has not been completed by Mr. Zach Gomes.

7.0 CONCLUSIONS

7.1 Conclusions

RMA GeoScience, Inc. has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of five parcels (APNs: 316-160-16s, -17s, -43s, -59s, and -61s / Addresses: 1099, 1139, and 1183 South Armstrong Avenue) in Fresno, California, the subject property. Any exceptions to, or deletions from, this practice are described in Section 1 of this report.

Environmental Concern	Number of Findings
Recognized Environmental Conditions (RECs)	1
Controlled Recognized Environmental Conditions (CRECs)	0
Historical Recognized Environmental Conditions (HRECs)	0
Business Environmental Risks (BERs)	3
De minimis Conditions	0
Data Gap / Data Failure	4

This assessment has revealed no evidence of CRECs, HRECs, or De minimis conditions in connection with the subject property.

This assessment has revealed the following REC in connection with the subject property.

- According to the records obtained, one unknown size fuel and one 350-gallon fuel underground storage tanks (USTs) are listed under the subject property addresses (1139 and 1183 South Armstrong Avenue, respectively). Mr. Greg Simonian, the property owner, stated that the USTs were removed approximately 35-40 years ago and provided the approximate locations of the USTs. Mr. Simonian also stated that he does not have any records of soil samples being collected after the removal of the USTs. It is the opinion of RMA GeoScience that additional investigation is warranted, such as a subsurface investigation (Phase II ESA).

This assessment has revealed the following BERs in connection with the subject property.

- The former residence located on the subject property was constructed before the 1978 ban on the manufacture of friable asbestos containing materials. Therefore, asbestos-containing construction materials may be present in the building materials used for their construction. An asbestos survey was not conducted as part of this investigation, but it is recommended.

- The Consumer Products Safety Commission limited lead content in residential paint in 1978. The use of paint containing lead was also prohibited in areas where consumers have direct access to painted surfaces. Based on the estimated construction dates of the former structures located on the subject property, lead-based paint may be present in or on original building materials. An assessment of lead-based paint in building materials was not conducted as part of this investigation, but it is recommended.

- Much of the subject property has been used for agricultural purposes sometime prior to 1937. It is recommended that prior to development, the subject property be tested for agricultural pesticides.

This assessment has revealed the following data gaps or data failures in connection with the subject property.

- Records of ownership of the subject property may be incomplete. The ownership record obtained during this assessment is based on reasonably attainable information and does not constitute a title search.

- Data gaps in excess of five years were encountered during the review of the standard historical sources.

- Interviews were not conducted with past owners, past operators, or past occupants.

- As of the date of this report, the User Questionnaire has not been completed by Mr. Zach Gomes.

Based on our findings, further environmental investigation is warranted at this time.

8.0 QUALIFICATIONS

The following statements are provided as specified by ASTM E1527-21 and 40 CFE 312.21(d):

> "We declare that, to the best of my professional knowledge and belief, we meet the definition of Environmental professional as defined by §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all the appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312."

9.0 LIMITATIONS

This Phase I Environmental Site Assessment was completed in accordance with generally accepted industry practice for determining the likelihood of the presence of hazardous substances at or beneath the subject property. Information presented in this report is based on visual observations, limited research, review of maps and literature, experience, and professional judgment. This assessment is not, and should not be construed as, a warranty or guarantee concerning the presence or not of hazardous substances which may affect the property. All discovered information has been disclosed and a good faith effort has been made to consult pertinent sources.

This study and report have been prepared on behalf and for the exclusive use of KB Home Central California, and solely for use in an environmental evaluation of the subject property. This report and its findings shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without prior written consent of RMA GeoScience, Inc. and KB Home Central California. However, RMA GeoScience, Inc. acknowledges and agrees that the report may be conveyed to the Buyer, Seller and Lender associated with the financing of the property.

10.0 REFERENCES

Bartow, J.A., 1991, The Cenozoic Evolution of the San Joaquin Valley, California, USGS Professional Paper 1501.

California Department of Water Resources Website**:** http://www.water.ca.gov/waterdatalibrary

California Department of Water Resources, 1980, updated 2003, Groundwater Bulletin 118
http//www.water.ca.gov/pubs/groundwater/bulletin_118

California Department of Toxic Substance Control Website:
http://www.envirostor.dtsc.ca.gov

Federal Emergency Management Agency, Flood Hazard Mapping Website, http://www.fema.gov/

Page, R.W., 1986, Geology of the Fresh Ground-Water Basin of the Central Valley, California, U.S. Geological Survey Professional Paper 1401-C.

State Water Resources Control Board Website,
http://geotracker.swrcb.ca.gov/

State of California Department of Conservation Division of Oil, Gas and Geothermal Website:
http://www.conservation.ca.gov/dog/.

United States Environmental Protection Agency,
Risk Management for Per- and Polyfluoroalkyl Substances (PFAS) under TSCA | US EPA

FIGURES

References: Google Earth

Approximate Scale: 1" ≈ 2,142'

Approximate Limits of the Subject Property

FIGURE 1

SITE VICINITY MAP

Simonian Estates

APNs: 316-160-16, -17, -43, -59, & -61

1099, 1139, and 1183 South Armstrong Avenue

Fresno, California 93727

Project # 07-230797-1

RMA GeoScience

Every Project Matters | www.rmacompanies.com

Reference: Google Earth

Approximate Scale: 1" ≈ 267'

FIGURE 2

SITE MAP

Simonian Estates

APNs: 316-160-16, -17, -43, -59, & -61

1099, 1139, and 1183 South Armstrong Avenue

Fresno, California 93727

Project # 07-230797-1

Approximate Limits of the Subject Property

RMA GeoScience

Every Project Matters | www.rmacompanies.com

SITE PHOTOGRAPHS

Photograph 1: View of the subject property, South Armstrong Avenue, and residential development.

Photograph 2: View of an abandoned irrigation well located on the northern portion of the subject property.

Photograph 3: View of the subject property, railroad tracks, and residential development.

Photograph 4: View of a pile of debris located on the southern boundary of the subject property.

Photograph 5: View of a pile of debris located on the southern boundary of the subject property.

Photograph 6: The location of one of the three former subject property residence.

Photograph 7: The location of one of the three former subject property residence.

Photograph 8: The location of one of the three former subject property residence.

EDR RADIUS REPORT

Simonian Estates
1099 S Armstrong Avenue
Fresno, CA 93727

Inquiry Number: 7454414.2s
September 26, 2023

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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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 (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1099 S ARMSTRONG AVENUE
FRESNO, CA 93727

COORDINATES

Latitude (North):	36.7212250 - 36˚ 43' 16.41''
Longitude (West):	119.6754490 - 119˚ 40' 31.61''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	261052.1
UTM Y (Meters):	4067082.2
Elevation:	323 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12012201 MALAGA, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200705
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1099 S ARMSTRONG AVENUE
FRESNO, CA 93727

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	SIMONIAN FAMILY TRUS	1099 SOUTH ARMSTRONG	RCRA NonGen / NLR		TP
A2	SIMONIAN FAMILY TRUS	1099 SOUTH ARMSTRONG	ECHO		TP
B3	SIMONIAN III	1139 S ARMSTRONG AVE	HIST UST	Higher	1 ft.
B4	SIMONIAN 4	1183 S ARMSTRONG	SWEEPS UST, HIST UST, CA FID UST	Higher	1 ft.
B5	SIMONIAN 4	1183 S ARMSTRONG AVE	HIST UST	Higher	1 ft.
B6	SIMONIAN III	1139 S ARMSTRONG	SWEEPS UST, HIST UST, CA FID UST	Higher	1 ft.
C7	YAMAMOTO	1258 S ARMSTRONG	HIST UST	Higher	265, 0.050, SSE
C8	YAMAMOTO	1258 S ARMSTRONG	SWEEPS UST, CA FID UST	Higher	265, 0.050, SSE
D9	BILL KERMOYAN FARMS	901 S ARMSTRONG	CUPA Listings	Higher	526, 0.100, NE
D10	W.L. KERMOYAN	901 S ARMSTRONG	SWEEPS UST, HIST UST, CA FID UST	Higher	526, 0.100, NE
D11	W.L. KERMOYAN	901 S ARMSTRONG AVE	HIST UST	Higher	526, 0.100, NE
E12	RILEY JOSEH V & RAMO	1108 S FOWLER	SWEEPS UST, CA FID UST	Lower	986, 0.187, WSW
E13	RILEY JOSEH V & RAMO	1108 S FOWLER AVE	HIST UST	Lower	986, 0.187, WSW
E14	D&J SERVICES	1108 S FOWLER	HIST UST, CUPA Listings	Lower	986, 0.187, WSW
15	CITY OF FRESNO WELL	750 S ARMSTRONG AVE	CUPA Listings, CERS	Higher	1277, 0.242, NNE
16	GARABEDIAL ESTATE	960 N FOWLER AVE	SWEEPS UST	Lower	1304, 0.247, WNW
17	NEW HIGH SCHOOL AND	FOWLER AVE./JENSEN A	ENVIROSTOR, SCH	Lower	3020, 0.572, SSW
18	PROPOSED SANGER UNIF	SOUTH ARMSTRONG/EAST	ENVIROSTOR, SCH	Higher	4052, 0.767, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
SIMONIAN FAMILY TRUS 1099 SOUTH ARMSTRONG FRESNO, CA 93727	RCRA NonGen / NLR EPA ID:: CAC003234989	CAC003234989
SIMONIAN FAMILY TRUS 1099 SOUTH ARMSTRONG FRESNO, CA 93727	ECHO	N/A

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

EXECUTIVE SUMMARY

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
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
CPS-SLIC..... Statewide SLIC Cases

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 Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

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
CERS HAZ WASTE	California Environmental Reporting System Hazardous Waste
Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

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

EXECUTIVE SUMMARY

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
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
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
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	Inspection, Compliance and Enforcement
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)

EXECUTIVE SUMMARY

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)
WELL STIM PROJ..... Well Stimulation Project (GEOTRACKER)
HWTS..... Hazardous Waste Tracking System
PFAS TRIS..... List of PFAS Added to the TRI
MINES MRDS..... Mineral Resources Data System
BIOSOLIDS..... ICIS-NPDES Biosolids Facility Data

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 identifes 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 04/24/2023 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PROPOSED SANGER UNIF Status: No Further Action Facility Id: 60001057	***SOUTH ARMSTRONG/EAST***	***S 1/2 - 1 (0.767 mi.)***	***18***	***34***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NEW HIGH SCHOOL AND Status: Certified Facility Id: 60001617	***FOWLER AVE./JENSEN A***	***SSW 1/2 - 1 (0.572 mi.)***	***17***	***24***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: 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.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 6 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SIMONIAN 4 Status: A Tank Status: A Comp Number: 53868	***1183 S ARMSTRONG***	***0 - 1/8 (0.000 mi.)***	***B4***	***12***
SIMONIAN III Status: A Tank Status: A Comp Number: 53867	***1139 S ARMSTRONG***	***0 - 1/8 (0.000 mi.)***	***B6***	***14***
YAMAMOTO Status: A Tank Status: A Comp Number: 11907	***1258 S ARMSTRONG***	***SSE 0 - 1/8 (0.050 mi.)***	***C8***	***16***
W.L. KERMOYAN Status: A Tank Status: A Comp Number: 43120	***901 S ARMSTRONG***	***NE 0 - 1/8 (0.100 mi.)***	***D10***	***17***

Lower Elevation	Address	Direction / Distance	Map ID	Page
RILEY JOSEH V & RAMO	***1108 S FOWLER***	***WSW 1/8 - 1/4 (0.187 mi.)***	***E12***	***19***

Status: A Tank Status: A Comp Number: 50235				
GARABEDIAL ESTATE Comp Number: 42422	960 N FOWLER AVE	WNW 1/8 - 1/4 (0.247 mi.)	16	24

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 9 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SIMONIAN III Facility Id: 00000053867	1139 S ARMSTRONG AVE	0 - 1/8 (0.000 mi.)	B3	11
SIMONIAN 4	***1183 S ARMSTRONG***	***0 - 1/8 (0.000 mi.)***	***B4***	***12***
SIMONIAN 4 Facility Id: 00000053868	1183 S ARMSTRONG AVE	0 - 1/8 (0.000 mi.)	B5	13
SIMONIAN III	***1139 S ARMSTRONG***	***0 - 1/8 (0.000 mi.)***	***B6***	***14***
YAMAMOTO Facility Id: 00000011907	1258 S ARMSTRONG	SSE 0 - 1/8 (0.050 mi.)	C7	15
W.L. KERMOYAN	***901 S ARMSTRONG***	***NE 0 - 1/8 (0.100 mi.)***	***D10***	***17***
W.L. KERMOYAN Facility Id: 00000043120	901 S ARMSTRONG AVE	NE 0 - 1/8 (0.100 mi.)	D11	18

Lower Elevation	Address	Direction / Distance	Map ID	Page
RILEY JOSEH V & RAMO Facility Id: 00000050235	1108 S FOWLER AVE	WSW 1/8 - 1/4 (0.187 mi.)	E13	20
D&J SERVICES	***1108 S FOWLER***	***WSW 1/8 - 1/4 (0.187 mi.)***	***E14***	***21***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 5 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SIMONIAN 4 Facility Id: 10008025 Status: A	***1183 S ARMSTRONG***	***0 - 1/8 (0.000 mi.)***	***B4***	***12***
SIMONIAN III Facility Id: 10008024 Status: A	***1139 S ARMSTRONG***	***0 - 1/8 (0.000 mi.)***	***B6***	***14***
YAMAMOTO Facility Id: 10005280 Status: A	***1258 S ARMSTRONG***	***SSE 0 - 1/8 (0.050 mi.)***	***C8***	***16***
W.L. KERMOYAN Facility Id: 10007239	***901 S ARMSTRONG***	***NE 0 - 1/8 (0.100 mi.)***	***D10***	***17***

Status: A

Lower Elevation	Address	Direction / Distance	Map ID	Page
RILEY JOSEH V & RAMO	***1108 S FOWLER***	***WSW 1/8 - 1/4 (0.187 mi.)***	***E12***	***19***
Facility Id: 10007790 Status: A				

Other Ascertainable Records

CUPA Listings: 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.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 3 CUPA Listings sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BILL KERMOYAN FARMS	901 S ARMSTRONG	NE 0 - 1/8 (0.100 mi.)	D9	16
Database: CUPA FRESNO, Date of Government Version: 06/28/2021 Facility Id: FA0274821				
CITY OF FRESNO WELL	***750 S ARMSTRONG AVE***	***NNE 1/8 - 1/4 (0.242 mi.)***	***15***	***22***
Database: CUPA FRESNO, Date of Government Version: 06/28/2021 Facility Id: FA0283556				

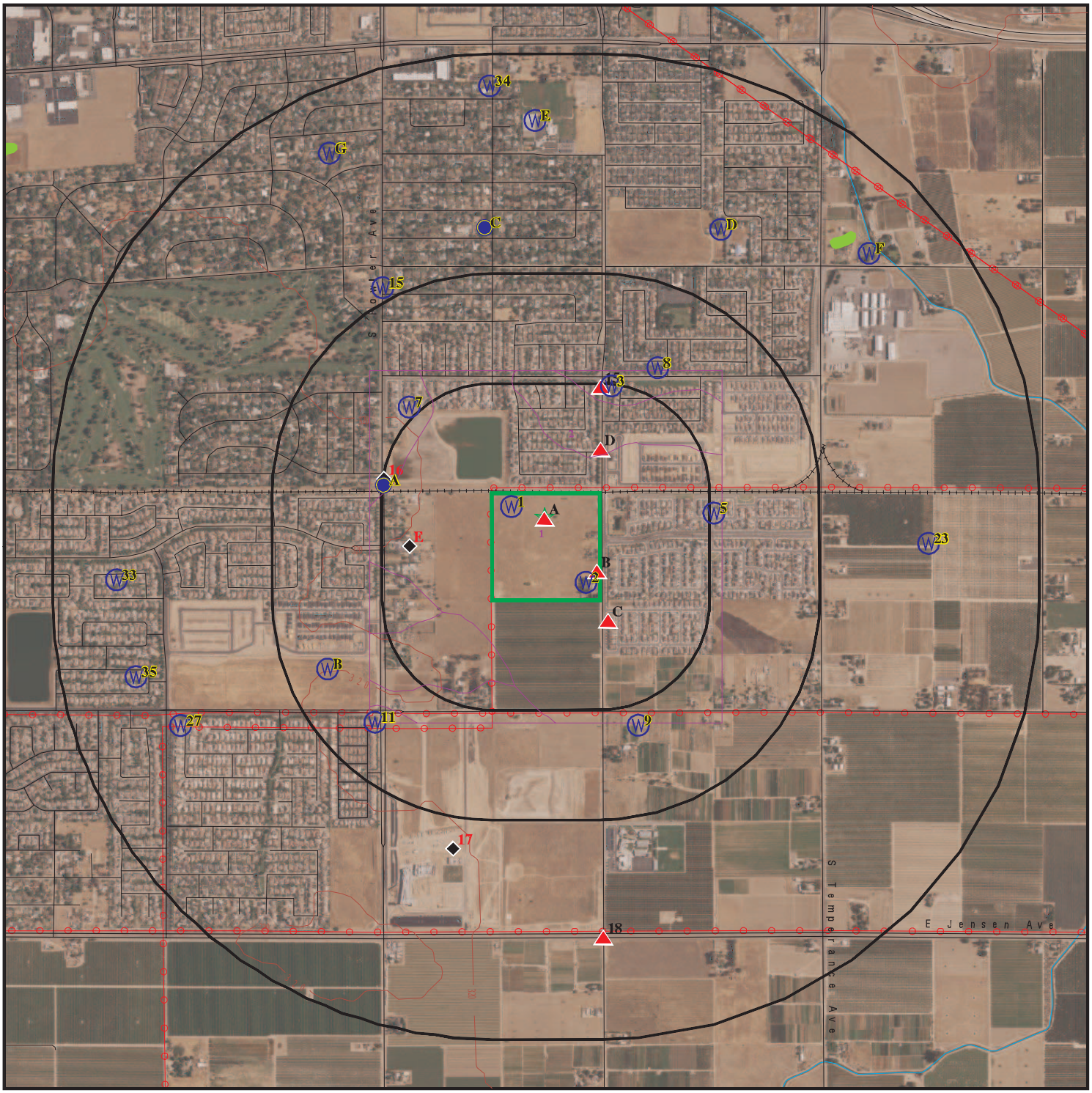
Lower Elevation	Address	Direction / Distance	Map ID	Page
D&J SERVICES	***1108 S FOWLER***	***WSW 1/8 - 1/4 (0.187 mi.)***	***E14***	***21***
Database: CUPA FRESNO, Date of Government Version: 06/28/2021 Facility Id: FA0169517				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
PACIFIC GAS AND ELECTRIC - FRESNO	CA BOND EXP. PLAN
FOWLER-MCKINLEY ELEMENTARY SCHOOL	ENVIROSTOR, SCH
PROPOSED TEMPERANCE ELEMENTARY SCH	ENVIROSTOR, SCH

OVERVIEW MAP - 7454414.2S



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

0 1/4 1/2 1 Miles

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:	Simonian Estates	CLIENT:	RMA Geoscience
ADDRESS:	1099 S Armstrong Avenue Fresno CA 93727	CONTACT:	Jim Vue
		INQUIRY #:	7454414.2s
LAT/LONG:	36.721225 / 119.675449	DATE:	September 26, 2023 2:33 pm

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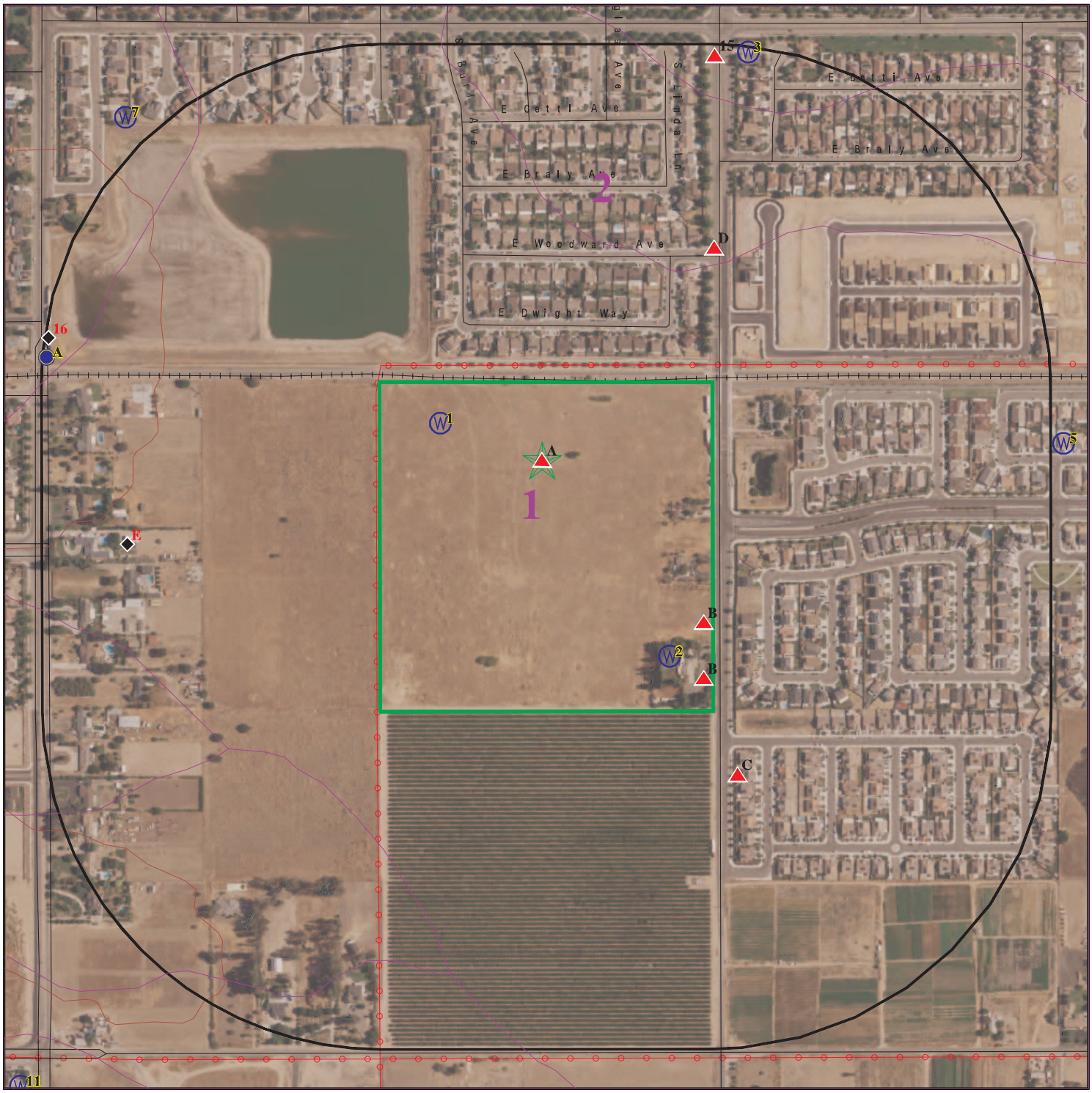
DETAIL MAP - 7454414.2S



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

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

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:	Simonian Estates	CLIENT:	RMA Geoscience
ADDRESS:	1099 S Armstrong Avenue Fresno CA 93727	CONTACT:	Jim Vue
		INQUIRY #:	7454414.2s
LAT/LONG:	36.721225 / 119.675449	DATE:	September 26, 2023 2:35 pm

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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								
Lists of Federal NPL (Superfund) sites								
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
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
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
Federal institutional controls / engineering controls registries								
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
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	0	2	NR	2
Lists of state and tribal landfills and solid waste disposal facilities								
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
Lists of state and tribal leaking storage tanks								
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	0	NR	NR	0
Lists of state and tribal registered storage tanks								
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
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
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
Local Lists of Hazardous waste / Contaminated Sites								
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
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		4	2	NR	NR	NR	6
HIST UST	0.250		7	2	NR	NR	NR	9
CA FID UST	0.250		4	1	NR	NR	NR	5
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
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	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
ECHO	0.001	1	0	NR	NR	NR	NR	1
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	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	0.250		0	0	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		1	2	NR	NR	NR	3
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
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
HWTS	0.001		0	NR	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	0.001		0	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
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		2	16	7	0	2	0	27

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **SIMONIAN FAMILY TRUST**
1099 SOUTH ARMSTRONG AVENUE
FRESNO, CA 93727 | **RCRA NonGen / NLR** | **1027692386**
CAC003234989

Site 1 of 2 in cluster A

Actual: 323 ft.

RCRA Listings:

Date Form Received by Agency:	20230531
Handler Name:	Simonian Family Trust
Handler Address:	1099 SOUTH ARMSTRONG AVENUE
Handler City,State,Zip:	FRESNO, CA 93727
EPA ID:	CAC003234989
Contact Name:	GREG SIMONIAN
Contact Address:	441 SHERWOOD WAY
Contact City,State,Zip:	MENLO PARK, CA 94024
Contact Telephone:	650-255-4114
Contact Fax:	Not reported
Contact Email:	GSIMONIAN@LEGALTEAM.COM
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:	441 SHERWOOD WAY
Mailing City,State,Zip:	MENLO PARK, CA 94024
Owner Name:	Simonian Family Trust
Owner Type:	Other
Operator Name:	Greg Simonian
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 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA 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

SIMONIAN FAMILY TRUST (Continued) **1027692386**

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:	20230601
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: SIMONIAN FAMILY TRUST	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	441 SHERWOOD WAY
Owner/Operator City,State,Zip:	MENLO PARK, CA 94024
Owner/Operator Telephone:	650-255-4114
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: GREG SIMONIAN	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	441 SHERWOOD WAY
Owner/Operator City,State,Zip:	MENLO PARK, CA 94024
Owner/Operator Telephone:	650-255-4114
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20230531
Handler Name: SIMONIAN FAMILY TRUST	
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

SIMONIAN FAMILY TRUST (Continued) **1027692386**

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

A2 Target Property | **SIMONIAN FAMILY TRUST** | **ECHO** | **1027740639**
1099 SOUTH ARMSTRONG AVENUE | **N/A**
FRESNO, CA 93727

Site 2 of 2 in cluster A

Actual: 323 ft.

ECHO:

Envid:	1027740639
Registry ID:	Not reported
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=CAC003234989
Name:	SIMONIAN FAMILY TRUST
Address:	1099 SOUTH ARMSTRONG AVENUE
City,State,Zip:	FRESNO, CA 93727

B3 | **SIMONIAN III** | **HIST UST** | **U001592990**
1139 S ARMSTRONG AVE | **N/A**
< 1/8 | **FRESNO, CA 93727**
1 ft.

Site 1 of 4 in cluster B

Relative: Higher

Actual: 324 ft.

HIST UST:

Name:	SIMONIAN III
Address:	1139 S ARMSTRONG AVE
City,State,Zip:	FRESNO, CA 93727
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000053867
Facility Type:	Other
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	2092550096
Owner Name:	ESTATE OF SAN SIMONIAN
Owner Address:	1183 SO. ARMSTRONG
Owner City,St,Zip:	FRESNO, CA 93727
Total Tanks:	0001
Tank Num:	001
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported

SIMONIAN III (Continued) **U001592990**

Leak Detection: Stock Inventor

B4 **SIMONIAN 4** **SWEEPS UST** **S101622584**
1183 S ARMSTRONG **HIST UST** **N/A**
< 1/8 **FRESNO, CA 93727** **CA FID UST**
1 ft.

Site 2 of 4 in cluster B

Relative: Higher

Actual: 324 ft.

SWEEPS UST:

Name:	SIMONIAN 4
Address:	1183 S ARMSTRONG
City:	FRESNO
Status:	Active
Comp Number:	53868
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	4
SWRCB Tank Id:	10-000-053868-000001
Tank Status:	A
Capacity:	350
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	1

HIST UST:

Name:	SIMONIAN 4
Address:	1183 SO ARMSTRONG
City,State,Zip:	FRESNO, CA 93727
File Number:	000241c9
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/000241c9.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

SIMONIAN 4 (Continued) **S101622584**

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CA FID UST:

Facility ID:	10008025
Regulated By:	UTNKA
Regulated ID:	00053868
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2092550096
Mail To:	Not reported
Mailing Address:	1183 S ARMSTRONG
Mailing Address 2:	Not reported
Mailing City,St,Zip:	FRESNO 93727
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

B5 **SIMONIAN 4** **HIST UST** **U001592988**
1183 S ARMSTRONG AVE **N/A**
< 1/8 **FRESNO, CA 93727**
1 ft.

Site 3 of 4 in cluster B

Relative: Higher
Actual: 324 ft.

HIST UST:

Name:	SIMONIAN 4
Address:	1183 S ARMSTRONG AVE
City,State,Zip:	FRESNO, CA 93727
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000053868
Facility Type:	Other
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	2092550096
Owner Name:	GARY C. SIMONIAN
Owner Address:	1183 SO. ARMSTRONG
Owner City,St,Zip:	FRESNO, CA 93727
Total Tanks:	0001
Tank Num:	001
Container Num:	4
Year Installed:	Not reported
Tank Capacity:	00000350
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

B6 **SIMONIAN III** **SWEEPS UST** **S101622586**
1139 S ARMSTRONG **HIST UST** **N/A**
< 1/8 **FRESNO, CA 93727** **CA FID UST**
1 ft.

Site 4 of 4 in cluster B

Relative:
Higher

Actual:
324 ft.

SWEEPS UST:

Name:	SIMONIAN III
Address:	1139 S ARMSTRONG
City:	FRESNO
Status:	Active
Comp Number:	53867
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	3
SWRCB Tank Id:	10-000-053867-000001
Tank Status:	A
Capacity:	Not reported
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	1

HIST UST:

Name:	SIMONIAN III
Address:	1139 SO ARMSTRONG
City,State,Zip:	FRESNO, CA 93727
File Number:	00023f78
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00023f78.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

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CA FID UST:

Facility ID:	10008024
Regulated By:	UTNKA

SIMONIAN III (Continued) **S101622586**

Regulated ID:	00053867
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2092550096
Mail To:	Not reported
Mailing Address:	1139 S ARMSTRONG
Mailing Address 2:	Not reported
Mailing City,St,Zip:	FRESNO 93727
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

C7 **YAMAMOTO** **HIST UST** **U001593020**
SSE **1258 S ARMSTRONG** **N/A**
< 1/8 **FRESNO, CA 93727**
0.050 mi.
265 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
323 ft.

HIST UST:

Name:	YAMAMOTO
Address:	1258 S ARMSTRONG
City,State,Zip:	FRESNO, CA 93727
File Number:	00025294
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00025294.pdf
Region:	STATE
Facility ID:	00000011907
Facility Type:	Not reported
Other Type:	TRACTOR
Contact Name:	NONE
Telephone:	2092554015
Owner Name:	SEICHI YAMAMOTO
Owner Address:	1258 S. ARMSTRONG
Owner City,St,Zip:	FRESNO, CA 93727
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1969
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

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C8 SSE < 1/8 0.050 mi. 265 ft. | **YAMAMOTO 1258 S ARMSTRONG FRESNO, CA 93727** | **SWEEPS UST CA FID UST** | **S101622612 N/A**

Site 2 of 2 in cluster C

Relative: Higher

Actual: 323 ft.

SWEEPS UST:

Name:	YAMAMOTO
Address:	1258 S ARMSTRONG
City:	FRESNO
Status:	Active
Comp Number:	11907
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	10-000-011907-000001
Tank Status:	A
Capacity:	550
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	1

CA FID UST:

Facility ID:	10005280
Regulated By:	UTNKA
Regulated ID:	00011907
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2092554015
Mail To:	Not reported
Mailing Address:	1258 S ARMSTRONG
Mailing Address 2:	Not reported
Mailing City,St,Zip:	FRESNO 93727
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

D9 NE < 1/8 0.100 mi. 526 ft. | **BILL KERMOYAN FARMS 901 S ARMSTRONG FRESNO, CA 93727** | **CUPA Listings** | **S104867169 N/A**

Site 1 of 3 in cluster D

Relative: Higher

Actual: 323 ft.

CUPA FRESNO:

Name:	BILL KERMOYAN FARMS
Address:	901 S ARMSTRONG
City,State,Zip:	FRESNO, CA 93727
Region:	FRESNO
Cross Street:	Not reported
Facility ID:	FA0274821

BILL KERMOYAN FARMS (Continued) **S104867169**

APM Number: 31367109
Program Element: UST REMOVAL/CLOSURE W/2 TANKS

D10 **W.L. KERMOYAN** **SWEEPS UST** **S101621470**
NE **901 S ARMSTRONG** **HIST UST** **N/A**
< 1/8 **FRESNO, CA 93703** **CA FID UST**
0.100 mi.
526 ft. **Site 2 of 3 in cluster D**

Relative:
Higher

Actual:
323 ft.

SWEEPS UST:

Name:	W.L. KERMOYAN
Address:	901 S ARMSTRONG
City:	FRESNO
Status:	Active
Comp Number:	43120
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	10-000-043120-000001
Tank Status:	A
Capacity:	2000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	2

Name:	W.L. KERMOYAN
Address:	901 S ARMSTRONG
City:	FRESNO
Status:	Active
Comp Number:	43120
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	10-000-043120-000002
Tank Status:	A
Capacity:	2000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

HIST UST:

Name:	WL KERMOYAN
Address:	901 SO ARMSTRONG
City,State,Zip:	FRESNO, CA 93703
File Number:	000257c2
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/000257c2.pdf
Region:	Not reported

W.L. KERMOYAN (Continued) **S101621470**

Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	10007239
Regulated By:	UTNKA
Regulated ID:	00043120
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2092517312
Mail To:	Not reported
Mailing Address:	901 S ARMSTRONG
Mailing Address 2:	Not reported
Mailing City,St,Zip:	FRESNO 93703
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

D11 **W.L. KERMOYAN** **HIST UST** **U001591408**
NE **901 S ARMSTRONG AVE** **N/A**
< 1/8 **FRESNO, CA 93703**
0.100 mi.
526 ft. **Site 3 of 3 in cluster D**

Relative:
Higher

Actual:
323 ft.

HIST UST:

Name:	W.L. KERMOYAN
Address:	901 S ARMSTRONG AVE
City,State,Zip:	FRESNO, CA 93703
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000043120
Facility Type:	Other
Other Type:	FARM
Contact Name:	Not reported

W.L. KERMOYAN (Continued) **U001591408**

Telephone:	2092517312
Owner Name:	W.L. KERMOYAN
Owner Address:	4581 E. WELDON
Owner City,St,Zip:	FRESNO, CA 93703
Total Tanks:	0002
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	None

E12 **RILEY JOSEH V & RAMONA J.** **SWEEPS UST** **S101622577**
WSW **1108 S FOWLER** **CA FID UST** **N/A**
1/8-1/4 **FRESNO, CA 93727**
0.187 mi.
986 ft. **Site 1 of 3 in cluster E**

Relative:
Lower

Actual:
321 ft.

SWEEPS UST:

Name:	RILEY JOSEH V & RAMONA J.
Address:	1108 S FOWLER
City:	FRESNO
Status:	Active
Comp Number:	50235
Number:	9
Board Of Equalization:	44-004385
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	10-000-050235-000001
Tank Status:	A
Capacity:	675
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	2
Name:	RILEY JOSEH V & RAMONA J.
Address:	1108 S FOWLER
City:	FRESNO
Status:	Active
Comp Number:	50235
Number:	9
Board Of Equalization:	44-004385

RILEY JOSEH V & RAMONA J. (Continued) **S101622577**

Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	10-000-050235-000002
Tank Status:	A
Capacity:	4000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	10007790
Regulated By:	UTNKA
Regulated ID:	00050235
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2092554734
Mail To:	Not reported
Mailing Address:	1108 S FOWLER
Mailing Address 2:	Not reported
Mailing City,St,Zip:	FRESNO 93727
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

E13 **RILEY JOSEH V & RAMONA J.** **HIST UST** **U001592978**
WSW **1108 S FOWLER AVE** **N/A**
1/8-1/4 **FRESNO, CA 93727**
0.187 mi.
986 ft. **Site 2 of 3 in cluster E**

Relative:
Lower

Actual:
321 ft.

HIST UST:

Name:	RILEY JOSEH V & RAMONA J.
Address:	1108 S FOWLER AVE
City,State,Zip:	FRESNO, CA 93727
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000050235
Facility Type:	Other
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	2092554734
Owner Name:	RILEY JOSEH V & RAMONA J.
Owner Address:	1108 S FOWLER
Owner City,St,Zip:	FRESNO, CA 93727
Total Tanks:	0002
Tank Num:	001
Container Num:	1

RILEY JOSEH V & RAMONA J. (Continued) **U001592978**

Year Installed:	1978
Tank Capacity:	00000675
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	10
Leak Detection:	Stock Inventor, None

Tank Num:	002
Container Num:	2
Year Installed:	1984
Tank Capacity:	00004000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	3/16
Leak Detection:	Stock Inventor, None

E14
WSW
1/8-1/4
0.187 mi.
986 ft.

D&J SERVICES **HIST UST** **S104868816**
1108 S FOWLER **CUPA Listings** **N/A**
FRESNO, CA 93725

Site 3 of 3 in cluster E

Relative:
Lower

Actual:
321 ft.

HIST UST:

Name:	RILEY JOSEH V AND RAMONA J
Address:	1108 S FOWLER
City,State,Zip:	FRESNO, CA 93727
File Number:	00025060
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00025060.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CUPA FRESNO:

Name:	D&J SERVICES
Address:	1108 S FOWLER
City,State,Zip:	FRESNO, CA 93725
Region:	FRESNO
Cross Street:	Not reported
Facility ID:	FA0169517

D&J SERVICES (Continued) **S104868816**

APM Number: 31616039S
Program Element: UST REMOVAL/CLOSURE W/2 TANKS

15
NNE
1/8-1/4
0.242 mi.
1277 ft.

CITY OF FRESNO WELL 327
750 S ARMSTRONG AVE
FRESNO, CA 93727

CUPA Listings **S116348288**
CERS **N/A**

Relative:
Higher

Actual:
326 ft.

CUPA FRESNO:

Name:	CITY OF FRESNO WELL 327
Address:	750 S ARMSTRONG AVE
City,State,Zip:	FRESNO, CA 93727
Region:	FRESNO
Cross Street:	HAMILTON
Facility ID:	FA0283556
APM Number:	31376126T
Program Element:	HAZARDOUS MATERIALS HANDLER - WELL SITE

CERS:

Name:	CITY OF FRESNO WELL 327
Address:	750 S ARMSTRONG AVE
City,State,Zip:	FRESNO, CA 93727
Site ID:	419234
CERS ID:	10694113
CERS Description:	Chemical Storage Facilities

Coordinates:

Site ID:	419234
Facility Name:	CITY OF FRESNO WELL 327
Env Int Type Code:	HMBP
Program ID:	10694113
Coord Name:	Not reported
Ref Point Type Desc:	Entrance point of a facility or station,
Latitude:	36.725500
Longitude:	-119.672600

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Fresno County Community Health Department
Entity Title:	Not reported
Affiliation Address:	1221 Fulton St., 3rd FloorP.O. Box 11867
Affiliation City:	Fresno
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93775
Affiliation Phone:	(559) 600-3271,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1910 E. UNIVERSITY AVE.
Affiliation City:	FRESNO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93703
Affiliation Phone:	,

CITY OF FRESNO WELL 327 (Continued) **S116348288**

Affiliation Type Desc:	Identification Signer
Entity Name:	ROBERT LITTLE
Entity Title:	WATER SYSTEMS SUPERVISOR
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:	Document Preparer
Entity Name:	ROBERT LITTLE
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:	Parent Corporation
Entity Name:	City of Fresno Well Site Organization
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:	Environmental Contact
Entity Name:	ROBERT LITTLE
Entity Title:	Not reported
Affiliation Address:	1910 E. UNIVERSITY AVE.
Affiliation City:	FRESNO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93703
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	CITY OF FRESNO, WATER DIVISION
Entity Title:	Not reported
Affiliation Address:	1910 E. UNIVERSITY AVE.
Affiliation City:	FRESNO
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93703
Affiliation Phone:	(559) 621-5300,

Affiliation Type Desc:	Operator
Entity Name:	CITY OF FRESNO / DPU / WATER DIVISION
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

CITY OF FRESNO WELL 327 (Continued) **S116348288**

Affiliation Zip: Not reported
Affiliation Phone: (559) 621-5300,

16
WNW
1/8-1/4
0.247 mi.
1304 ft.

GARABEDIAL ESTATE
960 N FOWLER AVE
FRESNO, CA 93727

SWEEPS UST **S106926543**
N/A

Relative:
Lower

Actual:
318 ft.

SWEEPS UST:

Name:	GARABEDIAL ESTATE
Address:	960 N FOWLER AVE
City:	FRESNO
Status:	Not reported
Comp Number:	42422
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:	10-000-042422-000001
Tank Status:	Not reported
Capacity:	300
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	DIESEL
Number Of Tanks:	1

17
SSW
1/2-1
0.572 mi.
3020 ft.

NEW HIGH SCHOOL AND MIDDLE SCHOOL
FOWLER AVE./JENSEN AVE.
FRESNO, CA 93727

ENVIROSTOR SCH **S111418026**
N/A

Relative:
Lower

Actual:
320 ft.

ENVIROSTOR:

Name:	NEW HIGH SCHOOL AND MIDDLE SCHOOL
Address:	FOWLER AVE./JENSEN AVE.
City,State,Zip:	FRESNO, CA 93727
Facility ID:	60001617
Status:	Certified
Status Date:	12/10/2018
Site Code:	104699
Site Type:	School Cleanup
Site Type Detailed:	School
Acres:	116
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Mellan Songco
Supervisor:	Jose Salcedo
Division Branch:	Northern California Schools & Santa Susana
Assembly:	31
Senate:	14

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	36.71033
Longitude:	-119.6792
APN:	316-022-27S, 316-022-28S, 316-022-29S, 316-022-30S, 316-022-31, 316-022-32, 316-022-33, 316-022-34, 316-022-35, 31602227S, 31602228S, 31602229S, 31602230S, 31602231, 31602232, 31602233, 31602234, 31602235
	Not reported
Past Use:	ABOVE GROUND STORAGE TANKS, AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, UNDERGROUND STORAGE TANKS
Potential COC:	DDE DDT Lead Dieldrin
Confirmed COC:	30 007 300 083 001 300 000
Potential Description:	SOIL
Alias Name:	Proposed Education Complex
Alias Type:	Alternate Name
Alias Name:	316-022-27S
Alias Type:	APN
Alias Name:	316-022-28S
Alias Type:	APN
Alias Name:	316-022-29S
Alias Type:	APN
Alias Name:	316-022-30S
Alias Type:	APN
Alias Name:	316-022-31
Alias Type:	APN
Alias Name:	316-022-32
Alias Type:	APN
Alias Name:	316-022-33
Alias Type:	APN
Alias Name:	316-022-34
Alias Type:	APN
Alias Name:	316-022-35
Alias Type:	APN
Alias Name:	31602227S
Alias Type:	APN
Alias Name:	31602228S
Alias Type:	APN
Alias Name:	31602229S
Alias Type:	APN
Alias Name:	31602230S
Alias Type:	APN
Alias Name:	31602231
Alias Type:	APN
Alias Name:	31602232
Alias Type:	APN
Alias Name:	31602233
Alias Type:	APN
Alias Name:	31602234
Alias Type:	APN
Alias Name:	31602235
Alias Type:	APN
Alias Name:	104699
Alias Type:	Project Code (Site Code)
Alias Name:	60001617
Alias Type:	Envirostor ID Number

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 02/02/2016
Comments: Final Community Profile

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/18/2017
Comments: On January 18, 2017, DTSC approved the RAW and signed the NOD for filing to Office of Planning and Research (OPR) within 5 days. The NOD was filed with the OPR on the same day.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 11/17/2016
Comments: On November 17, 2016, PM received the final public notice from T. Pickens.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 04/12/2019
Comments: On April 12, 2018, DTSC completed the project site certification document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 07/18/2014
Comments: On July 18, 2014, DTSC provided comments on the draft/revised tech memo for the soil sampling of irrigation wells at the site. In addition, DTSC approved the final tech memo via email.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 01/18/2017
Comments: On January 18, 2017, DTSC approved the revised RAW, SFPD 4.15 and a Notice of Determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/05/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 05/31/2013
Comments: On May 31, 2013, DTSC approved the Step-Out Sampling Addendum for implementation

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 07/01/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: School Cleanup Agreement
Completed Date: 04/02/2015
Comments: On April 3, 2015, DTSC mailed a Fully Executed School Cleanup Agreement to the District.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Responsible Agency Review
Completed Date: 06/20/2016
Comments: On June 20, 2016, DTSC issued comments on the draft EIR.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 11/02/2012
Comments: On November 2, 2012, DTSC approved the PEA Workplan for implementation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 03/28/2013
Comments: On March 28, 2013, DTSC approved the Revised Step Out Tech Memo and the Revised Workplan Addendum for implementation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/03/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/28/2018
Comments: On February 28, 2018, DTSC conducted a site visit to observe the implementation of the approved RAW. During the site visit, it was observed that all the areas to be excavated are marked with flags and orange spray marker on the ground (Parcels 5,8 and 9). Partially bagged materials (the District consultant mentioned chemicals used for agriculture) and other containers were left by the previous owner in the barn (Parcel 5).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/13/2013
Comments: On August 13, 2013, DTSC received photos of Parcels 6, 7 and 8 via email. On August 15, 2013, DTSC received additional information on

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Parcel 6.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/27/2012
Comments: On June 27, 2012, DTSC received photos from the District's consultant of Parcel 3 (1700 S Fowler Ave).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 12/10/2018
Comments: On December 10, 2018, DTSC approved the revised RACR.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 01/25/2012
Comments: Fully Executed EOA sent to district

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 03/21/2012
Comments: On March 21, 2012, DTSC conducted a site visit.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 12/14/2012
Comments: On December 14, 2012, DTSC observed the implementation of the approved PEA Workplan for Parcel 5.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 4.15 Request
Completed Date: 01/18/2017
Comments: On January 18, 2017, DTSC approved the revised RAW, SFPD 4.15 and a Notice of Determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 11/17/2016
Comments: On November 17, 2016, PM received the final Community Update (English and Spanish versions) from T. Pickens.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/09/2018
Comments: On February 9, 2018, DTSC finalized the Work Notice and submitted for mail out.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Completed Document Type:	Other Report
Completed Date:	11/17/2016
Comments:	On November 17, 2016, the Statement of Findings was finalized.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	04/03/2018
Comments:	On April 3, 2018, DTSC approved the Tech Memo via email.
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:	NEW HIGH SCHOOL AND MIDDLE SCHOOL
Address:	FOWLER AVE./JENSEN AVE.
City,State,Zip:	FRESNO, CA 93727
Facility ID:	60001617
Site Type:	School Cleanup
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	116
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Mellan Songco
Supervisor:	Jose Salcedo
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104699
Assembly:	31
Senate:	14
Special Program Status:	Not reported
Status:	Certified
Status Date:	12/10/2018
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	36.71033
Longitude:	-119.6792
APN:	316-022-27S, 316-022-28S, 316-022-29S, 316-022-30S, 316-022-31, 316-022-32, 316-022-33, 316-022-34, 316-022-35, 31602227S, 31602228S, 31602229S, 31602230S, 31602231, 31602232, 31602233, 31602234, 31602235
	Not reported
Past Use:	ABOVE GROUND STORAGE TANKS, AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, UNDERGROUND STORAGE TANKS
Potential COC:	DDE, DDT, Lead, Dieldrin
Confirmed COC:	30, 007, 300, 083, 001, 300, 000
Potential Description:	SOIL
Alias Name:	Proposed Education Complex

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Alias Type:	Alternate Name
Alias Name:	316-022-27S
Alias Type:	APN
Alias Name:	316-022-28S
Alias Type:	APN
Alias Name:	316-022-29S
Alias Type:	APN
Alias Name:	316-022-30S
Alias Type:	APN
Alias Name:	316-022-31
Alias Type:	APN
Alias Name:	316-022-32
Alias Type:	APN
Alias Name:	316-022-33
Alias Type:	APN
Alias Name:	316-022-34
Alias Type:	APN
Alias Name:	316-022-35
Alias Type:	APN
Alias Name:	31602227S
Alias Type:	APN
Alias Name:	31602228S
Alias Type:	APN
Alias Name:	31602229S
Alias Type:	APN
Alias Name:	31602230S
Alias Type:	APN
Alias Name:	31602231
Alias Type:	APN
Alias Name:	31602232
Alias Type:	APN
Alias Name:	31602233
Alias Type:	APN
Alias Name:	31602234
Alias Type:	APN
Alias Name:	31602235
Alias Type:	APN
Alias Name:	104699
Alias Type:	Project Code (Site Code)
Alias Name:	60001617
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Community Profile
Completed Date:	02/02/2016
Comments:	Final Community Profile
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	01/18/2017
Comments:	On January 18, 2017, DTSC approved the RAW and signed the NOD for filing to Office of Planning and Research (OPR) within 5 days. The NOD was filed with the OPR on the same day.
Completed Area Name:	PROJECT WIDE

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 11/17/2016
Comments: On November 17, 2016, PM received the final public notice from T. Pickens.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 04/12/2019
Comments: On April 12, 2018, DTSC completed the project site certification document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 07/18/2014
Comments: On July 18, 2014, DTSC provided comments on the draft/revised tech memo for the soil sampling of irrigation wells at the site. In addition, DTSC approved the final tech memo via email.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 01/18/2017
Comments: On January 18, 2017, DTSC approved the revised RAW, SFPD 4.15 and a Notice of Determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/05/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 05/31/2013
Comments: On May 31, 2013, DTSC approved the Step-Out Sampling Addendum for implementation

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 07/01/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: School Cleanup Agreement
Completed Date: 04/02/2015
Comments: On April 3, 2015, DTSC mailed a Fully Executed School Cleanup Agreement to the District.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Responsible Agency Review

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Completed Date: 06/20/2016
Comments: On June 20, 2016, DTSC issued comments on the draft EIR.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 11/02/2012
Comments: On November 2, 2012, DTSC approved the PEA Workplan for implementation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Tech Memo
Completed Date: 03/28/2013
Comments: On March 28, 2013, DTSC approved the Revised Step Out Tech Memo and the Revised Workplan Addendum for implementation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/03/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/28/2018
Comments: On February 28, 2018, DTSC conducted a site visit to observe the implementation of the approved RAW. During the site visit, it was observed that all the areas to be excavated are marked with flags and orange spray marker on the ground (Parcels 5,8 and 9). Partially bagged materials (the District consultant mentioned chemicals used for agriculture) and other containers were left by the previous owner in the barn (Parcel 5).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/13/2013
Comments: On August 13, 2013, DTSC received photos of Parcels 6, 7 and 8 via email. On August 15, 2013, DTSC received additional information on Parcel 6.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/27/2012
Comments: On June 27, 2012, DTSC received photos from the District's consultant of Parcel 3 (1700 S Fowler Ave).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 12/10/2018
Comments: On December 10, 2018, DTSC approved the revised RACR.

Completed Area Name: PROJECT WIDE

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 01/25/2012
Comments: Fully Executed EOA sent to district

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 03/21/2012
Comments: On March 21, 2012, DTSC conducted a site visit.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 12/14/2012
Comments: On December 14, 2012, DTSC observed the implementation of the approved PEA Workplan for Parcel 5.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 4.15 Request
Completed Date: 01/18/2017
Comments: On January 18, 2017, DTSC approved the revised RAW, SFPD 4.15 and a Notice of Determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 11/17/2016
Comments: On November 17, 2016, PM received the final Community Update (English and Spanish versions) from T. Pickens.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/09/2018
Comments: On February 9, 2018, DTSC finalized the Work Notice and submitted for mail out.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/17/2016
Comments: On November 17, 2016, the Statement of Findings was finalized.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/03/2018
Comments: On April 3, 2018, DTSC approved the Tech Memo via email.

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

NEW HIGH SCHOOL AND MIDDLE SCHOOL (Continued) **S111418026**

Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

18
South
1/2-1
0.767 mi.
4052 ft.

PROPOSED SANGER UNIFIED SCHOOL DISTRICT ELEMENTARY **ENVIROSTOR** **S109422385**
SOUTH ARMSTRONG/EAST JENSEN **SCH** **N/A**
FRESNO, CA 93727

Relative:
Higher

Actual:
323 ft.

ENVIROSTOR:

Name:	PROPOSED SANGER UNIFIED SCHOOL DISTRICT ELEMENTARY SCHOOL
Address:	SOUTH ARMSTRONG/EAST JENSEN
City,State,Zip:	FRESNO, CA 93727
Facility ID:	60001057
Status:	No Further Action
Status Date:	12/15/2009
Site Code:	104665
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	13
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Assembly:	31
Senate:	14
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	36.71043
Longitude:	-119.6708
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic Chlordane DDD DDE DDT Endrin Toxaphene
Confirmed COC:	30001-NO 30004-NO 30023-NO 30006-NO 30007-NO 30008-NO 30010-NO No Contaminants found
Potential Description:	SOIL
Alias Name:	104665
Alias Type:	Project Code (Site Code)
Alias Name:	60001057
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	04/06/2009
Comments:	Fully Executed Oversight Agreement
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	02/10/2009
Comments:	Ag site. Needs PEA.

PROPOSED SANGER UNIFIED SCHOOL DISTRICT ELEMENTARY SCHOOL (Continued) **S109422385**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	06/11/2009
Comments:	PEA Workplan approved by PM.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement Application
Completed Date:	03/20/2009
Comments:	Received application on 3/20/2009. See uploaded document

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	12/15/2009
Comments:	DTSC approved the PEA with a no further action required determination. Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	12/17/2009
Comments:	CRU completed and signed by TL.

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 SANGER UNIFIED SCHOOL DISTRICT ELEMENTARY SCHOOL
Address:	SOUTH ARMSTRONG/EAST JENSEN
City,State,Zip:	FRESNO, CA 93727
Facility ID:	60001057
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	13
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
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104665
Assembly:	31
Senate:	14
Special Program Status:	Not reported
Status:	No Further Action

PROPOSED SANGER UNIFIED SCHOOL DISTRICT ELEMENTARY SCHOOL (Continued) **S109422385**

Status Date:	12/15/2009
Restricted Use:	NO
Funding:	School District
Latitude:	36.71043
Longitude:	-119.6708
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic, Arsenic, Chlordane, DDD, DDE, DDT, Endrin, Toxaphene
Confirmed COC:	30001-NO, 30004-NO, 30023-NO, 30006-NO, 30007-NO, 30008-NO, 30010-NO, No Contaminants found
Potential Description:	SOIL
Alias Name:	104665
Alias Type:	Project Code (Site Code)
Alias Name:	60001057
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	04/06/2009
Comments:	Fully Executed Oversight Agreement
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	02/10/2009
Comments:	Ag site. Needs PEA.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	06/11/2009
Comments:	PEA Workplan approved by PM.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement Application
Completed Date:	03/20/2009
Comments:	Received application on 3/20/2009. See uploaded document
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	12/15/2009
Comments:	DTSC approved the PEA with a no further action required determination. Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	12/17/2009
Comments:	CRU completed and signed by TL.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported

PROPOSED SANGER UNIFIED SCHOOL DISTRICT ELEMENTARY SCHOOL (Continued) **S109422385**

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

Count: 3 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FRESNO	S105960401	PACIFIC GAS AND ELECTRIC - FRESNO	CALIFORNIA AND ORANGE AVENUES	93725	CA BOND EXP. PLAN
FRESNO	S123785057	FOWLER-MCKINLEY ELEMENTARY SCHOOL	NORTHEAST CORNER OF FOWLER AVE	93727	ENVIROSTOR, SCH
FRESNO	S126143205	PROPOSED TEMPERANCE ELEMENTARY SCH	WEST SIDE OF TEMPERANCE AVENUE	93727	ENVIROSTOR, SCH

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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
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.

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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
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: 06/23/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/23/2023
Next Scheduled EDR Contact: 10/09/2023
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 know 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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/23/2023
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: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

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: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 05/25/2023
Date Data Arrived at EDR: 05/31/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 54

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
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: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
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: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

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: 06/12/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
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 identifes 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: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
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 inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

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
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
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
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
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
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
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
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
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
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

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
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 Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
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
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
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
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
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: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

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
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

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
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

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: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

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: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
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
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
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
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
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
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
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
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

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: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 05/31/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
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: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

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: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

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: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
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
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds 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: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 08/30/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

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
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 83

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 11/20/2023
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
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

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
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

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
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: No Update Planned

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
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/13/2023
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: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
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
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
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: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
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
Date Data Arrived at EDR: 11/30/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 71

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 11/13/2023
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
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: California Environmental Reporting System Hazardous 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: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/11/2023
Number of Days to Update: 84

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
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: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
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
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
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
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
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: 04/28/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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.

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/06/2023
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
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: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
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: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/19/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 04/15/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
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: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
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.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 05/08/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 55

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
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: 07/10/2023
Next Scheduled EDR Contact: 10/23/2023
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: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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: 08/01/2023
Next Scheduled EDR Contact: 11/20/2023
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: 06/19/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

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
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
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
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
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
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
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
Date Data Arrived at EDR: 02/16/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 75

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/18/2023
Next Scheduled EDR Contact: 11/27/2023
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: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 83

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Annually

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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 12/11/2023
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: 05/09/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 06/12/2023
Next Scheduled EDR Contact: 10/30/2023
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: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 11/13/2023
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: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/07/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Annually

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
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
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
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
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
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
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: 07/20/2023
Date Data Arrived at EDR: 09/01/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 19

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/12/2023
Next Scheduled EDR Contact: 10/30/2023
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: 12/31/2021
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 12/11/2023
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
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/28/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

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
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
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
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/22/2023
Next Scheduled EDR Contact: 01/08/2024
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
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
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
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
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.

Date of Government Version: 03/31/2023
Date Data Arrived at EDR: 04/20/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 81

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
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: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 08/10/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
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 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

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

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

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: 05/01/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 61

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Semi-Annually

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: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

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
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
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: 06/13/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 61

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 12/18/2023
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: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 60

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

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: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
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: 06/24/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/29/2023
Next Scheduled EDR Contact: 10/16/2023
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
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
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: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 54

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
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: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

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
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
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: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

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: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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 facilitys 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: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

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: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
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: 07/05/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/16/2023
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: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

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: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 03/31/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/20/2023
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
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Annually

DRYCLEAN FEATHER RIVER DIST: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO METO DIST: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/19/2023
Number of Days to Update: 82

Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO CO DIST: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 02/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1461

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQ VAL DIST: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 05/24/2023
Date Data Arrived at EDR: 05/30/2023
Date Made Active in Reports: 08/21/2023
Number of Days to Update: 83

Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN DIST: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL CO DIST: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDO CO DIST: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE DESERT DIST: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTEREY BAY DIST: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA CO DIST: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO DIST: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

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: 05/22/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 82

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER CO DIST: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA DIST: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE CO DIST: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1469

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 07/13/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS CO DIST: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 816

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 07/24/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

DRYCLEAN LAKE CO DIST: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO COAST UNIFIED DIST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SIERRA DIST: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SONOMA CO DIST: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB CO DIST: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB CO DIST: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 04/23/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1467

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA CO DIST: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA CO DIST: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
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: 05/17/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GLENN CO DIST: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/03/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 83

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 09/11/2023
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: 12/31/2021
Date Data Arrived at EDR: 06/09/2023
Date Made Active in Reports: 08/30/2023
Number of Days to Update: 82

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
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.

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/06/2023
Number of Days to Update: 79

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 09/13/2023
Date Data Arrived at EDR: 09/14/2023
Date Made Active in Reports: 09/21/2023
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 09/13/2023
Next Scheduled EDR Contact: 10/30/2023
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: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
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: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
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.

Date of Government Version: 06/29/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/19/2023
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 06/29/2023
Next Scheduled EDR Contact: 10/16/2023
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: 07/07/2023
Next Scheduled EDR Contact: 10/16/2023
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: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 05/08/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
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: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
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: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Annually

SANTA CRUZ CO SITE MITI: Site Mitigation Listing
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 07/07/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

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: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
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: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
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

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/06/2023
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data
The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 07/16/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
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
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
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: 04/13/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

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: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
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
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

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
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: 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
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: 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
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
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
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
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: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

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: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 04/03/2023
Date Data Arrived at EDR: 04/20/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 81

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 82

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/06/2023
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: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
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: 06/29/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Semi-Annually

GLENN COUNTY:

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: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/12/2023
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 06/28/2023
Number of Days to Update: 75

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
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: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 13

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/03/2023
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 05/31/2023
Number of Days to Update: 34

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
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: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 06/21/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/11/2023
Date Made Active in Reports: 06/26/2023
Number of Days to Update: 76

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/10/2023
Next Scheduled EDR Contact: 10/23/2023
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: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
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: 09/19/2023
Next Scheduled EDR Contact: 01/01/2024
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: 07/13/2023
Next Scheduled EDR Contact: 10/23/2023
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: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 48

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

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: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 82

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
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: 03/02/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/07/2023
Number of Days to Update: 80

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/20/2023
Next Scheduled EDR Contact: 10/30/2023
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
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/23/2023
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
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/12/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 42

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

MARIN COUNTY:

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: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
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: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
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: 07/25/2023
Next Scheduled EDR Contact: 11/27/2023
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: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
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: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

NAPA COUNTY:

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: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
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: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/05/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 81

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/01/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 27

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

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: 07/31/2023
Next Scheduled EDR Contact: 12/11/2023
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: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/28/2023
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 62

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
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: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
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: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/04/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 82

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 05/09/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 08/01/2023
Number of Days to Update: 83

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 04/04/2023
Date Data Arrived at EDR: 04/05/2023
Date Made Active in Reports: 06/27/2023
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

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
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 04/28/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 04/28/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 05/03/2023
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

SAN FRANCISO 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: 04/11/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 07/11/2023
Number of Days to Update: 89

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
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
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
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: 09/08/2023
Next Scheduled EDR Contact: 12/18/2023
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: 08/29/2023
Next Scheduled EDR Contact: 12/18/2023
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: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
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

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: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
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: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
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: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
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: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
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: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

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: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
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: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
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 Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/24/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 19

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 05/11/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 04/12/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 06/28/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

TULARE COUNTY:

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: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
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: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
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: 03/27/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 80

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
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: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
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: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
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: 03/27/2023
Date Data Arrived at EDR: 04/21/2023
Date Made Active in Reports: 07/07/2023
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 12

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
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: 04/03/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 56

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/04/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 82

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
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
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/06/2023
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Annually

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: 07/27/2023
Next Scheduled EDR Contact: 11/06/2023
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: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
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: 08/10/2022
Next Scheduled EDR Contact: 11/27/2023
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: 08/30/2023
Next Scheduled EDR Contact: 12/18/2023
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
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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.

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

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SIMONIAN ESTATES
1099 S ARMSTRONG AVENUE
FRESNO, CA 93727

TARGET PROPERTY COORDINATES

Latitude (North):	36.721225 - 36˚ 43’ 16.41’’
Longitude (West):	119.675449 - 119˚ 40’ 31.62’’
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	261052.1
UTM Y (Meters):	4067082.2
Elevation:	323 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12012201 MALAGA, 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).

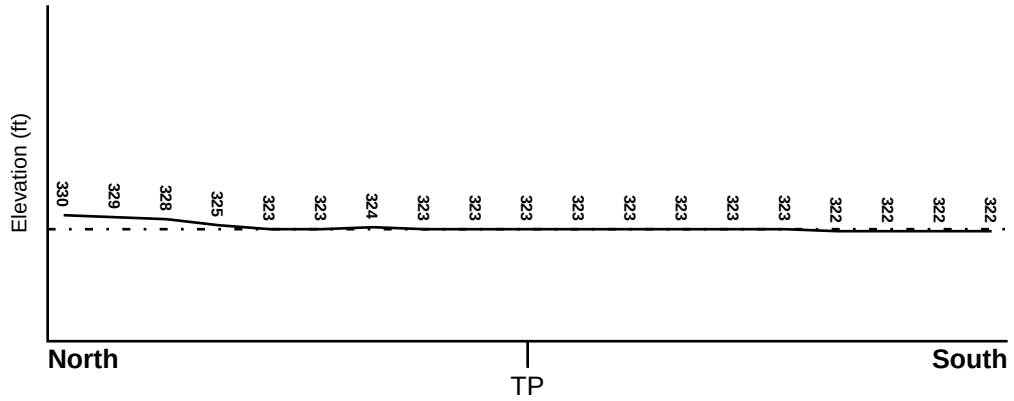
TOPOGRAPHIC INFORMATION

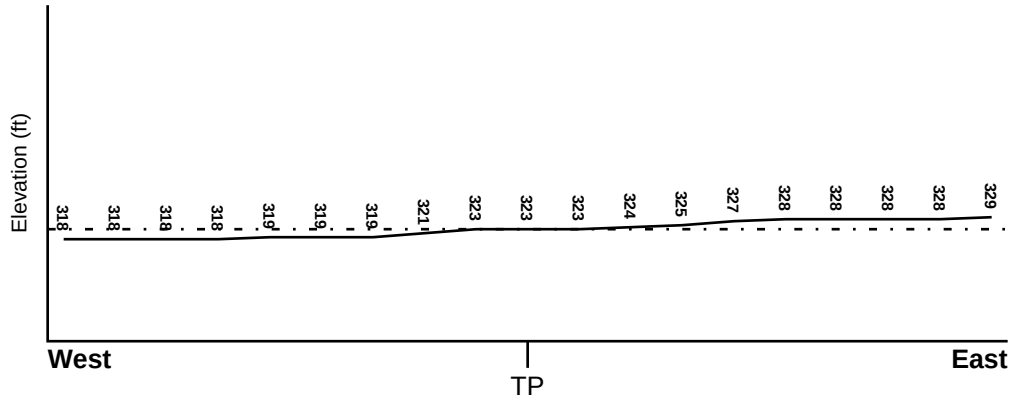
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 323 ft.

0 1/2 1 Miles

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

Flood Plain Panel at Target Property	FEMA Source Type
06019C2135H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06019C2130H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
MALAGA	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.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

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

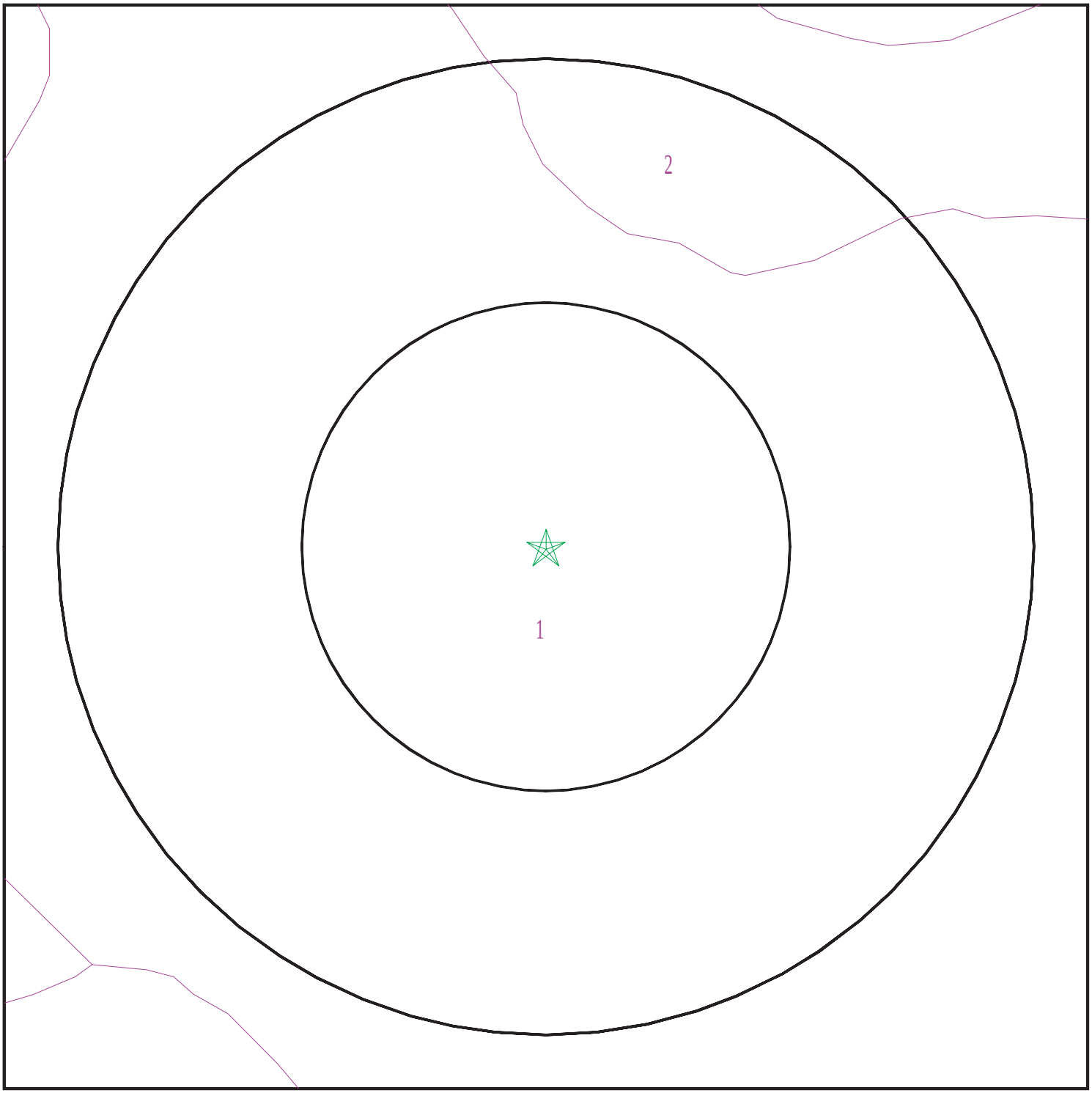
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed 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 - 7454414.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Simonian Estates	CLIENT:	RMA Geoscience
ADDRESS:	1099 S Armstrong Avenue Fresno CA 93727	CONTACT:	Jim Vue
		INQUIRY #:	7454414.2s
LAT/LONG:	36.721225 / 119.675449	DATE:	September 26, 2023 2:35 pm

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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: EXETER

Soil Surface Texture: sandy 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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.1 Min: 0.01	Max: Min:
2	14 inches	29 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.1 Min: 0.01	Max: Min:
3	29 inches	33 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.1 Min: 0.01	Max: Min:

Soil Map ID: 2

Soil Component Name: GREENFIELD

Soil Surface Texture: sandy 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

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	16 inches	38 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
3	38 inches	59 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000176876	0 - 1/8 Mile WNW
2	USGS40000176825	1/8 - 1/4 Mile SSE
A4	USGS40000176884	1/4 - 1/2 Mile WNW
15	USGS40000176945	1/2 - 1 Mile NW
C16	USGS40000176964	1/2 - 1 Mile NNW

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

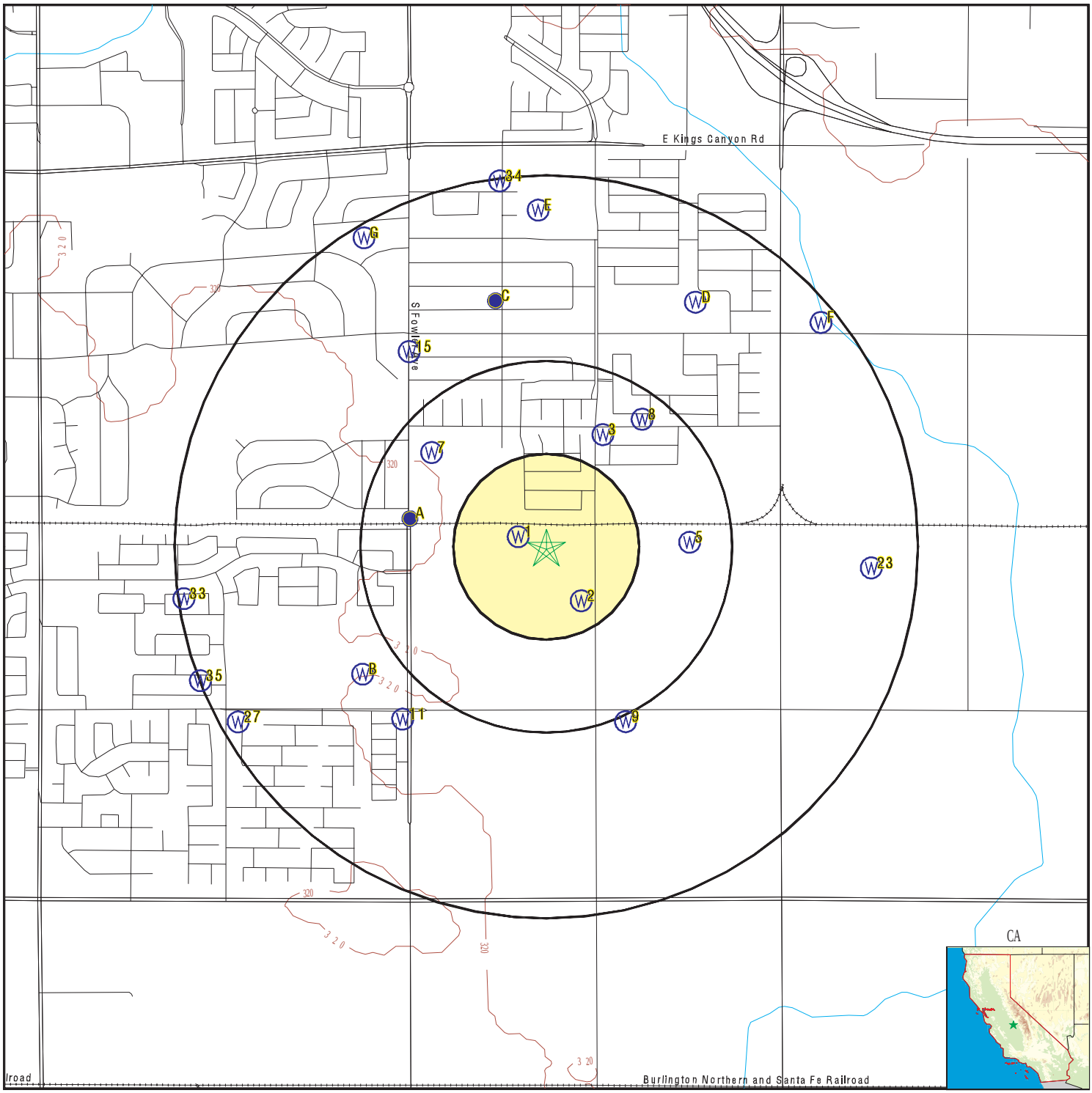
MAP ID	WELL ID	LOCATION FROM TP
3	CADDW0000011472	1/4 - 1/2 Mile NNE
5	CADPR0000003185	1/4 - 1/2 Mile East
A6	CADDW0000004351	1/4 - 1/2 Mile West
7	CADDW0000013240	1/4 - 1/2 Mile NW
8	CADPR0000003605	1/4 - 1/2 Mile NE
9	CADPR0000003903	1/2 - 1 Mile SSE
B10	12227	1/2 - 1 Mile WSW
11	CADDW0000011834	1/2 - 1 Mile SW
B12	CADWR0000000173	1/2 - 1 Mile SW
B13	CADWR0000016968	1/2 - 1 Mile SW
B14	CADPR0000004036	1/2 - 1 Mile WSW
C17	CADWR0000018096	1/2 - 1 Mile NNW
C18	CADDW0000016431	1/2 - 1 Mile North
D19	CADDW0000018578	1/2 - 1 Mile NNE
D20	CADDW0000020501	1/2 - 1 Mile NNE
D21	CAUSGSN00002559	1/2 - 1 Mile NNE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D22	12231	1/2 - 1 Mile NNE
23	CADPR0000001386	1/2 - 1 Mile East
E24	12228	1/2 - 1 Mile North
E25	CADDW0000000580	1/2 - 1 Mile North
F26	12232	1/2 - 1 Mile NE
27	12236	1/2 - 1 Mile WSW
G28	12229	1/2 - 1 Mile NNW
G29	12223	1/2 - 1 Mile NNW
G30	23282	1/2 - 1 Mile NNW
G31	12230	1/2 - 1 Mile NNW
F32	CADDW0000006305	1/2 - 1 Mile NE
33	CADWR0000013410	1/2 - 1 Mile West
34	CADDW0000012368	1/2 - 1 Mile North
35	CADPR0000005001	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 7454414.2s



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: Simonian Estates	CLIENT: RMA Geoscience
ADDRESS: 1099 S Armstrong Avenue Fresno CA 93727	CONTACT: Jim Vue
LAT/LONG: 36.721225 / 119.675449	INQUIRY #: 7454414.2s
	DATE: September 26, 2023 2:35 pm

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Map ID Direction Distance Elevation	Database	EDR ID Number
1 **WNW** **0 - 1/8 Mile** **Higher**	**FED USGS**	**USGS40000176876**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	014S021E15C002M	Type:	Well
Description:	Not Reported	HUC:	18030012
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:	1950	Well Depth:	130
Well Depth Units:	ft	Well Hole Depth:	160
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1963-02-01
Feet below surface:	47.29	Feet to sea level:	Not Reported
Note:	Not Reported		

---

2 **SSE** **1/8 - 1/4 Mile** **Higher**	**FED USGS**	**USGS40000176825**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	014S021E15C001M	Type:	Well
Description:	Not Reported	HUC:	18030012
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:	Not Reported	Well Depth:	75
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1963-10-22
Feet below surface:	46.31	Feet to sea level:	Not Reported
Note:	Not Reported		

---

3 **NNE** **1/4 - 1/2 Mile** **Higher**	**CA WELLS**	**CADDW0000011472**

Well ID:	1010007-642	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 327 - RAW	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=1010007-642&store_num=		
GeoTracker Data:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
A4 **WNW** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000176884**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	014S021E09R001M	Type:	Well
Description:	Not Reported	HUC:	18030012
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:	19590806	Well Depth:	288
Well Depth Units:	ft	Well Hole Depth:	335
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1963-09-17
Feet below surface:	47.00	Feet to sea level:	Not Reported
Note:	Not Reported		

---

5 **East** **1/4 - 1/2 Mile** **Higher**	**CA WELLS**	**CADPR0000003185**

Well ID:	84161	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	84161	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=84161&store_num=		
GeoTracker Data:	Not Reported		

A6 **West** **1/4 - 1/2 Mile** **Lower**	**CA WELLS**	**CADDW0000004351**

Well ID:	1010007-092	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 276 INF - DESTROYED	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=1010007-092&store_num=		
GeoTracker Data:	Not Reported		

---

7 **NW** **1/4 - 1/2 Mile** **Lower**	**CA WELLS**	**CADDW0000013240**

Well ID:	1010007-679	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 339 - RAW	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=1010007-679&store_num=		

GeoTracker Data: Not Reported

8
NE **CA WELLS** **CADPR0000003605**
1/4 - 1/2 Mile
Higher

Well ID:	84120	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	84120	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=84120&store_num=		
GeoTracker Data:	Not Reported		

9
SSE **CA WELLS** **CADPR0000003903**
1/2 - 1 Mile
Higher

Well ID:	84162	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	84162	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=84162&store_num=		
GeoTracker Data:	Not Reported		

B10
WSW **CA WELLS** **12227**
1/2 - 1 Mile
Lower

Seq:	12227	Prim sta c:	14S/21E-09R01 M
Frds no:	1010007092	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	WELL 276 - INACTIVE	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	364300.0	Longitude:	1194100.0
Precision:	4	Status:	IU
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988
Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		

Map ID Direction Distance Elevation	Database	EDR ID Number
11 **SW** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADDW0000011834**

Well ID:	1010007-644	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 188 - RAW	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=1010007-644&store_num=		
GeoTracker Data:	Not Reported		

B12 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADWR0000000173**

Well ID:	14S21E15C002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	14S21E15C002M	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=14S21E15C002M&store_num=		
GeoTracker Data:	Not Reported		

B13 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADWR0000016968**

Well ID:	14S21E15C001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	14S21E15C001M	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=14S21E15C001M&store_num=		
GeoTracker Data:	Not Reported		

B14 **WSW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADPR0000004036**

Well ID:	84170	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	84170	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=84170&store_num=		
GeoTracker Data:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
15 **NW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000176945**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	014S021E09J001M	Type:	Well
Description:	Not Reported	HUC:	18030012
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:	1941	Well Depth:	100
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1963-10-21
Feet below surface:	41.75	Feet to sea level:	Not Reported
Note:	Not Reported		

C16 **NNW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000176964**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	014S021E10E001M	Type:	Well
Description:	Not Reported	HUC:	18030012
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:	19550101	Well Depth:	120
Well Depth Units:	ft	Well Hole Depth:	160
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1963-01-30
Feet below surface:	9.80	Feet to sea level:	Not Reported
Note:	Not Reported		

C17 **NNW** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADWR0000018096**

Well ID:	14S21E10E001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	14S21E10E001M	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=14S21E10E001M&store_num=		
GeoTracker Data:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
C18 **North** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADDW0000016431**

Well ID:	1010007-090	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 274 INF	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=1010007-090&store_num=		
GeoTracker Data:	Not Reported		

D19 **NNE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADDW0000018578**

Well ID:	1010007-695	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 135B - INACTIVE	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=1010007-695&store_num=		
GeoTracker Data:	Not Reported		

D20 **NNE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADDW0000020501**

Well ID:	1010007-339	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 135A INF	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=1010007-339&store_num=		
GeoTracker Data:	Not Reported		

D21 **NNE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CAUSGSN00002559**

Well ID:	USGS-364300119400001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-364300119400001	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-364300119400001&store_num=		
GeoTracker Data:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
D22 **NNE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**12231**

Seq:	12231	Prim sta c:	14S/21E-10H02 M
Frds no:	1010007339	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	WELL 135A	Station ty:	WELL/AMBNT/MUN
Latitude:	364352.0	Longitude:	1194000.0
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988
Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		

Sample date:	28-FEB-18	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-FEB-18	Finding:	4.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	13-FEB-18	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-FEB-18	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	29-JAN-18	Finding:	4.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-JAN-18	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	17-JAN-18	Finding:	4.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	10-JAN-18	Finding:	4.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-JAN-18	Finding:	4.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	27-DEC-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-DEC-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-DEC-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-DEC-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-NOV-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-NOV-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	13-NOV-17	Finding:	5.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-NOV-17	Finding:	5.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	5.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	25-OCT-17	Finding:	5.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	17-OCT-17	Finding:	5.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-OCT-17	Finding:	5.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-OCT-17	Finding:	5.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	26-SEP-17	Finding:	5.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-SEP-17	Finding:	25.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	5.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	20-SEP-17	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	0.24
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	280.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	2.6
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	20-SEP-17	Finding:	0.11
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	20-SEP-17	Finding:	24.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	20-SEP-17	Finding:	7.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	2.2
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	20.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	35.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	170.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	5.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-SEP-17	Finding:	210.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	170.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-SEP-17	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	20-SEP-17	Finding:	440.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	19-SEP-17	Finding:	5.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	13-SEP-17	Finding:	5.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-SEP-17	Finding:	5.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	29-AUG-17	Finding:	5.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-AUG-17	Finding:	5.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-AUG-17	Finding:	5.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-AUG-17	Finding:	5.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-AUG-17	Finding:	5.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	26-JUL-17	Finding:	7.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-JUL-17	Finding:	7.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-JUL-17	Finding:	6.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-JUL-17	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	27-JUN-17	Finding:	7.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	29-JUN-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-JUN-15	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	15-JUN-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JUN-15	Finding:	24.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	01-JUN-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-MAY-15	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-MAY-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAY-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAY-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-APR-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-MAR-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-MAR-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-MAR-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-MAR-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-FEB-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-FEB-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-FEB-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	02-FEB-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-JAN-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-JAN-15	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-DEC-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-NOV-14	Finding:	2.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	18-NOV-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-NOV-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-NOV-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-OCT-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-OCT-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-OCT-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-OCT-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-SEP-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-SEP-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-SEP-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-SEP-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	03-SEP-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-AUG-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-AUG-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-AUG-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-AUG-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-JUL-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-JUL-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUL-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	01-JUL-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUN-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JUN-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-JUN-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JUN-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-MAY-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	19-MAY-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-MAY-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAY-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-APR-14	Finding:	410.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	30-APR-14	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	30-APR-14	Finding:	170.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	210.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	160.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	33.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	20.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	25.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	2.3
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	9.1
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	20.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	30-APR-14	Finding:	260.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	30-APR-14	Finding:	0.32
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported

Dlr:	0.		
Sample date:	30-APR-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-APR-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-APR-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-APR-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-APR-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-APR-14	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	31-MAR-14	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-MAR-14	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-MAR-14	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-FEB-14	Finding:	24.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-FEB-14	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-FEB-14	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-DEC-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-NOV-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-NOV-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	13-NOV-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-NOV-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-OCT-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-OCT-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-OCT-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-OCT-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-OCT-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-SEP-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-SEP-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-SEP-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-AUG-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-AUG-13	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-AUG-13	Finding:	25.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	22-JUL-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-JUL-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUL-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JUL-13	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JUN-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JUN-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JUN-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-MAY-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-MAY-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-MAY-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-MAY-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-APR-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-APR-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-APR-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	08-APR-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-APR-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-MAR-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-MAR-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAR-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAR-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-FEB-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-JAN-13	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JAN-13	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-JAN-13	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JAN-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JAN-13	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-DEC-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-DEC-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-DEC-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-NOV-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	20-NOV-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-NOV-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-NOV-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-OCT-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-OCT-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-OCT-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-OCT-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-OCT-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-SEP-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-AUG-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-AUG-12	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-AUG-12	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	06-AUG-12	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-JUL-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JUL-12	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JUL-12	Finding:	22.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JUL-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JUL-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUN-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-JUN-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-JUN-12	Finding:	23.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-JUN-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-MAY-12	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-MAY-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-MAY-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-MAY-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-MAY-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-APR-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	09-APR-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-MAR-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-MAR-12	Finding:	21.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-MAR-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAR-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-FEB-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-FEB-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-FEB-12	Finding:	0.398
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	23-JAN-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JAN-12	Finding:	20.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

23
East
1/2 - 1 Mile
Higher

CA WELLS **CADPR0000001386**

Well ID:	84148	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	84148	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=84148&store_num=		
GeoTracker Data:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
E24 **North** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**12228**

Seq:	12228	Prim sta c:	14S/21E-10C01 M
Frds no:	1000293001	County:	10
District:	40	User id:	10C
System no:	1000293	Water type:	G
Source nam:	6350 E LANE	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	364403.0	Longitude:	1194028.0
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:	1000293	System nam:	John Wash School
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		

E25 **North** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADDW0000000580**	

Well ID:	1000293-001	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=1000293-001&store_num=		
GeoTracker Data:	Not Reported		

F26 **NE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**12232**	

Seq:	12232	Prim sta c:	14S/21E-11E01 M
Frds no:	1010007265	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	WELL 135 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	364348.0	Longitude:	1193942.0
Precision:	3	Status:	DS
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988

Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		

27
WSW
1/2 - 1 Mile
Lower

CA WELLS 12236

Seq:	12236	Prim sta c:	14S/21E-16M02 M
Frds no:	1010007317	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	WELL 152	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	364252.0	Longitude:	1194122.0
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988
Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		

G28
NNW
1/2 - 1 Mile
Higher

CA WELLS 12229

Seq:	12229	Prim sta c:	14S/21E-10D01 M
Frds no:	1010007091	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	WELL 275	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	364400.0	Longitude:	1194100.0
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988
Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		

Sample date:	01-JUN-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	01-JUN-15	Finding:	8.e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		

Sample date:	27-MAY-15	Finding:	35.

Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-MAY-15	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAY-15	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAY-15	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAY-15	Finding:	7.2e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	27-APR-15	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-APR-15	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-APR-15	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-APR-15	Finding:	6.9e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	08-APR-15	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-APR-15	Finding:	7.5e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	20-JAN-15	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-JAN-15	Finding:	5.4e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	12-JAN-15	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-JAN-15	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-DEC-14	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	22-DEC-14	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-DEC-14	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-DEC-14	Finding:	2.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	10-DEC-14	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-DEC-14	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-DEC-14	Finding:	7.4e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	29-JUL-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-JUL-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-JUL-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUL-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JUL-14	Finding:	7.3e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	02-JUL-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUN-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JUN-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-14	Finding:	6.2e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	11-JUN-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	03-JUN-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-MAY-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-MAY-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-MAY-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAY-14	Finding:	30.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	6.5e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	06-MAY-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAY-14	Finding:	0.29
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	240.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	16.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	06-MAY-14	Finding:	7.6
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	2.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	22.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	18.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	06-MAY-14	Finding:	150.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	8.2
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	340.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	06-MAY-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-APR-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-APR-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-APR-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-APR-14	Finding:	7.8e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	07-APR-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	31-MAR-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-MAR-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-MAR-14	Finding:	5.2e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	10-MAR-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAR-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	24-FEB-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-FEB-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-FEB-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-FEB-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-FEB-14	Finding:	9.5e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	27-JAN-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-JAN-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-JAN-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-JAN-14	Finding:	7.9e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	06-JAN-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-DEC-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-DEC-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-DEC-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-DEC-13	Finding:	7.8e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	10-DEC-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	03-DEC-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-NOV-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-NOV-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-NOV-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-NOV-13	Finding:	7.9e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	05-NOV-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-OCT-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-OCT-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-OCT-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-OCT-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-OCT-13	Finding:	8.7e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	02-OCT-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-SEP-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-SEP-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-13	Finding:	8.5e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L

Dlr:	2.e-002		
Sample date:	05-SEP-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-AUG-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-AUG-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-AUG-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-13	Finding:	7.4e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	06-AUG-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-JUL-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-JUL-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUL-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUL-13	Finding:	9.3e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	02-JUL-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JUN-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JUN-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-13	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	03-JUN-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-MAY-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-MAY-13	Finding:	3.4e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	20-MAY-13	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-MAY-13	Finding:	8.8e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	17-MAY-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-NOV-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-OCT-12	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-OCT-12	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-OCT-12	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-OCT-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-OCT-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-SEP-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	27-AUG-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-AUG-12	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-AUG-12	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-12	Finding:	8.9e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	06-AUG-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	01-AUG-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JUL-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JUL-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JUL-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JUL-12	Finding:	8.4e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	02-JUL-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUN-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-JUN-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-JUN-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-JUN-12	Finding:	9.8e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		

Sample date:	08-JUN-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-MAY-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-MAY-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-MAY-12	Finding:	9.1e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	14-MAY-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAY-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-MAY-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-MAY-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-APR-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-APR-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-APR-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-APR-12	Finding:	9.8e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	26-MAR-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-MAR-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-MAR-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	06-MAR-12	Finding:	9.3e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	06-MAR-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-FEB-12	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-FEB-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-FEB-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-FEB-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-FEB-12	Finding:	0.19
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	02-FEB-12	Finding:	0.48
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	31-JAN-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-JAN-12	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JAN-12	Finding:	28.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JAN-12	Finding:	9.e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	09-JAN-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JAN-12	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Map ID Direction Distance Elevation	Database	EDR ID Number
G29 **NNW** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**12223**

Seq:	12223	Prim sta c:	14S/21E-09C01 M
Frds no:	1010007113	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	WELL 297-1	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	364400.0	Longitude:	1194100.0
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988
Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		

Sample date:	03-JUN-14	Finding:	38.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	27-MAY-14	Finding:	260.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	27-MAY-14	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		

Sample date:	27-MAY-14	Finding:	0.16
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		

Sample date:	27-MAY-14	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	27-MAY-14	Finding:	0.87
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		

Sample date:	27-MAY-14	Finding:	380.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		

Sample date:	27-MAY-14	Finding:	27.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	27-MAY-14	Finding:	17.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	27-MAY-14	Finding:	630.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	27-MAY-14	Finding:	8.3
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	27-MAY-14	Finding:	260.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	27-MAY-14	Finding:	310.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	27-MAY-14	Finding:	51.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-MAY-14	Finding:	31.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-MAY-14	Finding:	25.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	27-MAY-14	Finding:	2.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-AUG-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-AUG-13	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-JUL-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-JUL-13	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUL-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JUN-13	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	19-JUN-13	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-NOV-12	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	3.32
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	07-NOV-12	Finding:	0.311
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-OCT-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-OCT-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-OCT-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-OCT-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-SEP-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-AUG-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-AUG-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	14-AUG-12	Finding:	41.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-AUG-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-JUL-12	Finding:	40.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JUL-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JUL-12	Finding:	39.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUL-12	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JUL-12	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-JUN-12	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

G30
NNW
1/2 - 1 Mile
Higher

CA WELLS 23282

Seq:	23282	Prim sta c:	K10/007-297TRTD
Frds no:	1010007287	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	SITE 297 (GAC)	Station ty:	WELL/AMBNT
Latitude:	364400.0	Longitude:	1194100.0
Precision:	3	Status:	AT
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988
Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		
Sample date:	12-DEC-17	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-DEC-17	Finding:	6.6

Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-NOV-17	Finding:	6.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-NOV-17	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	13-NOV-17	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-NOV-17	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	25-OCT-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	17-OCT-17	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-OCT-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-OCT-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	26-SEP-17	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	19-SEP-17	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-SEP-17	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-SEP-17	Finding:	6.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	29-AUG-17	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-AUG-17	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	16-AUG-17	Finding:	6.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-AUG-17	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	31-JUL-17	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-JUL-17	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-JUL-17	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-JUL-17	Finding:	6.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUL-17	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	29-JUN-17	Finding:	3.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-APR-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	27-MAR-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-MAR-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-MAR-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-MAR-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-MAR-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-FEB-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-FEB-17	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	10-FEB-17	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-JAN-17	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-JAN-17	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	19-JAN-17	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	13-JAN-17	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-JAN-17	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-DEC-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-DEC-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-DEC-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-DEC-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-DEC-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-NOV-16	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-NOV-16	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-NOV-16	Finding:	7.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	17-OCT-16	Finding:	9.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	14-OCT-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-OCT-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	27-SEP-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-SEP-16	Finding:	7.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-SEP-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-SEP-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-AUG-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-AUG-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-AUG-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-AUG-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	25-JUL-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	18-JUL-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-JUL-16	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-JUL-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	27-JUN-16	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-JUN-16	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	13-JUN-16	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-JUN-16	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	31-MAY-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	27-MAY-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	29-MAR-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-MAR-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-MAR-16	Finding:	7.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-MAR-16	Finding:	7.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	02-MAR-16	Finding:	7.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-FEB-16	Finding:	7.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	16-FEB-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-FEB-16	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	02-FEB-16	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	25-JAN-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	20-JAN-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	12-JAN-16	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-JAN-16	Finding:	6.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-DEC-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-DEC-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-DEC-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-DEC-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-NOV-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-NOV-15	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-NOV-15	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-NOV-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-NOV-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-OCT-15	Finding:	29.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-OCT-15	Finding:	27.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-OCT-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-OCT-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-AUG-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	19-AUG-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-AUG-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-AUG-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-AUG-15	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-AUG-15	Finding:	4.e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	28-JUL-15	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-JUL-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-JUL-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-JUL-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUN-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-JUN-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-JUN-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-JUN-15	Finding:	3.9e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	15-JUN-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JUN-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	01-JUN-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	01-JUN-15	Finding:	3.8e-002
Chemical:	ETHYLENE DIBROMIDE (EDB)	Report units:	UG/L
Dlr:	2.e-002		
Sample date:	27-MAY-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-MAY-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAY-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-MAY-15	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-APR-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-APR-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-APR-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-APR-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-MAR-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-MAR-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-MAR-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-MAR-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-MAR-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-FEB-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	17-FEB-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-FEB-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-FEB-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-JAN-15	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-JAN-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-JAN-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-JAN-15	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-DEC-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-DEC-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-DEC-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-DEC-14	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-DEC-14	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-NOV-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-NOV-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-NOV-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	04-NOV-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-OCT-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-OCT-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-OCT-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-OCT-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-SEP-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-SEP-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-SEP-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-SEP-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-AUG-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-AUG-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-AUG-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-JUL-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-JUL-14	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	07-JUL-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JUL-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUN-14	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JUN-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-JUN-14	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-MAY-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-MAY-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-APR-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-APR-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-APR-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-APR-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	31-MAR-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-MAR-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAR-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-FEB-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	18-FEB-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-FEB-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-FEB-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-JAN-14	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JAN-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-JAN-14	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-JAN-14	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-DEC-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-DEC-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-DEC-13	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-DEC-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-DEC-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-NOV-13	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-NOV-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-NOV-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-NOV-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	28-OCT-13	Finding:	30.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-OCT-13	Finding:	24.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-SEP-13	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-13	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-SEP-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-AUG-13	Finding:	36.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JUN-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-JUN-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JUN-13	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-MAY-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-MAY-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-MAY-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-MAY-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-APR-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-APR-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	15-APR-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-APR-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-APR-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-MAR-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-MAR-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAR-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-MAR-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-FEB-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-FEB-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-FEB-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-FEB-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-JAN-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-JAN-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-JAN-13	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JAN-13	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JAN-13	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	27-DEC-12	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-DEC-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-DEC-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-DEC-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-NOV-12	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-NOV-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-NOV-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-NOV-12	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-NOV-12	Finding:	37.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUN-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-JUN-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-JUN-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-MAY-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-MAY-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	16-MAY-12	Finding:	0.324
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-MAY-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-MAY-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-MAY-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-APR-12	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-APR-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-APR-12	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-APR-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-MAR-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-MAR-12	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-MAR-12	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-MAR-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-FEB-12	Finding:	34.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-FEB-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-FEB-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-FEB-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	31-JAN-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-JAN-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JAN-12	Finding:	32.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JAN-12	Finding:	33.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

G31
NNW
1/2 - 1 Mile
Higher

CA WELLS 12230

Seq:	12230	Prim sta c:	14S/21E-10E01 M
Frds no:	1010007090	County:	10
District:	11	User id:	AGE
System no:	1010007	Water type:	G
Source nam:	WELL 274	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	364400.0	Longitude:	1194100.0
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:	1010007	System nam:	Fresno, City Of
Hqname:	Not Reported	Address:	2326 FRESNO STREET
City:	FRESNO	State:	CA
Zip:	93721	Zip ext:	2988
Pop serv:	390350	Connection:	99005
Area serve:	CITY OF FRESNO		
Sample date:	15-DEC-14	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-DEC-14	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-DEC-14	Finding:	2.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	24-JUL-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-JUL-14	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	07-JUL-14	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JUL-14	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUN-14	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-JUN-14	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-14	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-MAY-14	Finding:	31.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-MAY-14	Finding:	0.71
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	410.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	130.
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	28-MAY-14	Finding:	33.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	28-MAY-14	Finding:	18.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	2.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	32.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	56.
Chemical:	CALCIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	28-MAY-14	Finding:	270.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	320.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	260.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	650.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	28-MAY-14	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-DEC-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-NOV-13	Finding:	48.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-NOV-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	13-NOV-13	Finding:	48.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-NOV-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	28-OCT-13	Finding:	48.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	21-OCT-13	Finding:	49.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-OCT-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-OCT-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-OCT-13	Finding:	49.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	23-SEP-13	Finding:	49.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-SEP-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-13	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-13	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-AUG-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-AUG-13	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-AUG-13	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-13	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-13	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-JUL-13	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-NOV-12	Finding:	31.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	0.28
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	07-NOV-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-NOV-12	Finding:	0.48
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported

Dlr:	0.		
Sample date:	07-NOV-12	Finding:	410.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	0.397
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	6.09
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	07-NOV-12	Finding:	130.
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	07-NOV-12	Finding:	34.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	07-NOV-12	Finding:	20.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	3.2
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	0.26
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	640.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	240.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	300.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	270.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	56.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-NOV-12	Finding:	33.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	09-OCT-12	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-OCT-12	Finding:	47.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-12	Finding:	48.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-SEP-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-SEP-12	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	27-AUG-12	Finding:	46.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-AUG-12	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-AUG-12	Finding:	45.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	01-AUG-12	Finding:	44.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	26-JUL-12	Finding:	43.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

F32
NE
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000006305**

Well ID:	1010007-265	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 135 - DESTROYED	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=1010007-265&store_num=		
GeoTracker Data:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
33 **West** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADWR0000013410**

Well ID:	14S21E09R001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	14S21E09R001M	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=14S21E09R001M&store_num=		
GeoTracker Data:	Not Reported		

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34 **North** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADDW0000012368**

Well ID:	1010007-091	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 275 INF	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=1010007-091&store_num=		
GeoTracker Data:	Not Reported		

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35 **WSW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADPR0000005001**

Well ID:	84177	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	84177	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=84177&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93727	20	0

Federal EPA Radon Zone for FRESNO 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 Zip Code: 93727

Number of sites tested: 6

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.433 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

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 Californias 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 Heath 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 IRAA 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

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AERIAL PHOTOGRAPHS

Simonian Estates

1099 S Armstrong Avenue

Fresno, CA 93727

Inquiry Number: 7454414.8

September 26, 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

09/26/23

Site Name:

Simonian Estates
1099 S Armstrong Avenue
Fresno, CA 93727
EDR Inquiry # 7454414.8

Client Name:

RMA Geoscience
9854 Glenoaks Blvd
Sun Valley, CA 91352
Contact: Jim Vue

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:

Year	*Scale*	*Details*	*Source*
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
1999	1"=500'	Acquisition Date: January 01, 1999	USGS/DOQQ
1987	1"=500'	Flight Date: June 17, 1987	USDA
1984	1"=500'	Flight Date: June 09, 1984	USDA
1979	1"=500'	Flight Date: September 04, 1979	USDA
1973	1"=500'	Flight Date: May 08, 1973	USDA
1967	1"=500'	Flight Date: May 02, 1967	USDA
1962	1"=500'	Flight Date: August 09, 1962	USGS
1957	1"=500'	Flight Date: August 14, 1957	USDA
1950	1"=500'	Flight Date: January 31, 1950	USDA
1946	1"=500'	Flight Date: April 22, 1946	USGS
1937	1"=500'	Flight Date: September 14, 1937	USDA

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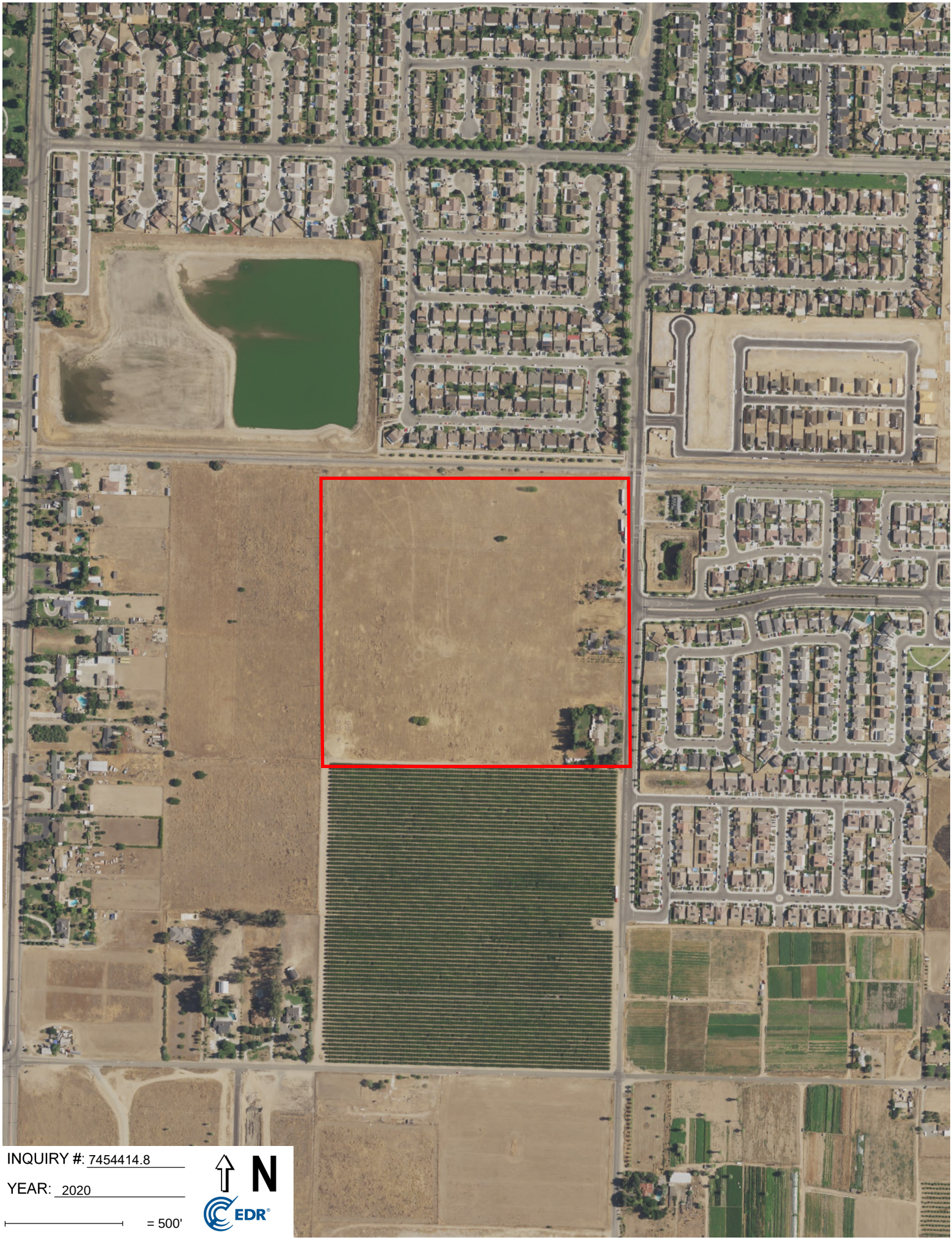
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EDR

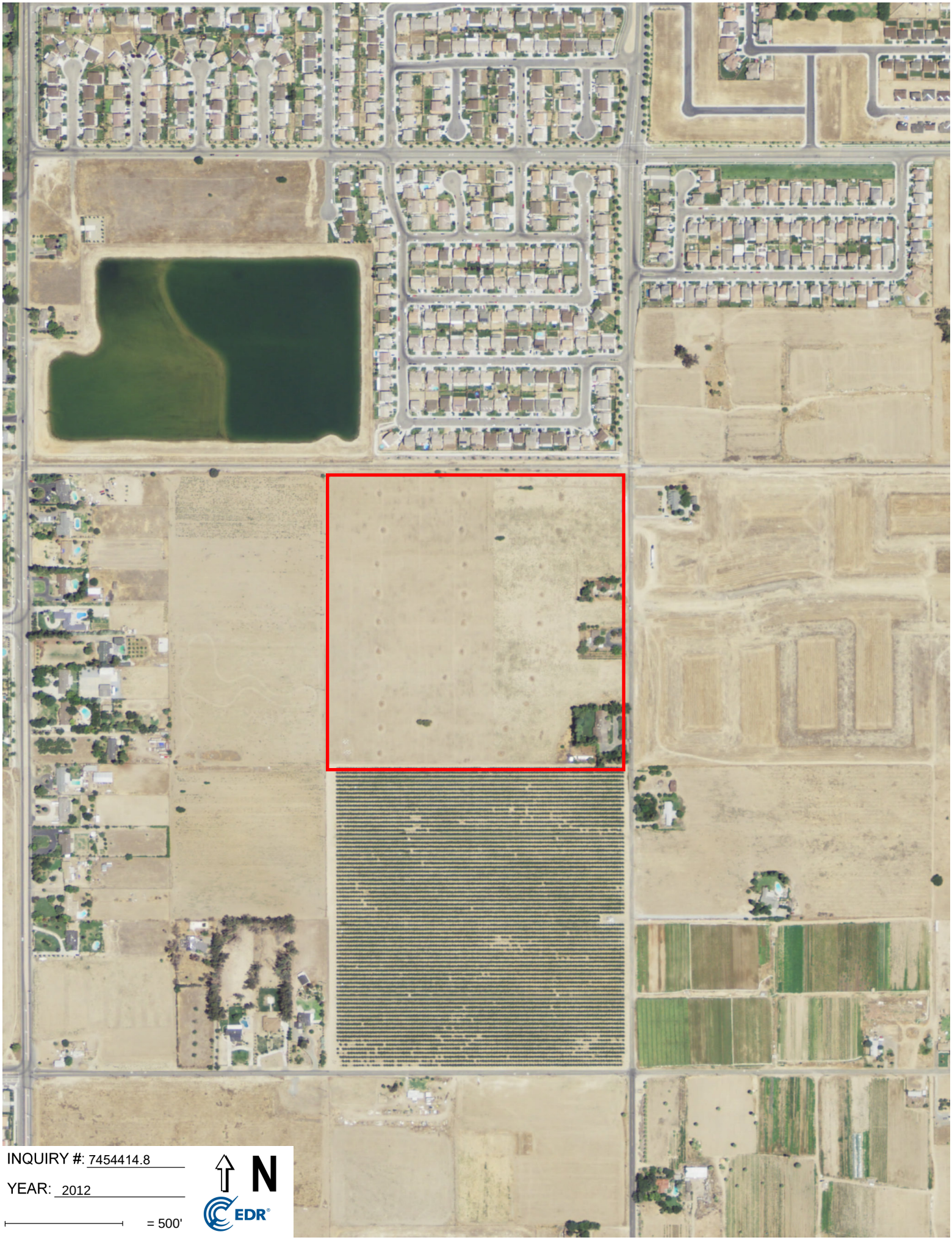
INQUIRY #: 7454414.8

YEAR: 2016

= 500'

N

EDR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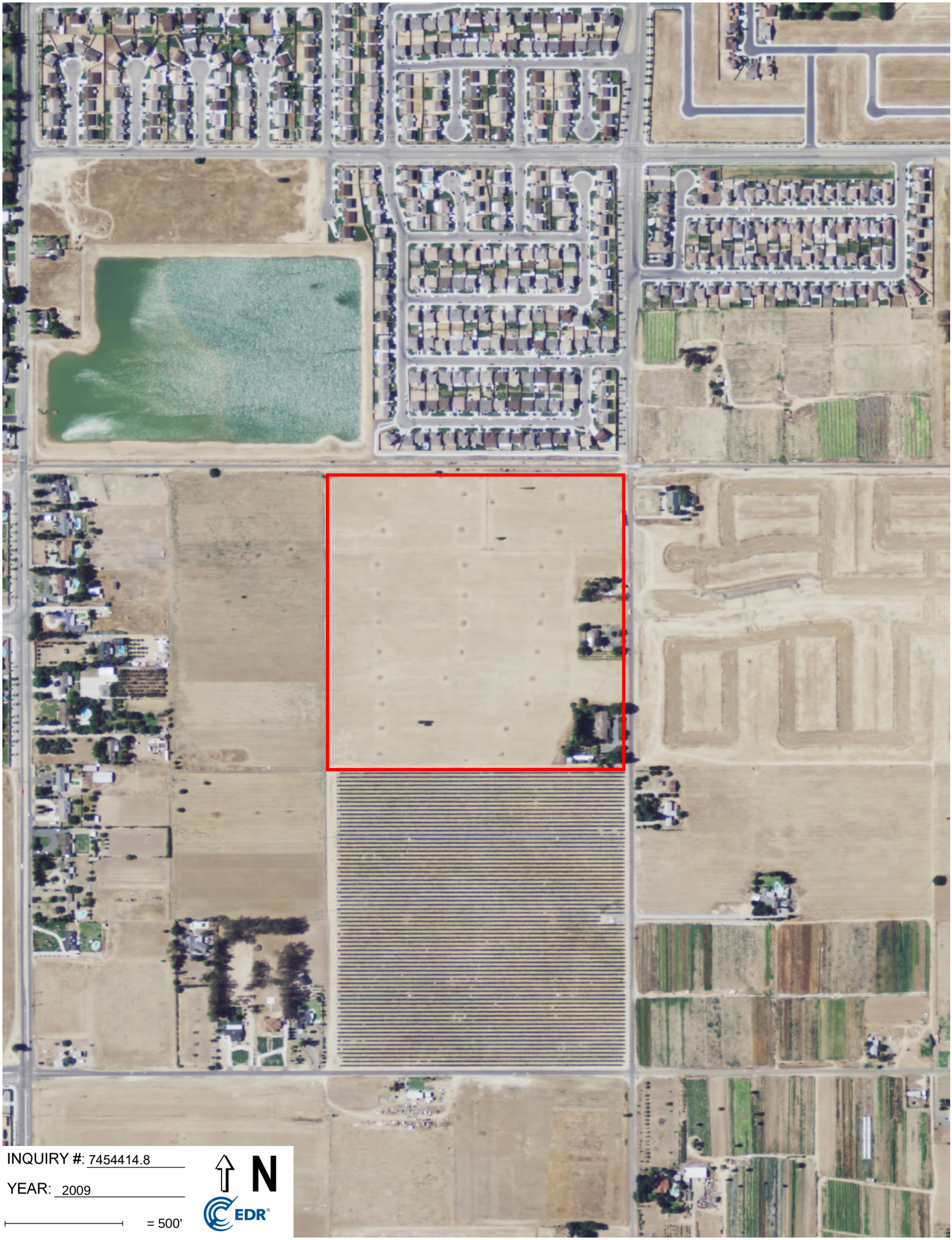
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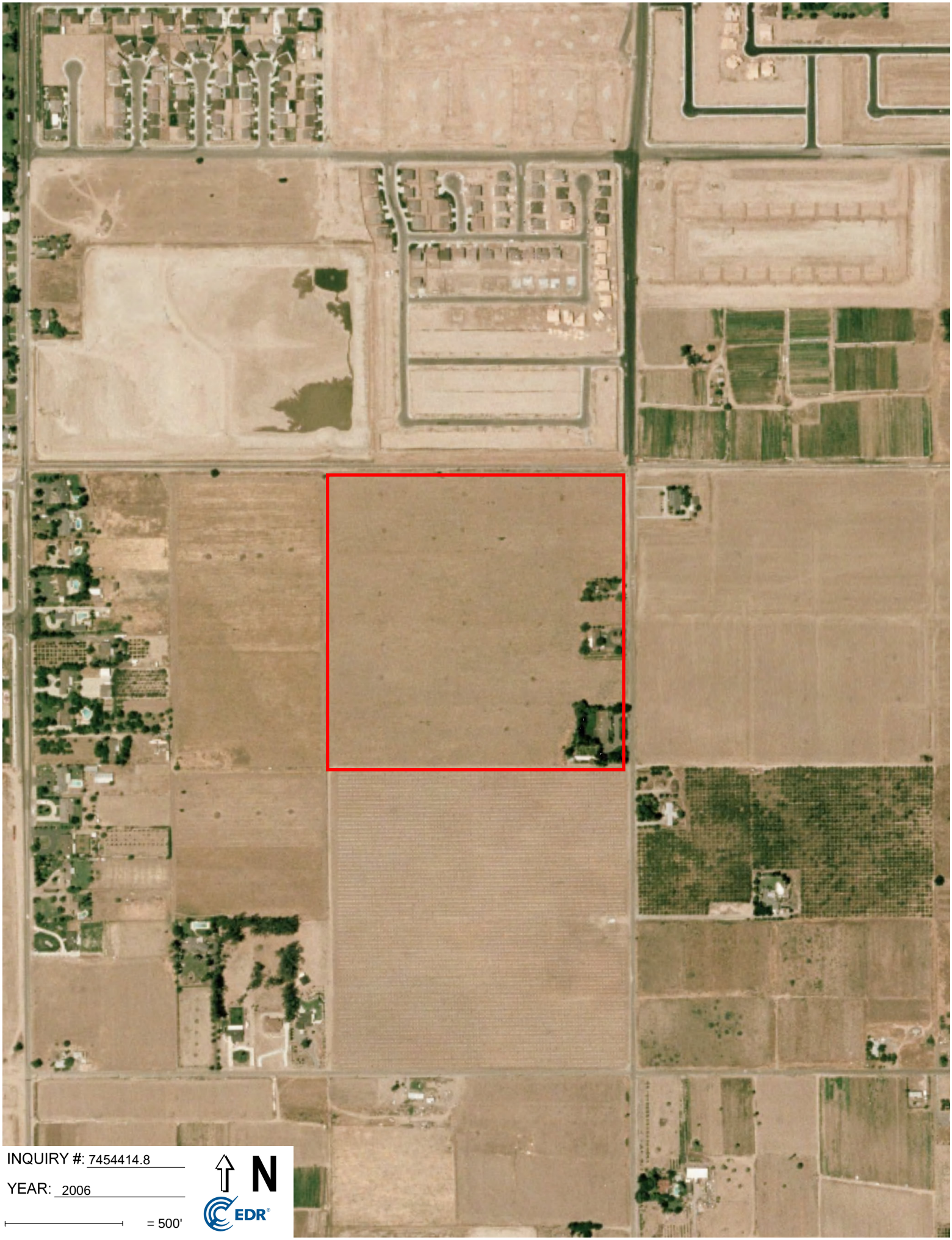
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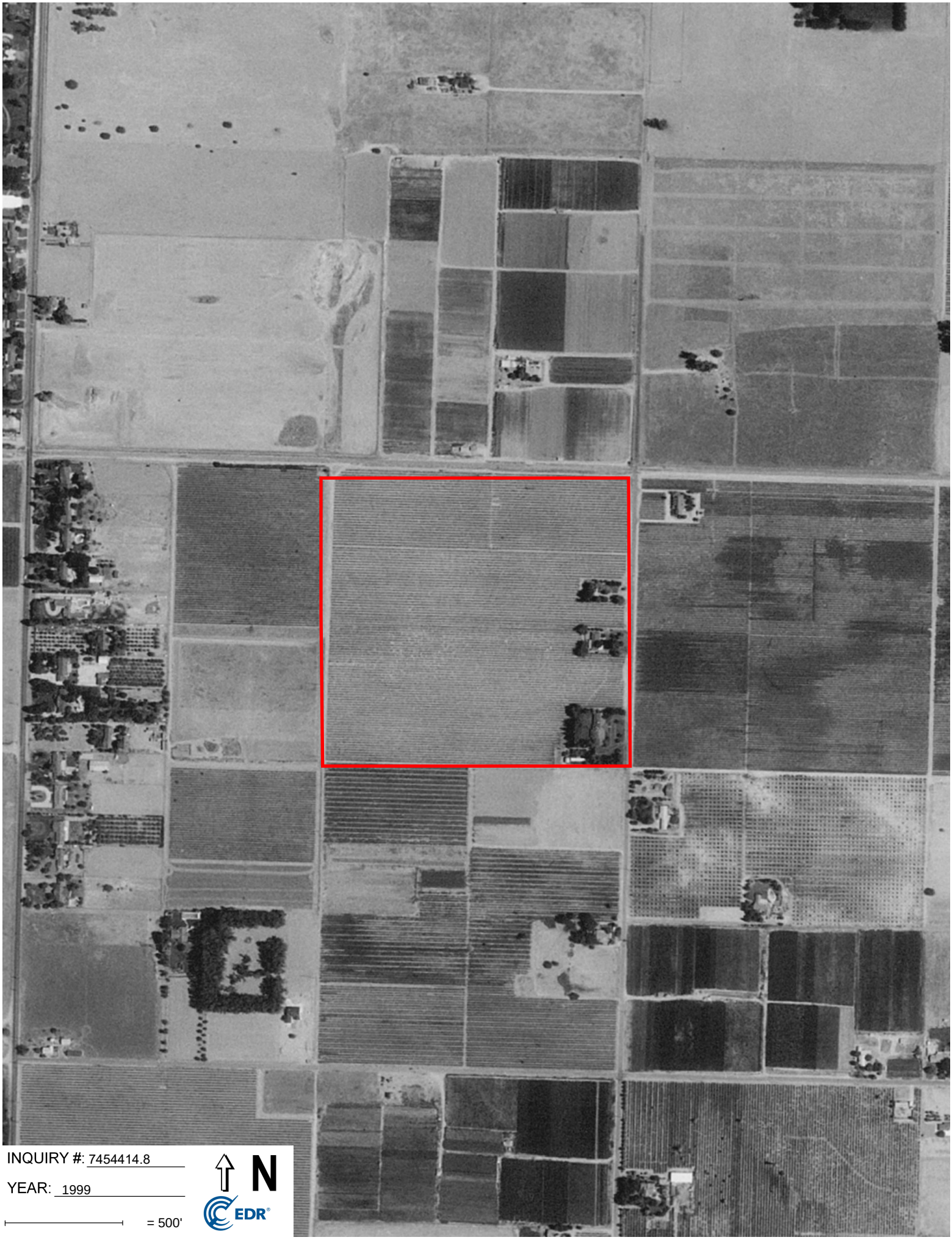
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EDR

INQUIRY #: 7454414.8

YEAR: 1984

= 500'

N

EDR

INQUIRY #: 7454414.8
YEAR: 1979
= 500'
N
EDR

INQUIRY #: 7454414.8
YEAR: 1973
= 500'
N
EDR

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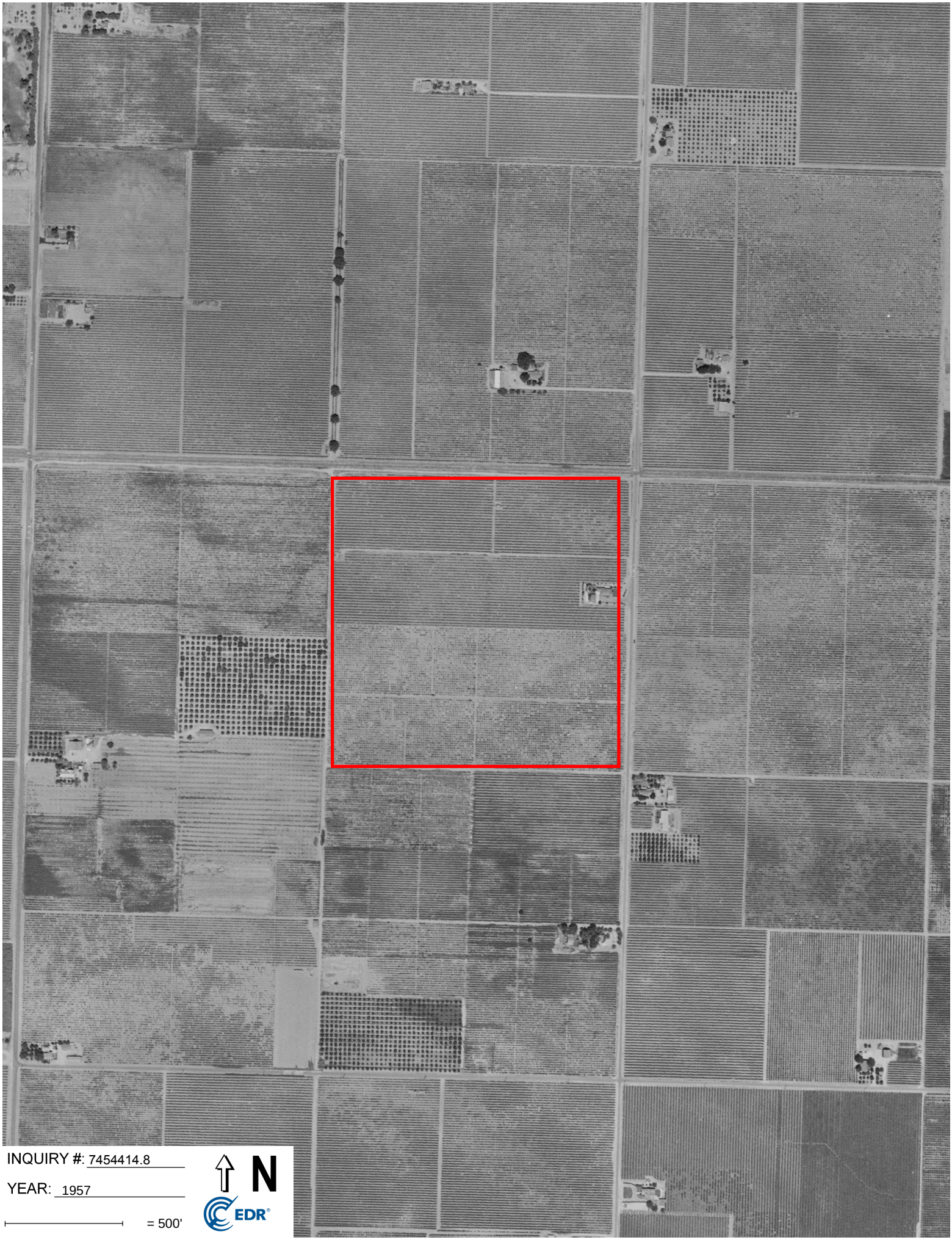
EDR

INQUIRY #: 7454414.8
YEAR: 1962
= 500'
N
EDR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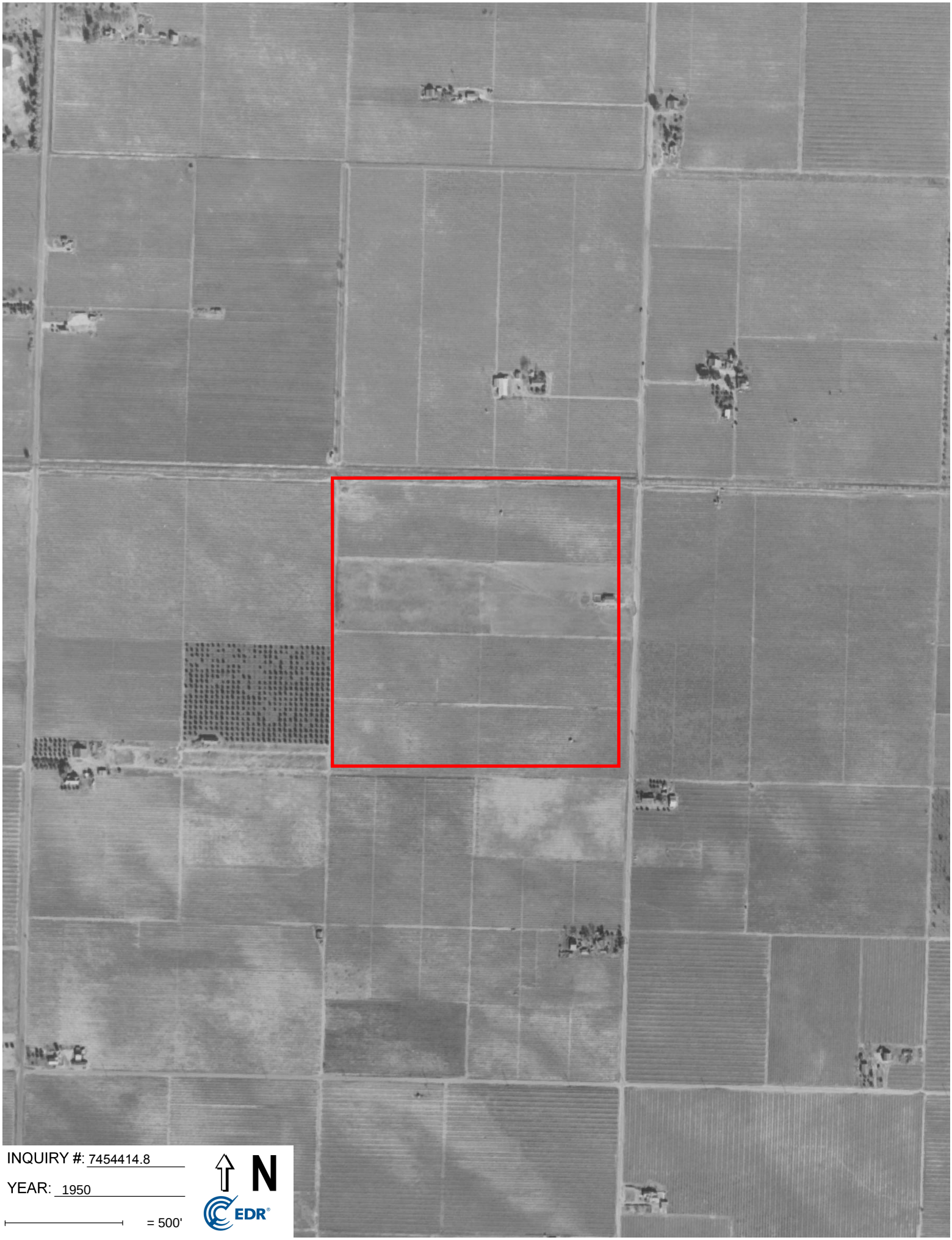
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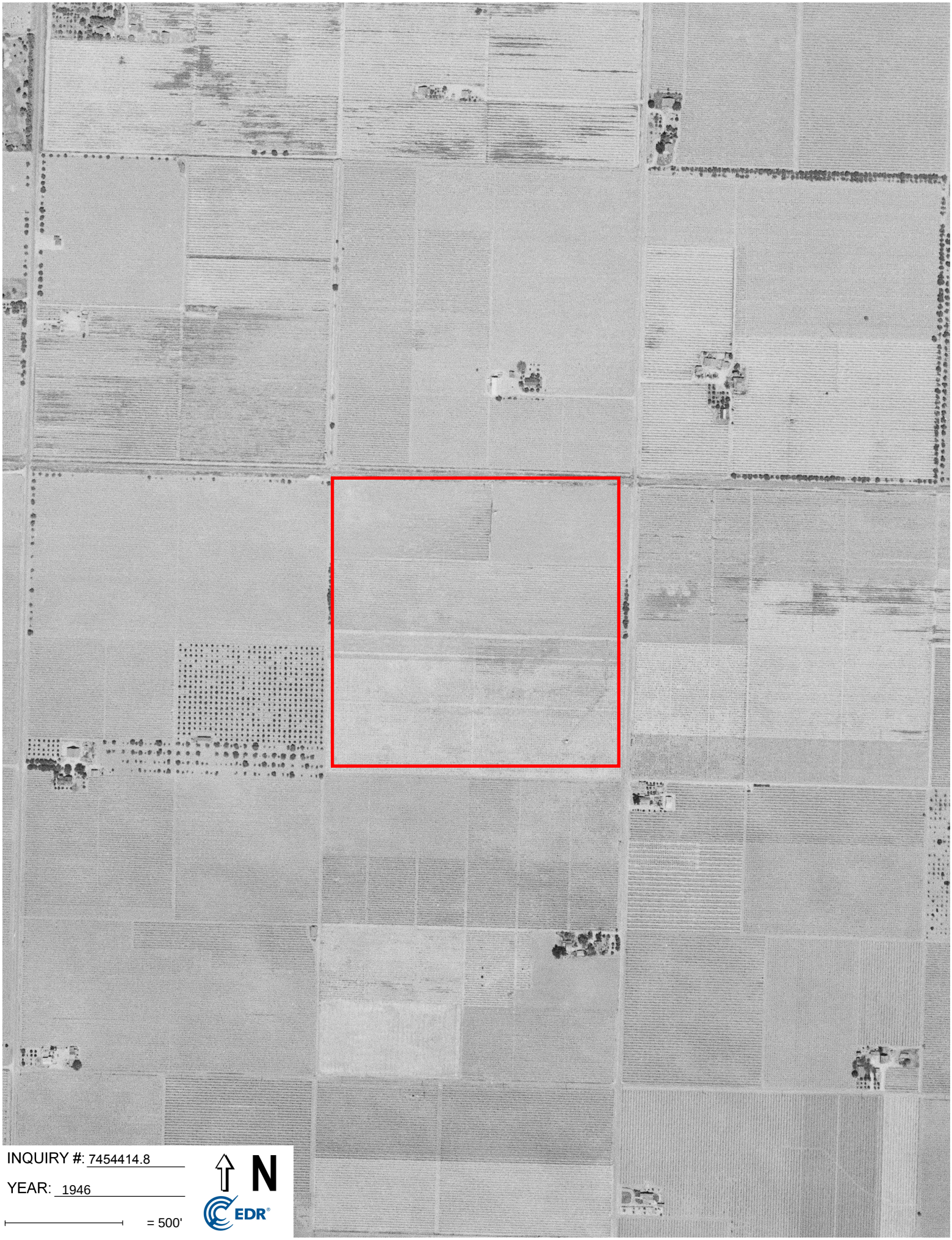
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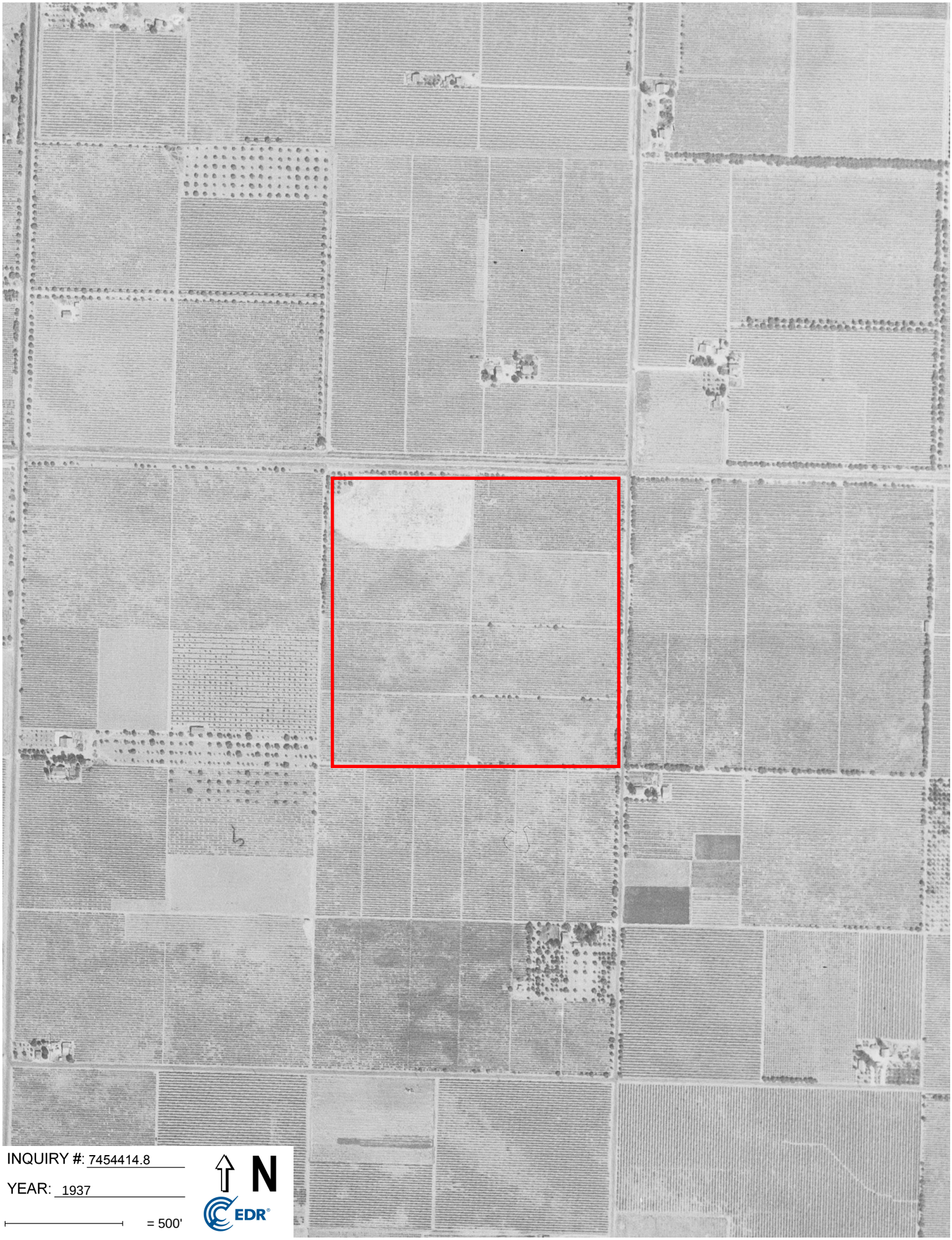
EDR


INQUIRY #: 7454414.8
YEAR: 1937
= 500'
N
EDR

TOPOGRAPHIC MAPS

Simonian Estates

1099 S Armstrong Avenue

Fresno, CA 93727

Inquiry Number: 7454414.4

September 26, 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

09/26/23

Site Name:	Client Name:
Simonian Estates	RMA Geoscience
1099 S Armstrong Avenue	9854 Glenoaks Blvd
Fresno, CA 93727	Sun Valley, CA 91352
EDR Inquiry # 7454414.4	Contact: Jim Vue

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by RMA Geoscience 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. EDRs 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:

P.O.# 07-230797-1/01

Project: Simonian Estates

Coordinates:

Latitude:	36.721225 36° 43' 16" North
Longitude:	-119.675449 -119° 40' 32" West
UTM Zone:	Zone 11 North
UTM X Meters:	261057.87
UTM Y Meters:	4067284.74
Elevation:	323.00' above sea level

Maps Provided:

2018	1946
2015	1923
2012	
1981	
1972	
1964	
1948	
1947	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets

Malaga
2018
7.5-minute, 24000

2015 Source Sheets

Malaga
2015
7.5-minute, 24000

2012 Source Sheets

Malaga
2012
7.5-minute, 24000

1981 Source Sheets

Malaga
1981
7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1972 Source Sheets

Malaga
1972
7.5-minute, 24000
Aerial Photo Revised 1972

1964 Source Sheets

Malaga
1964
7.5-minute, 24000
Aerial Photo Revised 1962

1948 Source Sheets

MALAGA
1948
7.5-minute, 25000

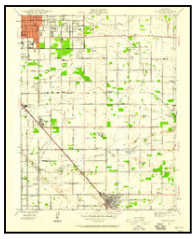
1947 Source Sheets

Malaga
1947
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1946 Source Sheets



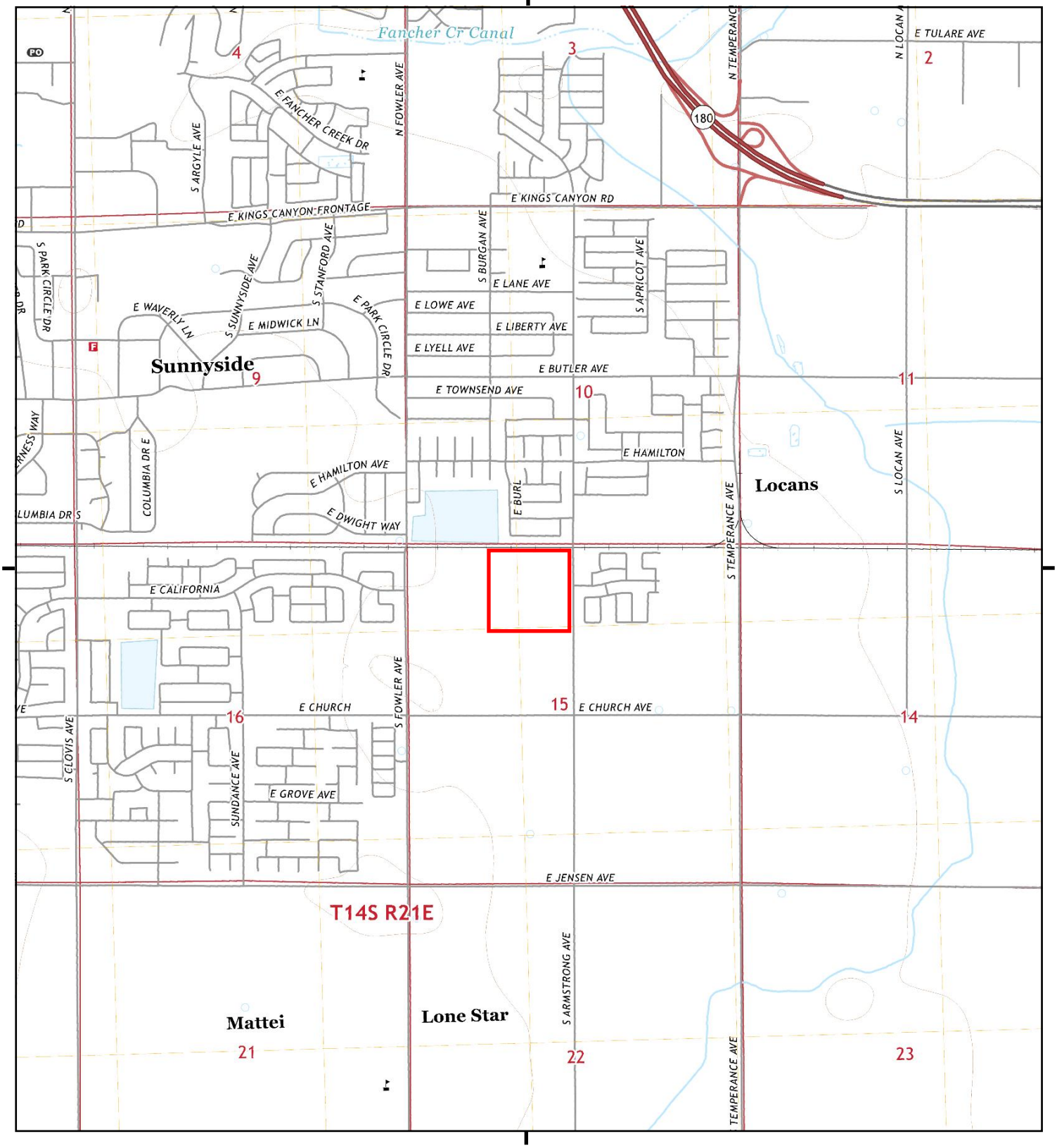
Malaga
1946
7.5-minute, 24000

1923 Source Sheets

Malaga
1923
7.5-minute, 31680

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

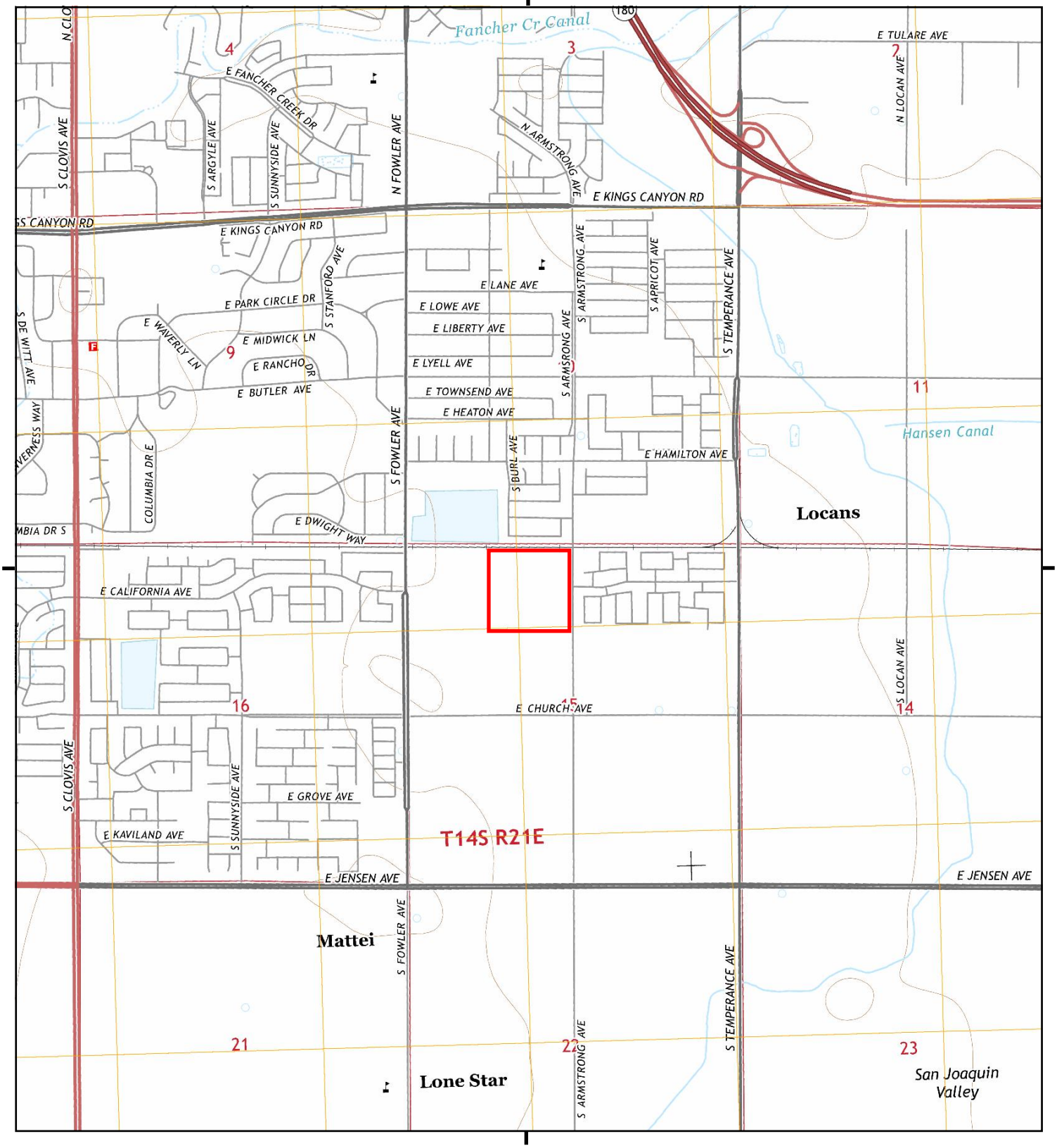
TP, Malaga, 2018, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

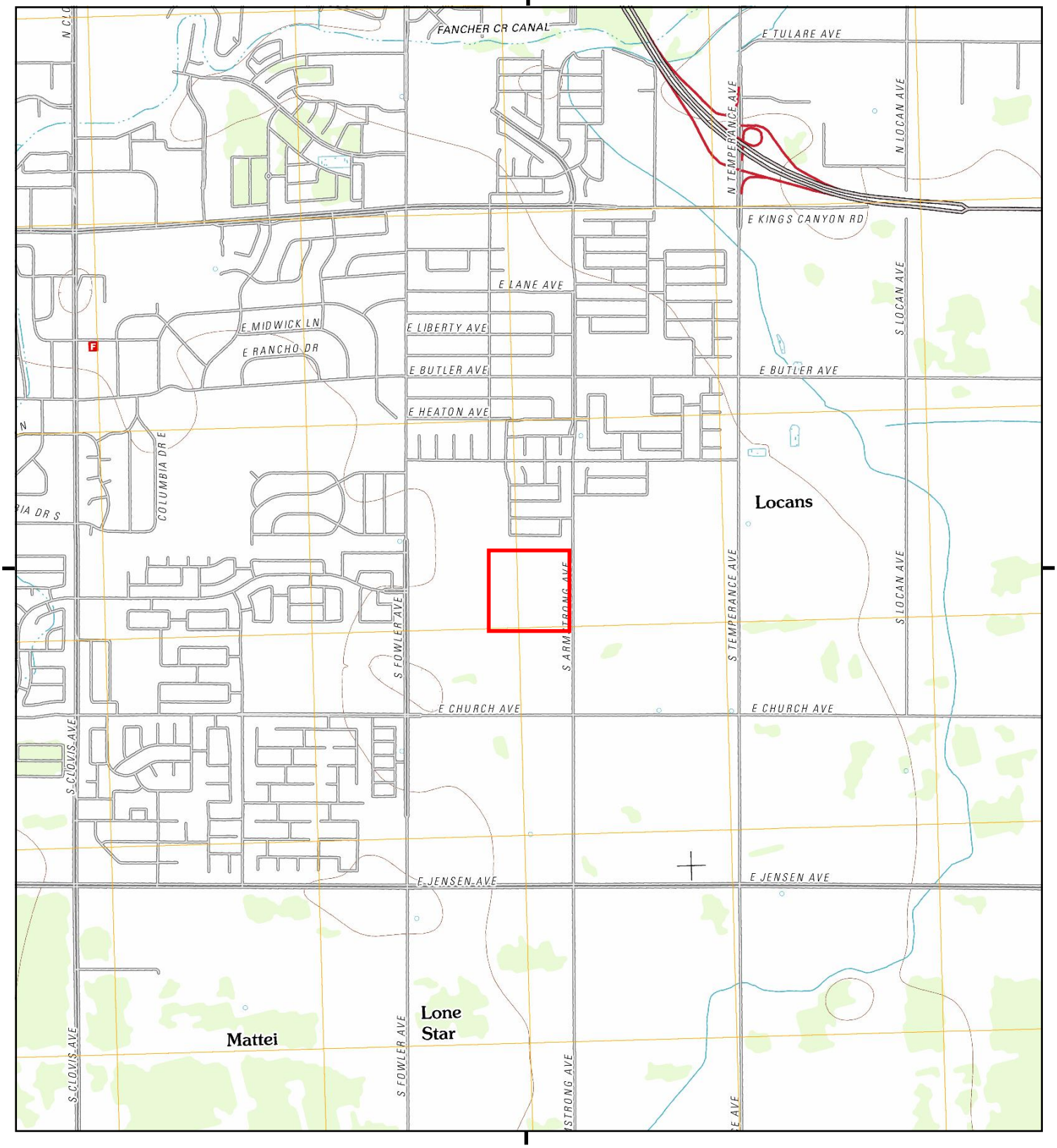
TP, Malaga, 2015, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

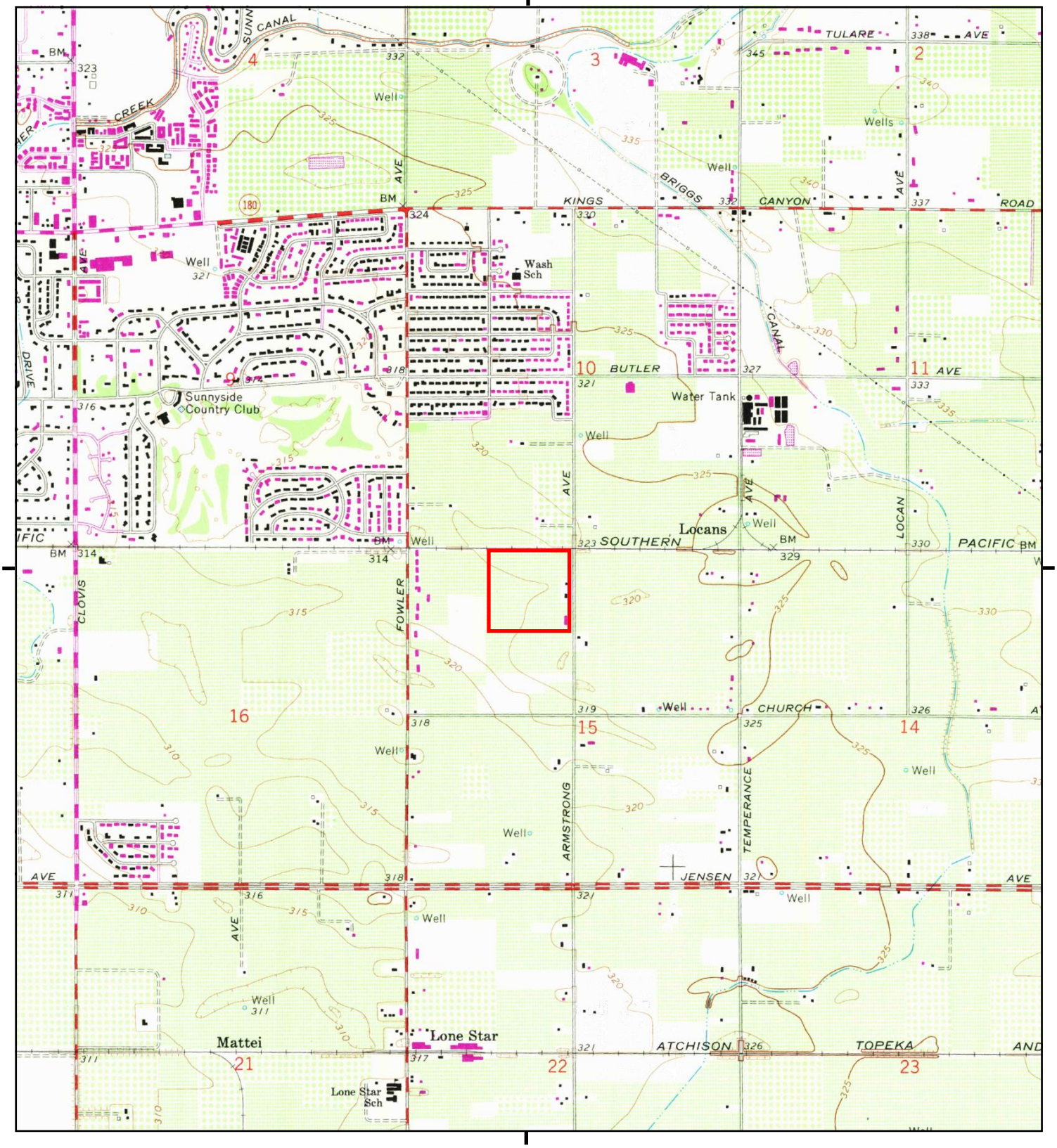
TP, Malaga, 2012, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

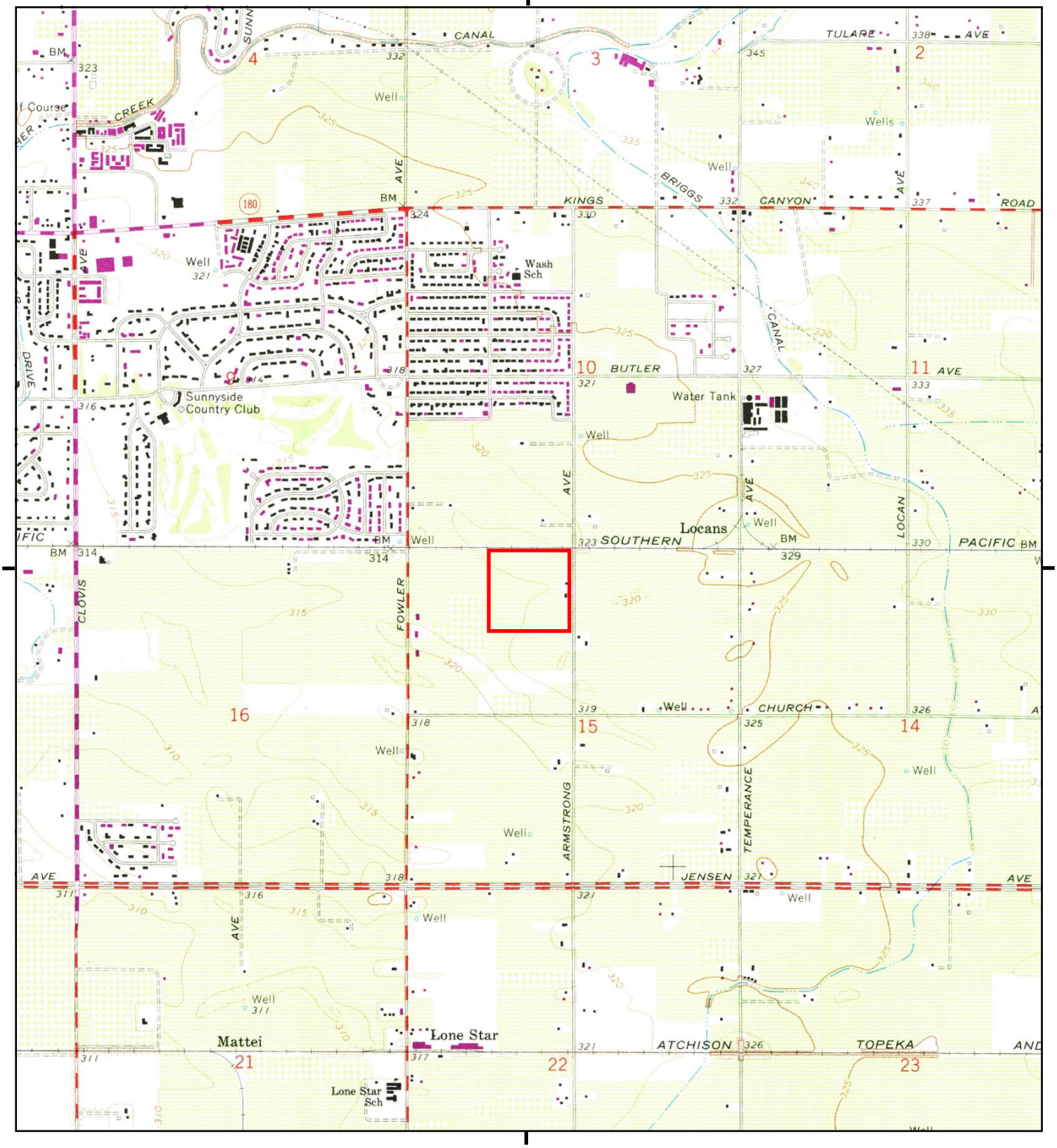
TP, Malaga, 1981, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

1972



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

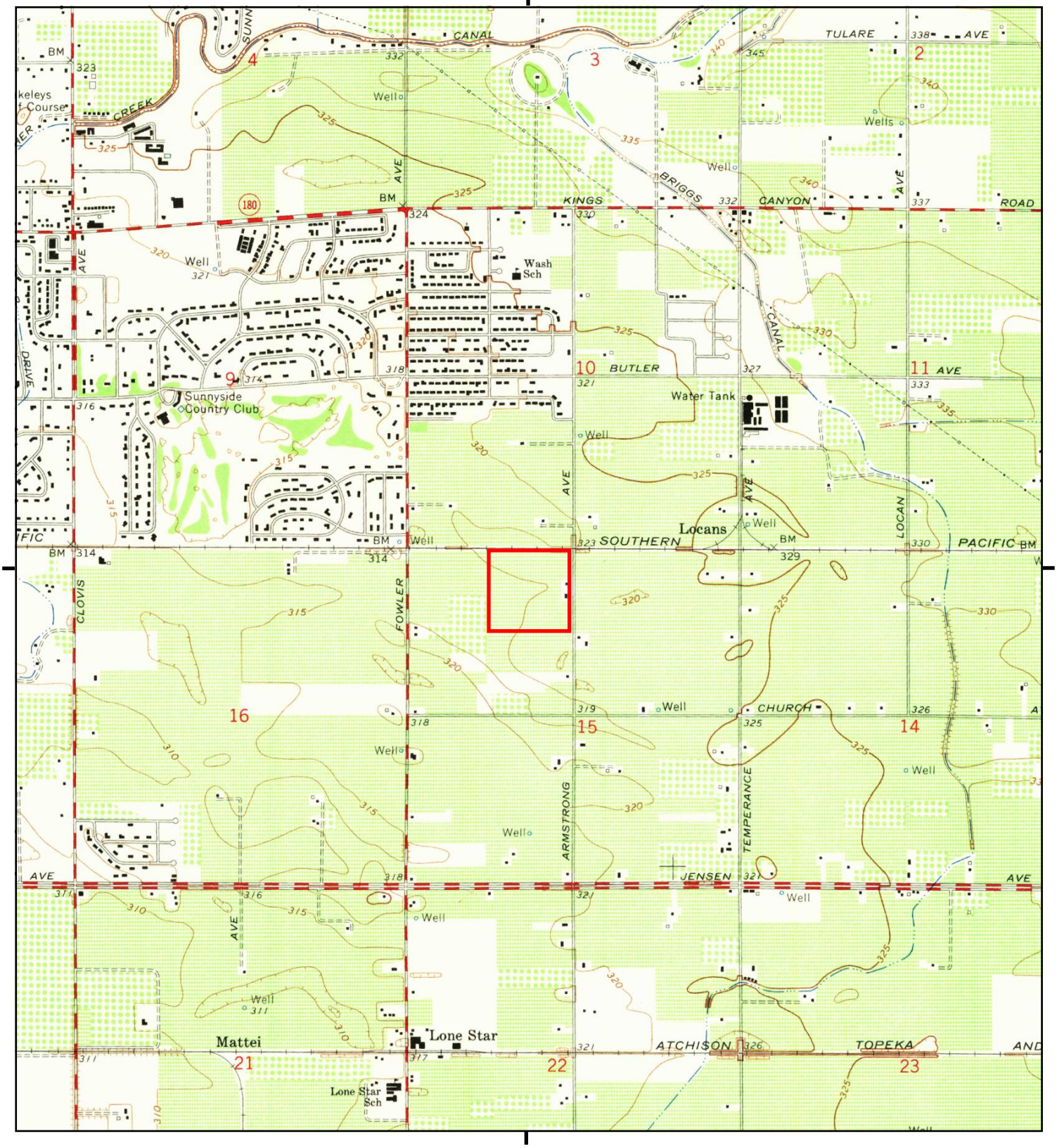
TP, Malaga, 1972, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

1964



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

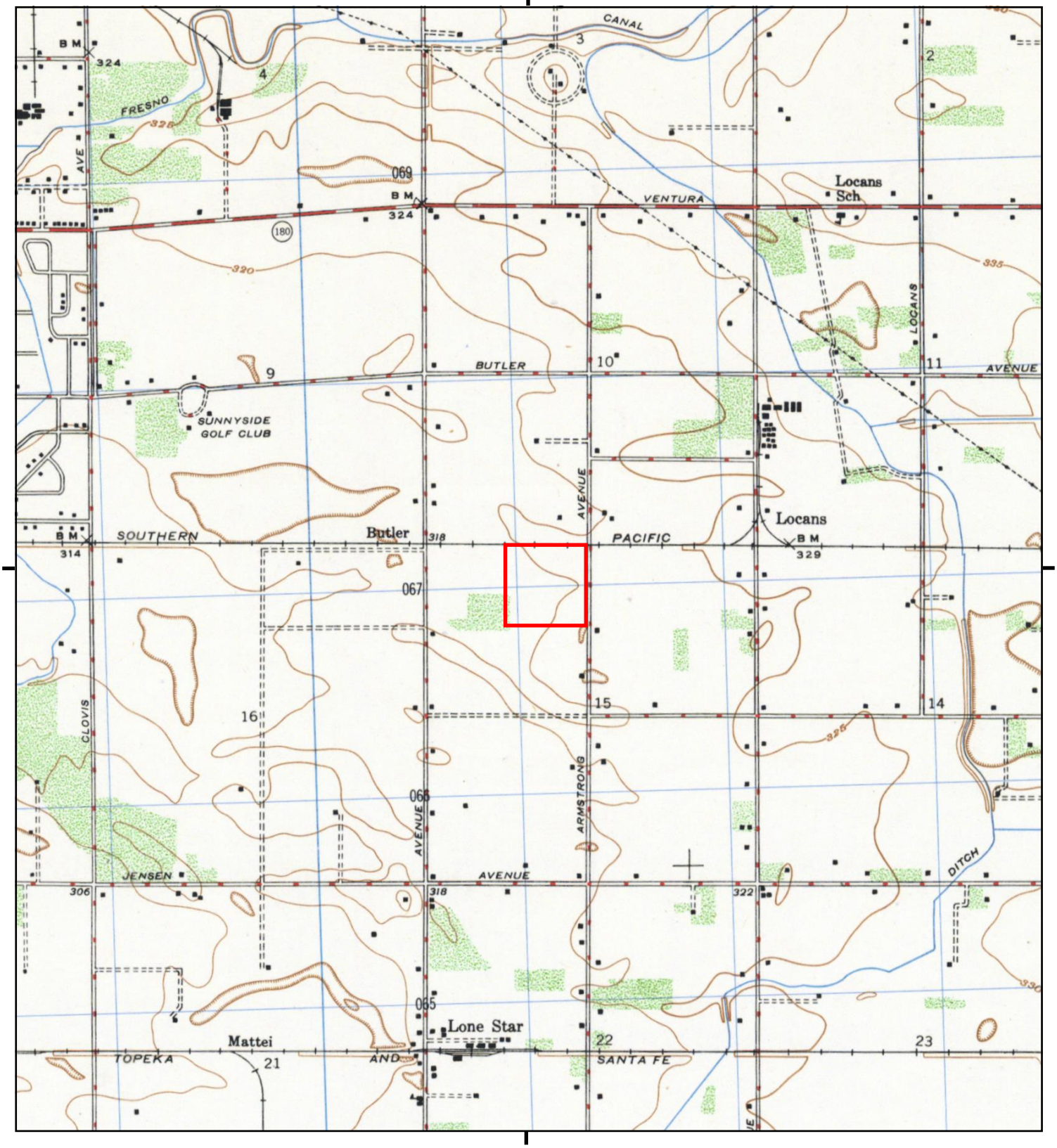
TP, Malaga, 1964, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

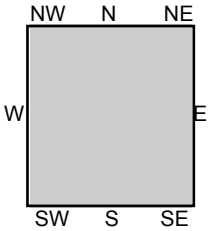
Historical Topo Map

1948



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



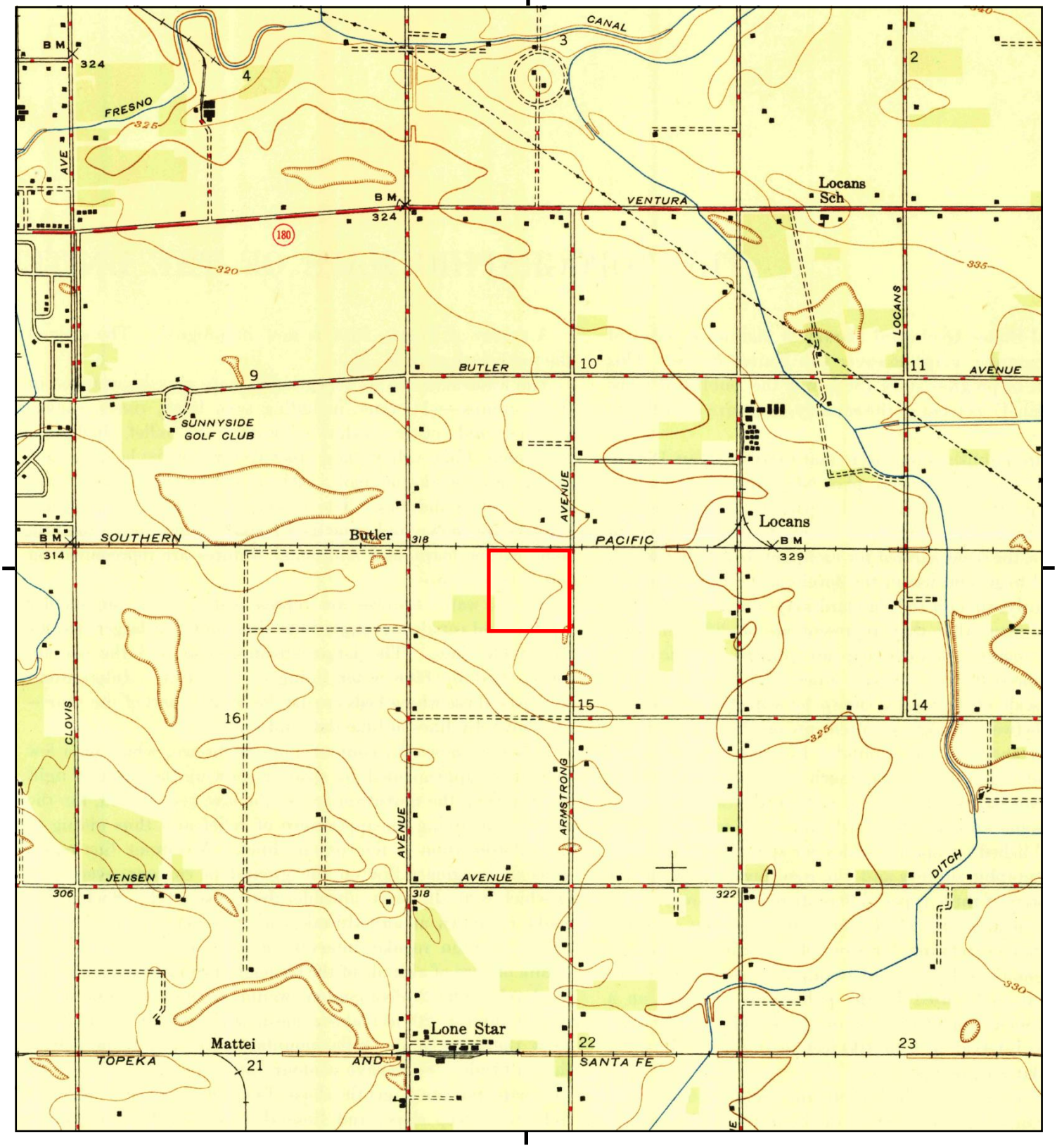
TP, MALAGA, 1948, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

1947



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

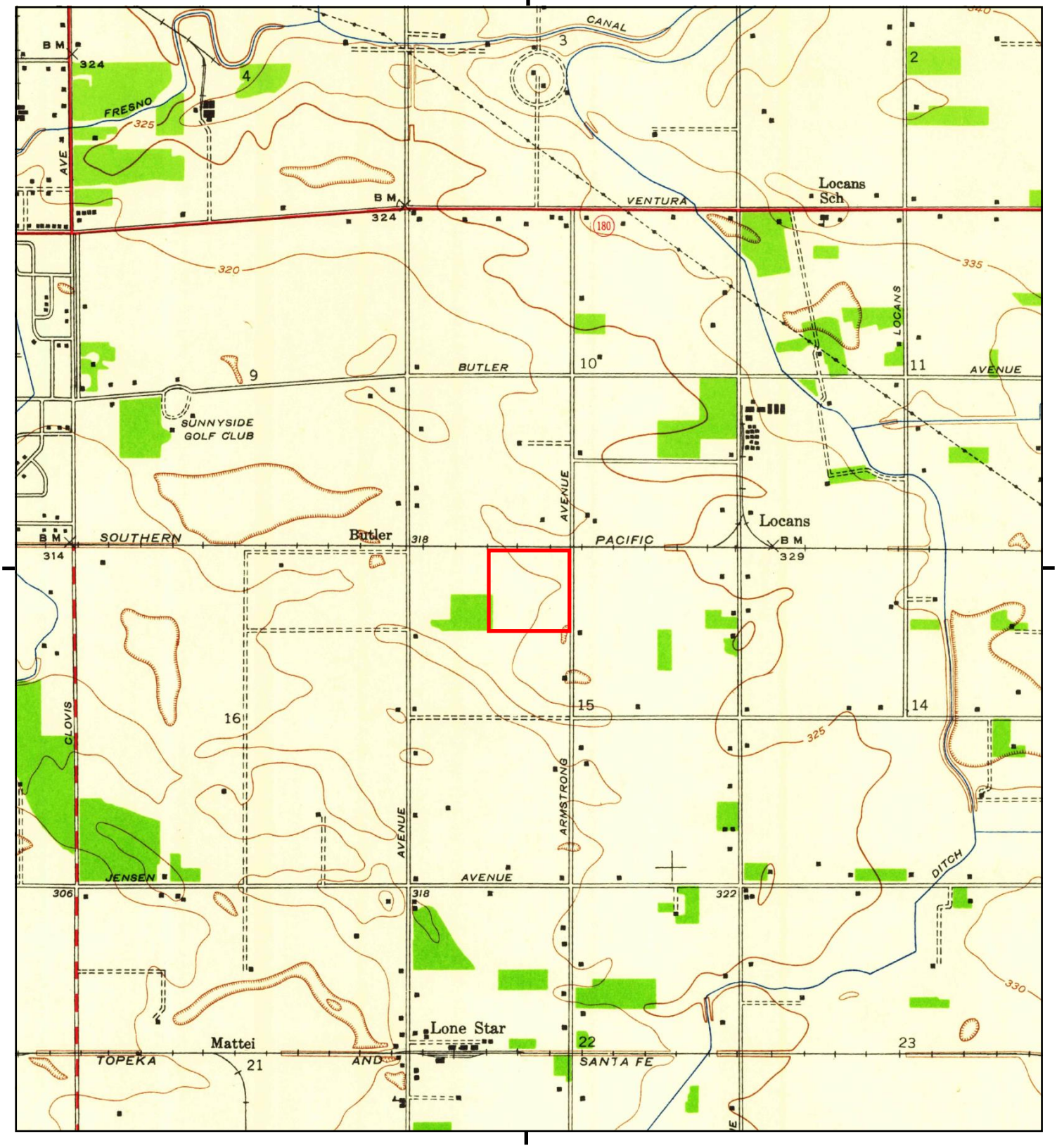
TP, Malaga, 1947, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

1946



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

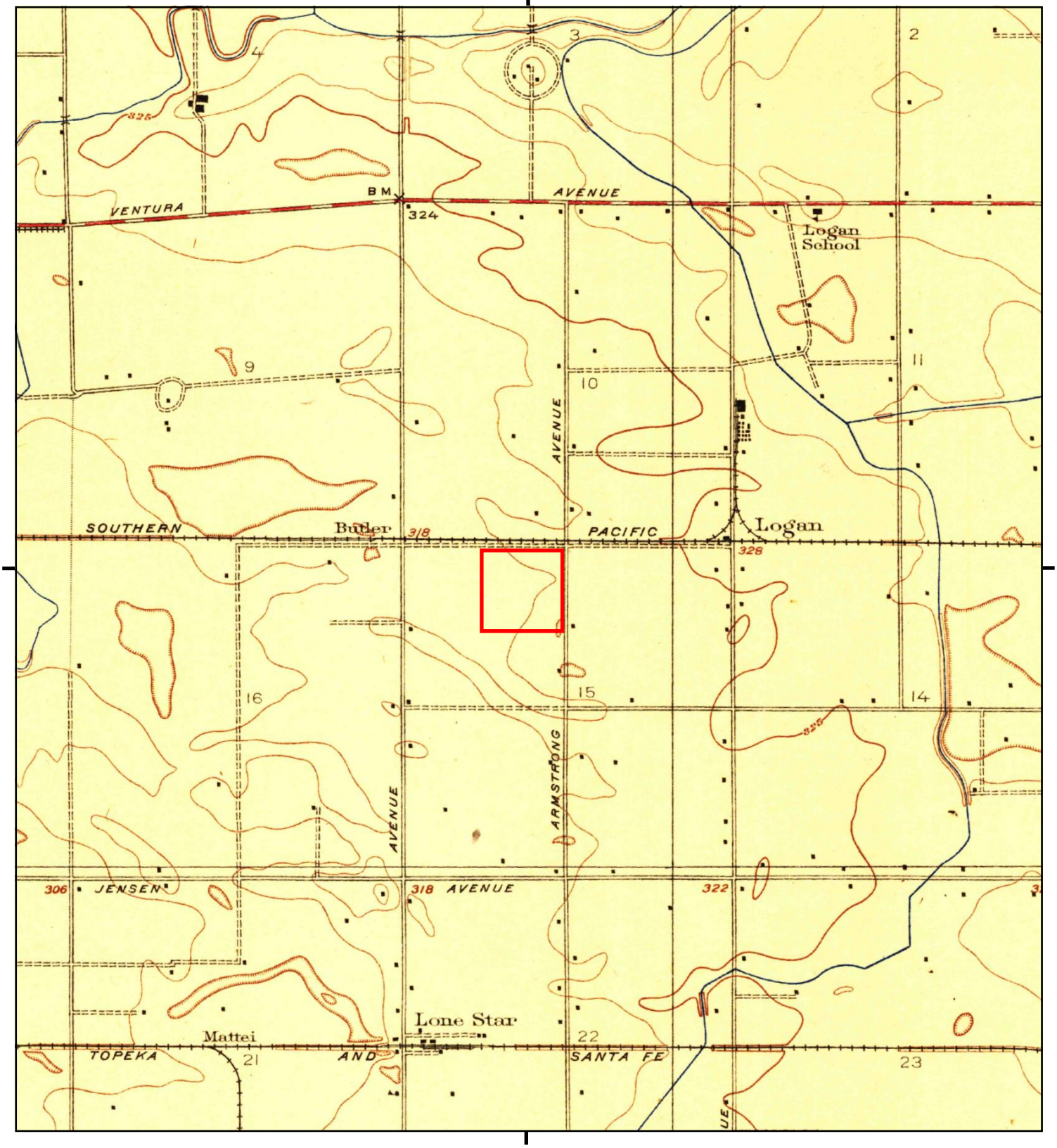
TP, Malaga, 1946, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

Historical Topo Map

1923



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Malaga, 1923, 7.5-minute

SITE NAME: Simonian Estates
ADDRESS: 1099 S Armstrong Avenue
Fresno, CA 93727
CLIENT: RMA Geoscience

N

SANBORN REPORT

Simonian Estates

1099 S Armstrong Avenue

Fresno, CA 93727

Inquiry Number: 7454414.3

September 26, 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

09/26/23

Site Name:	Client Name:
Simonian Estates	RMA Geoscience
1099 S Armstrong Avenue	9854 Glenoaks Blvd
Fresno, CA 93727	Sun Valley, CA 91352
EDR Inquiry # 7454414.3	Contact: Jim Vue

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by RMA Geoscience 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 # 44A9-4070-8D55

PO # 07-230797-1/01

Project Simonian Estates

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 #: 44A9-4070-8D55

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™

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CITY DIRECTORY

Simonian Estates
1099 S Armstrong Avenue
Fresno, CA 93727

Inquiry Number: 7454414.5
September 29, 2023

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract 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 Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at approximately five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through current. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

Summary information obtained is provided in the text of this report.

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.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2020	EDR Digital Archive	-	X	X	-
2017	Cole Information	-	X	X	-
2014	Cole Information	X	X	X	-
2010	Cole Information	X	X	X	-
2005	Cole Information	-	X	X	-
2002	R.L. Polk & Co Publishers	X	X	X	-
2000	Cole Information	-	X	X	-
1996	R.L. Polk & Co Publishers	-	X	X	-
1995	Cole Information	-	X	X	-
1992	Cole Information	-	X	X	-
1990	R.L. Polk & Co Publishers	-	-	-	-
1986	R.L. Polk & Co Publishers	-	-	-	-
1980	R.L. Polk & Co Publishers	-	-	-	-
1975	R.L. Polk & Co Publishers	-	-	-	-
1970	R.L. Polk & Co Publisher	-	-	-	-
1965	R.L. Polk & Co Publisher	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1962	R. L. Polk & Co.	-	-	-	-
1958	R. L. Polk & Co.	-	-	-	-
1952	R.L. Polk & Co Publishers	-	-	-	-
1947	R.L. Polk & Co Publishers	-	-	-	-
1942	R.L. Polk & Co Publishers	-	-	-	-
1937	R.L. Polk & Co Publishers	-	-	-	-
1932	R.L. Polk & Co Publishers	-	-	-	-
1927	Cole Information	-	-	-	-
1922	Polk-Husted Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

Address	*Type*	*Findings*
South Fowler Avenue	Client Entered	
East Dwight Way	Client Entered	
South Filbert Avenue	Client Entered	
East Christine Avenue	Client Entered	

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

1099 S Armstrong Avenue
Fresno, CA 93727

FINDINGS DETAIL

Target Property research detail.

ARMSTRONG AVE

1099 ARMSTRONG AVE

Year	*Uses*	*Source*
2002	Henry Margaret A	R.L. Polk & Co Publishers
	Henry Roger E E + A	R.L. Polk & Co Publishers

S ARMSTRONG AVE

1099 S ARMSTRONG AVE

Year	*Uses*	*Source*
2014	ANGELICA GONZALEZ	Cole Information
2010	ANGELICA GONZALEZ	Cole Information

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

ARMSTRONG AVE

1032 ARMSTRONG AVE

Year	Uses	Source
2002	Halemeier Walter R & Doris 81+ A	R.L. Polk & Co Publishers
1996	Halemeier Doris	R.L. Polk & Co Publishers
	Halemeier Waller	R.L. Polk & Co Publishers

1139 ARMSTRONG AVE

Year	Uses	Source
2002	Simonian Alice 81+ A	R.L. Polk & Co Publishers

1183 ARMSTRONG AVE

Year	Uses	Source
2002	Simonian Elaine J	R.L. Polk & Co Publishers
	Simonian Gary C 81+ A	R.L. Polk & Co Publishers
1996	Simonian Gary C 6506 CODS	R.L. Polk & Co Publishers

S ARMSTRONG AVE

1032 S ARMSTRONG AVE

Year	Uses	Source
2020	ROSA VALDEZ	EDR Digital Archive
	VIOLA VALDEZ	EDR Digital Archive
	MATTHEW VALDEZ	EDR Digital Archive
	DANIEL SOTO	EDR Digital Archive
	RUBEN SOTO	EDR Digital Archive
	JOSE VALDEZ	EDR Digital Archive
2017	AUGUST HALEMEIER	Cole Information
2014	AUGUST HALEMEIER	Cole Information
2010	AUGUST HALEMEIER	Cole Information
2005	WALTER HALEMEIER	Cole Information

FINDINGS

Year	Uses	Source
2000	WALTER HALEMEIER	Cole Information
1995	HALEMEIER, WALTER	Cole Information
1992	HALEMEIER, WALTER	Cole Information

1139 S ARMSTRONG AVE

Year	Uses	Source
2017	ELISABETH MONTGOMERY	Cole Information
2014	ELISABETH MONTGOMERY	Cole Information
2010	ELISABETH MONTGOMERY	Cole Information
2005	OCCUPANT UNKNOWN	Cole Information
1995	SIMONIAN, ALICE	Cole Information

1183 S ARMSTRONG AVE

Year	Uses	Source
2014	GARY SIMONIAN	Cole Information
2010	GARY SIMONIAN	Cole Information
2005	GARY SIMONIAN	Cole Information
2000	GARY SIMONIAN	Cole Information
1995	SIMONIAN, GARY C	Cole Information
1992	SIMONIAN, GARY C	Cole Information

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
East Christine Avenue	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
East Dwight Way	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
South Filbert Avenue	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
South Fowler Avenue	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 S ARMSTRONG AVE	2020, 2017, 2014, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 S ARMSTRONG AVE	2014, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 S ARMSTRONG AVE	2020, 2017, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1032 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1995, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1139 ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1139 S ARMSTRONG AVE	2020, 2017, 2014, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1139 S ARMSTRONG AVE	2020, 2017, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1139 S ARMSTRONG AVE	2020, 2014, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1139 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1139 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
1183 ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1183 ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1183 S ARMSTRONG AVE	2020, 2017, 2014, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1183 S ARMSTRONG AVE	2020, 2017, 2010, 2005, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1183 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1183 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2002, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1183 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922
1183 S ARMSTRONG AVE	2020, 2017, 2014, 2010, 2005, 2002, 2000, 1996, 1995, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
1099 S Armstrong Avenue	2020, 2017, 2005, 2000, 1996, 1995, 1992, 1990, 1986, 1980, 1975, 1970, 1965, 1962, 1958, 1952, 1947, 1942, 1937, 1932, 1927, 1922

USER QUESTIONNAIRE

INTERVIEW QUESTIONNAIRE

RMA GeoScience
Every Project Matters | www.rmacompanies.com

INTERVIEW QUESTIONNAIRE
ASTM E 1527-21

In accordance with Section 10 of the Standard Practice for Phase I Environmental Site Assessments (ESA); Designation E1527-21 the environmental professional shall address questions to be asked of past and present owners, operators, and occupants of the subject property.

We ask that you complete the following questions to the best of your knowledge and return it to us at your earliest convenience for inclusion in the Phase I ESA.

1. Is there litigation or administrative proceedings relevant to hazardous substances or petroleum products? No

2. Are you aware of the existence of structures on site in the past? Yes. 1099 S. Armstrong
   If so, was there asbestos containing building materials in the structure? Yes. Abated + removed upon demo of house per permit.

3. Are there or has there ever been chemicals, pesticides or herbicides used, mixed or formulated on the subject property?
   Not known
   If so, what types?
   Storage areas:

4. Are there or has there ever been above ground or underground storage tanks at the subject property? Yes - but they have been removed
   Location 1099 + 1143 S. Armstrong
   Contents Gas
   Permits Not known

5. Have any solid or liquid waste been disposed of, treated or neutralized on the subject property?
   If so, what types Septic tanks abandoned upon demo of structures.
   Permits Yes - Inde Demolition

6. Have there been any spills, leaks or other releases of chemicals on the subject property? Not Known
   What chemicals?
   Quantity
   Cleanup measures?
   Are there any enforcement actions pending against the subject property?

7. Are you aware of any past uses of the subject property such as agricultural or commercial usage?
   Yes. Vineyard

Completed by: Greg Simonian
Company: Trustee
Date: 10/20/23

Signature:
Title: Trustee of Simonian Family Trust

From: Walter Smith
To: Jim Vue
Subject: Fwd: Simonian Property Phase I ESA
Date: Wednesday, October 25, 2023 7:53:18 AM

Jim: See below. Hope this is helpful.

Walter C. Smith

Senior Vice President – Retail

DRE #00914097

NEWMARK PEARSON

COMMERCIAL

7480 N Palm Ave, Suite 101

Fresno, CA 93711

T 559.447.6222

F 559.432.2938

wsmith@pearsonrealty.com

newmarkpearson.com
View My Listings

Begin forwarded message:

> **From:** Greg Simonian <GSimonian@legalteam.com>
> **Date:** October 24, 2023 at 9:07:40 PM PDT
> **To:** Walter Smith <WSmith@pearsonrealty.com>
> **Cc:** Walter Smith <WSmith@pearsonrealty.com>
> **Subject: RE: Simonian Property Phase I ESA**
>
> Walter, This was a long time ago and I do not have this information. All I can say is that there were 2 of them and they held gas. They were removed 35-40 years ago if memory serves, but I just don't recall. See my responses in red, below.
>
> ---
>
> **From:** Walter Smith <WSmith@pearsonrealty.com>
> **Sent:** Tuesday, October 24, 2023 8:51 PM
> **To:** Greg Simonian <GSimonian@legalteam.com>
> **Cc:** wsmith@pearsonrealty.com
> **Subject:** Fwd: Simonian Property Phase I ESA

Greg: a few more questions from the consultant. Please see below. Thank you,

Walter C. Smith

Senior Vice President – Retail

DRE #00914097

NEWMARK PEARSON

COMMERCIAL

7480 N Palm Ave, Suite 101

Fresno, CA 93711

T 559.447.6222

F 559.432.2938

wsmith@pearsonrealty.com

newmarkpearson.com
View My Listings

Begin forwarded message:

> **From:** Jim Vue <jvue@rmageoscience.com>
> **Date:** October 24, 2023 at 4:47:32 PM PDT
> **To:** Walter Smith <WSmith@pearsonrealty.com>
> **Cc:** Josue Montes <jmontes@rmageoscience.com>, Megan Stewart <mstewart@rmageoscience.com>, Michael Cooper <MCooper@khov.com>, Amy Williams <awilliams@khov.com>
> **Subject: RE: Simonian Property Phase I ESA**
>
> Walter,
>
> Per our conversation, could you please get more information about the

former USTs on the subject property. From my findings, I only know the size of one of the two USTs. Which is a 350-gallon UST.

Here is my request for more information.

1. Size of each of the USTs? I do not know
2. Gasoline? Or Diesel? Gas
3. When were the USTs removed? I'm not sure, but I would estimate over 35-40 years ago
4. Where are the location of the former USTs? One was located at 1183 and another at 1099
5. Any reports or records of the removal of the USTs? I do not know.
6. Any reports or records of soil samples collected after the removal of the USTs? I do now know.

Thank you,

Jim Vue, GIT
Staff Geologist
RMA GeoScience, Inc.
3897 North Ann Avenue
Fresno, CA 93727
559.708.8865 | 559.228.9488 fax
www.rmageoscience.com

ENGINEERING GEOLOGY
GEOTECHNICAL ENGINEERING
ENVIRONMENTAL ENGINEERING
CONSTRUCTION SERVICES

From: Walter Smith <WSmith@pearsonrealty.com>
Sent: Monday, October 23, 2023 5:26 PM
To: Jim Vue <jvue@rmageoscience.com>
Cc: Josue Montes <jmontes@rmageoscience.com>; Megan Stewart <mstewart@rmageoscience.com>; Michael Cooper <MCooper@KHOV.COM>; Amy Williams <awilliams@KHOV.COM>
Subject: Re: Simonian Property Phase I ESA

Thank you Jim. I have copied the KHOV Team - Michael Cooper & Amy Williams.

Best,

Walter C. Smith

Senior Vice President – Retail

DRE #00914097

NEWMARK PEARSON

COMMERCIAL

7480 N Palm Ave, Suite 101

Fresno, CA 93711

T 559.447.6222

F 559.432.2938

wsmith@pearsonrealty.com

newmarkpearson.com
View My Listings

On Oct 23, 2023, at 4:32 PM, Jim Vue <jvue@rmageoscience.com> wrote:

Walter,

Following up on our phone conversation, the Phase I ESA Report will be completed by the end of this week or early next week.

Thank you,
Jim Vue, GIT
Staff Geologist
RMA GeoScience, Inc.

3897 North Ann Avenue
Fresno, CA 93727
559.708.8865 | 559.228.9488 fax
www.rmageoscience.com

ENGINEERING GEOLOGY
GEOTECHNICAL ENGINEERING
ENVIRONMENTAL ENGINEERING
CONSTRUCTION SERVICES

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RECORD REQUESTS AND RESPONSES

R042056-092023 - City Public Records Request

Message History (2)

On 9/20/2023 5:12:58 PM, Fresno Public Records Center wrote:

City of FRESNO

Dear Jim Vue:

Thank you for your interest in public records of City of Fresno. Your request has been received and is being processed in accordance with the California Public Records Act (CPRA). Your request was received on 9/20/2023 and given the reference number R042056-092023 for tracking purposes. Your request mentioned:

> **Request for building records, permits, site plans, and applications for the following parcels/addresses.**
>
> **316-160-17s**
> **316-160-16s**
> **316-160-61s**
> **316-160-59s**
> **316-160-43s**
>
> **1099, 1139, and 1183 S Armstrong Ave, Fresno, CA 93727**

If reassigned to the City Attorney's Office for processing, the City Attorney's Office will coordinate with other City Departments regarding the collection and review process of responsive records. Within 10 days of receipt of your request, you will be contacted about the availability of the records in question, unless the response time is extended by written notification to you. PLEASE NOTE: The CPRA does not require a governmental body to create new records to respond to a request, do legal research, or answer questions that seek information only and do not seek production of an existing public record.

You can monitor the progress of your request at the link below. You will receive an email if an extension of time is required and once your request has been completed.

If you have any questions or need additional information, please feel free to contact the City Attorney's Office at 559-621-7500. For Police Department requests, you may contact the Police Department's Record's Division at 559-621-2534.

Again, thank you for using the Public Records Center.

City of Fresno

To monitor the progress or update this request please log into the Public Records Center

On 9/20/2023 5:12:57 PM, Jim Vue wrote:

Request Created on Public Portal

From: Fresno Public Records Center
To: Jim Vue
Cc: aimee.rios@fresno.gov; Casey.Carrillo@fresno.gov; cheng.her@fresno.gov; Kathleen.Abdulla@fresno.gov; Romi.Morgan@fresno.gov; Valerie.Lehn-Belerique@fresno.gov; Yvette.Aguilar@fresno.gov
Subject: [Records Center] City Public Records Request :: R042056-092023
Date: Thursday, September 28, 2023 3:00:38 PM

--- Please respond above this line ---

RE: PUBLIC RECORDS REQUEST of September 20, 2023, Reference # R042056-092023.

Dear Jim Vue,

The City of Fresno (City) received your public information request for records under the California Public Records Act (Gov. Code, § 7920.000 et seq.) on September 20, 2023. Your request seeks:

> *Request for building records, permits, site plans, and applications for the following parcels/addresses.*
>
> *316-160-17s*
> *316-160-16s*
> *316-160-61s*
> *316-160-59s*
> *316-160-43s*
>
> *1099, 1139, and 1183 S Armstrong Ave, Fresno, CA 93727*

The City responds as follows:

The City has reviewed its files and has determined there are no records responsive to your request.

Please feel free to contact the Fresno City Attorney's Office at 559-621-7500 if you have any questions.

Very truly yours,

Aimee Rios
Paralegal
for
TRAVIS R. STOKES
Assistant City Attorney
City of Fresno

To monitor the progress or update this request please log into the Public Records Center

DOCUMENTS AND REPORTS

PLEASE USE BLACK INK

12/9/03

THIS FORM TO BE MICROFILMED

APPLICATION FOR PERMIT

COUNTY OF FRESNO
DEVELOPMENT SERVICES DIVISION
MAILING ADDRESS 2220 TULARE ST. 6TH FLOOR
FRESNO, CA 93721
OFFICE LOCATION SOUTHWEST CORNER OF TULARE & "M" STREETS, SUITE "A"

ACTIVE PERMITS YES (NO)
PHONE NOS
24-HR. INSPECTION REQUEST LINE 262-4131
LOCAL 262-4029
TOLL FREE 1-(800) 742-1011
FAX 262-4893

ADDRESS

PROJECT ADDRESS 1183 S. ARMSTRONG ( ) NEW
CITY FRESNO CROSS ST. CHURCH P.C. NO
PROPERTY OWNER GARY SIMONIAN
MAIL ADDRESS 1183 S. ARMSTRONG
CITY FRESNO CA ZIP 93727 TEL NO
CONTRACTOR VALLEY PUMP & DAIRY ST. LIC 372995 TEL NO 587-1000
ADDRESS PO BOX 668 ARMONA CA 93202
DESIGNER ERNIE V. ST. LIC TEL NO
ADDRESS

LEGAL DESC
SUB RT 1 AC IN NE¼ OF NW¼ SEC 15 T14 R21

APN 316-160-

PROJECT 3 TO 4 WIRE CONVERTION ON 10 HP PUMP

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Number 372995 License Class D-21
Contractor VALLEY PUMP & DAIRY

OWNERS BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Section 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom, and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale.)

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: the Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.)

☐ I am exempt under Sec. _____ B&PC for this reason

Owner _____
Date _____

WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

☐ I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

☐ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier _____ Policy Number 10-1-04
(This section need not be completed if the permit is for one hundred dollars ($100) or less)

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Applicant CALL-IN

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEYS' FEES.

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Div. C.)

Lender's Name NONE
Address _____
City _____ Zip _____

I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspection purposes.

Applicant or Agent CALL-IN.
Date _____

ZONING

REQUIRED SETBACKS	FRONT MIN	FRONT MAX	SIDE INTERIOR	SIDE STREET	REAR MIN

ZONE DISTRICT AL-20
REMARKS

APPROVALS

ZONING BY PAT	DATE 12/8/03	
PLAN CHECK BY	DATE	
FEES BY BJ	DATE 12/8/03	
COMPLETED BY PAT	DATE 12/8/03	
VALIDATED BY	DATE	
ACCOUNT NO 95	SLUC	CONSOLIDATED ( ) YES ( ) NO

TYPE CONST	OCC. GRP	STORES	BLDG HT	V/C 13
BLDG	@			
GAR	@			
PATIO	@			
DECK	@			
	@			
	@			
TOTAL VALUATION	$			

FEES

BUILDING PLAN CHECK		
PLUMBING PLAN CHECK		
ELECTRICAL PLAN CHECK		
MECHANICAL PLAN CHECK		
OVERTIME		
PLAN CHECK SUBTOTAL		
BUILDING PERMIT		
PLUMBING PERMIT		
ELECTRICAL PERMIT	46	00
MECHANICAL PERMIT		
ENERGY SURCHARGE		
S.M.I.		
MICROFILM		
SWIMMING POOL PERMIT		
REINSPECTION FEE		
S.R.A. FEE		
FAX IN	14	00
misc	5	00
ADMIN	5	50
MOBILEHOME ISSUANCE		
MOBILEHOME LOT PREP		
MOBILEHOME INSTALLATIONS		
MOBILEHOME FOUNDATION		
TOTAL FEE	70	50

PLUMBING

NO	ITEM		FEE
	PERMIT ISSUANCE FEE		
	On-site piping (sewer / water / gas)		
	SEPTIC		
	TEST HOLE		
	WATER PIPING	FLOOR DRAIN	
	KITCHEN SINK	WASH MACH	
	SHOWER	BATH TUB	
	WATER CLOSET	LAVATORY	
	DRINKING FOUNTAIN	URINAL	
	BACK FLOW DEVICE		
	GAS APPLIANCE OR VENT		
	GAS PIPING SYSTEM		

NEW SINGLE FAMILY DWELLING
By Number of Bathrooms _____
Additional fixture (s) beyond 3 baths
Min TOTAL FEE $

ELECTRICAL

NO	ITEM		FEE
1	PERMIT ISSUANCE		26 00
	120V OUTLET(S) / FIXTURE(S)		
	SPECIAL USE OUTLETS		
	TRANSFORMERS		

MOTORS (BY H/P)

	OVER 0 TO 1		OVER 30-50	
	OVER 1 TO 5		OVER 50-100	
	OVER 5 TO 30		OVER 100	

SERVICE & OR SUB-PANELS

1	0 TO 200 AMPS	20 00
	201 TO 400 AMPS	
	401 TO 600 AMPS	
	OVER 600 AMPS	

NEW SINGLE FAMILY DWELLING
By Area of Construction _____ Sq. Ft.
Additional sq. ft. beyond 3,000
Min
FOR WATER WELL PUMP TOTAL FEE $46 00

MECHANICAL

NO	ITEM	FEE
	PERMIT ISSUANCE	
	DUCT SYSTEM	
	WOODBURNING DEVICE	
	GAS APPLIANCE	
	GAS PIPING SYSTEM	
	EVAPORATIVE COOLER	

REFRIGERATION COOLING UNITS

LESS THAN 7 TONS	
OVER 7 TONS to 14 TONS	
OVER 14 TONS	

NEW SINGLE FAMILY DWELLING
By Area of Construction _____ Sq. Ft.
Additional sq. ft. beyond 3,000
Min TOTAL FEE $

Spec val 568.38
New val. 497.88

** ORDER# 0026 **
KP # 1
001 ELECTRI 46.00
001 CALL IN 14.00
001 WORKER C 5.00
001 ACCOUNT 5.50
NORA 12/10/2003 16:06 01 050615
01 12/10/2003 16:06 050615 TND
CHARGE $70.50
NORA

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED OR IF NO INSPECTIONS ARE COMPLETED WITHIN 180 DAYS

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

FORM # 1 (Rev. 6/99)

INSPECTION RECORD

JOB ADDRESS _____ PERMIT NO. _____

(CORRECTION NOTICE DOES NOT NECESSARILY COORDINATE WITH ADJACENT INSPECTION)

BUILDING			CORRECTION	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Flood Prone-Elev.				
Foundation: Forms & setback				
Foundation / Patio Piers				
Floor Girders & Joists				
Shear Panel Nailing				
Pre-roof				
Roof Sheathing				
Roof Batten/Felt				
Roof Covering				
Exterior Lath/Siding				
Fireplace Damper				
Fireplace: Roof				
Frame				
Insulation				
Shower Wall Over Tub				
Shower Pan & Walls				
Bond Beam & Steel				
Pool Steel, Bonding & setback				
Pre Deck				
Pool Fencing and Gates				
Final Inspection				
Certificate of Occupancy				

OCCUPANCY REQUIREMENTS

1) Flood Prone: ☐ Yes ☐ No
   Map No. _____ Zone _____
2) Proposed Bldg. Height By Zoning:
   Stories _____ Height _____ Ft.
3) School Fees Due? ☐ Yes ☐ No
   District(s) _____
   Satisfied By _____
   Receipt No. _____ Date _____
4) Grading Permit Req.? ☐ Yes ☐ No
   Permit # _____ Date _____
   Finaled By _____ Date _____
5) Land Use Permit(s)
   Permit No. _____
   Permit No. _____
   Permit No. _____
   Is Occupancy Pending? ☐ Yes ☐ No
   Site Conditions Satisfied
   By _____ Date _____
6) Soil Capacity (Surface) _____ PSF

Fire Protection: SRA ☐YES ☐NO

REQ.	ITEM	INSP.	DATE
	ON-SITE WATER		
	ROOF COVERING		
	30' SETBACKS		
	DRIVEWAY		
	TURNOUTS		
	ADDRESS		

ELECTRICAL			CORRECTION	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Conduit: Pvc Galv. Interior				
Conduit: Pvc Galv. Exterior				
Rough Wiring				
Elec. Main Panel 60 amps	D. Smith	12/11/03		
Temporary Meter				
Temporary Power Pole				
~~UFER~~ Location/Driven Ground at Pole	D. Smith	12/11/03		
Water Pipe Bond Location				
Wiring to Well				
Pool Equipment Bonding				
FINAL INSPECTION	D. Smith	12/11/03		

MOBILE HOME		
TYPE OF INSPECTION	APPROVED BY	DATE
PERM FOUND/TIE-DOWNS		
FLOOD PRONE - ELEV		
FORMS & SETBACKS		
PIERS / ANCHORS		
STEPS / LANDINGS		
ELECT SERV - ___ AMPS		
GROUNDING ELECTRODE		
WIRING TO WELL		
CONTINUITY TEST		
CONDUIT / FEEDERS		
GAS TEST - EXTERIOR		
GAS TEST MONOMETER		
WASTE LINE		
SEPTIC SYSTEM		
WATER SERVICE		
WELL SEAL PAD		
Final Inspection		
Certificate of Occupancy		

PLUMBING			CORRECTION	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Ground Plumbing: soil				
Water Pipe - under floor				
Water Pipe - above floor				
Vents & Top Out				
Gas Pipe - Interior				
Gas Test - Interior				
Gas Test - Exterior				
Second Floor Tub test				
Septic System				
House Sewer				
Water Service PVC/gal				
Well Seal Pad				
FINAL INSPECTION				

REMARKS/COMMENTS

MECHANICAL			CORRECTION	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Ducts Underfloor				
Ducts Overhead				
Wood Burning Appliance				
Refrigeration Unit/Furnace				
Evaporative Cooler				
Gas Pipe				
Gas test				
FINAL INSPECTION				

CASH DEPOSIT: Temporary Power Occupancy	AMOUNT
APPROVED TO POST BY	DATE
APPROVED FOR REFUND BY	DATE
REFUNDED BY	DATE

HAZARDOUS MATERIAL STORAGE FOR NON-RESIDENTIAL CONSTRUCTION

certify that the occupants of this building (will / will not) need to comply with the applicable requirements of Section 25505, 25533 & 25534 of the Health and Safety Code and the requirements for a permit for construction or modification the air Pollution Control District.

Applicant _____ _____

FOR APPLICANT TO FILL IN
TYPE OR PRINT

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS — DIVISION OF BUILDING AND SAFETY

GORDON D. BERRY
DIRECTOR OF PUBLIC WORKS

JOHN E. WEAVER
CHIEF BUILDING INSPECTOR

24 HR. INSPECTION
ANSWERING SERVICE
488-3895

APPLICATION FOR
PERMIT

4499 E. KINGS CANYON ROAD
FRESNO, CALIF. 93702
488-3886

BUILDING

NEW | ALTERATION | DRAINAGE FEE $97.44 Paid

STORIES | BUILDING SIZE SQ. FT. | PATIO | GAR./CP

PROJECT: DRAINAGE FEE

LEGAL DESC.

A.P.N. 316-160-43

FOR APPLICANT TO FILL IN (Type or Print) ZONE 1 - 2 3 - 4 - 5 - 6

BUILDING ADDRESS: 1183 S. ARMSTRONG

NEAREST TOWN: | NEAREST CROSS ST.:

OWNER: Gary Simonian | DATE: 2/24/77

MAIL ADDRE:

CITY | ZIP | TEL. NO.

CONTRACTOR	ADDRESS	PHONE
BLDG.		
PLUMBING		
ELEC.		
MECH.		
SEPTIC		

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

0 97.44 FC
1 97.44 TOTL
97.44 CKTD
.00 CACG
1551 101 2/24/77

FIRST PRINT LINE

SIZE OF LOT | NO. OF BLDGS. NOW ON LOT

USE OF BLDG.

DESIGNER | LICENSE #

ADDRESS | TEL. NO.

SEWER CONNECTION APPROVAL

ZONING

REQUIRED SETBACK	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR

APPROVED BY | DATE

ZONING ACCEPTANCE: R-A | APPROVED ☐ | PENDING ☐

ZONE DISTRICT | SPECIAL PERMITS

PLUMBING

NO	(SUP. FEE 1.50)	EACH	FEE
	PERMIT FEE	3.00	3.00
	WATER CLOSET	3.00	
	BASIN LAVATORY	3.00	
	BATH TUB	3.00	
	SHOWER	3.00	
	KITCHEN SINK	3.00	
	DISHWASHER	3.00	
	LAUNDRY TRAYS	3.00	
	FLOOR DRAIN	3.00	
	URINAL	3.00	
	WASTE DISPOSAL	3.00	
	BACKFLOW DEVICE	3.50	
	WATER PIPING and/or SERVICE	2.50	
	HOUSE SEWER	9.00	
	CONVERSION LPG to NAT. GAS	18.00	
	EA. GAS PIPING SYSTEM 1 to 5 outlets	3.50	
	GAS PIPING SYSTEM 6 or more, each	.75	
	GAS APPLIANCE	4.50	
	ROOF DRAIN EACH	1.00	
	ROOF DRAIN MIN.	3.50	

SPECIAL INSPECTION FEE — $10 PER HOUR

SINGLE FAMILY DWELLING

1 All plumbing work, including water heater, in a one bathroom newly constructed, single family dwelling; excluding all other gas appliance fees	27.50	
2 All plumbing work, including water heater, in a two bathroom newly constructed, single family dwelling; excluding all other gas appliance fees	35.00	
3 All plumbing work, including water heater in a newly constructed, single family dwelling of three bathrooms; excluding all other gas appliance fees	40.00	
4 For each additional bathroom over three $3.00 per bathroom fixture.		

TOTAL FEE $

ELECTRICAL

NO	(SUP. FEE $1.50)	EACH	FEE
	PERMIT FEE	3.00	3.00
	RECEPTACLES Switches Light Outlets		
	FIXTURES		
	TOTAL (of two lines above)		
	FIRST 10 OR PORTION	4.00	
	REMAINDER @ .15 ea.		
	ELECTRIC RANGES / DISHWASHER	1.50	
	DRYERS / HEATER / DISPOSAL	1.50	
	220 OUTLET 1.50 / WELDER 1.50		
	0 - ½ HP .75 / OVER 5 - 15 HP	3.00	
	OVER ½ - 2 HP 1.50 / OVER 15 - 50 HP	6.50	
	OVER 2 - 5 HP 2.50 / OVER 50 HP	17.00	

SPECIAL INSPECTION FEE — $10.00 PER HOUR

SERVICE & OR SUB-PANELS

0 — 99 AMPS	2.50
100 — 125 AMPS	4.00
126 — 200 AMPS	6.00
201 — 399 AMPS	8.00
OVER 350,000 CM WIRE	12.00

SINGLE FAMILY DWELLING

Area of Construction 0 to 750 Sq. Ft.	18.50
751 to 1000	25.00
1001 to 1500	34.00
1501 to 2000	44.00
2001 to 2500	54.00
2501 to 3000	64.00
EA. ADD. 500 Sq. Ft.	2.50

TOTAL FEE $

MECHANICAL

NO		EACH	FEE
	PERMIT FEE	3.00	3.00
	EA. GAS PIPING SYSTEM 1 to 5 outlets	3.50	
	GAS APPLIANCE	2.50	
	EA. ADD. OUTLET	.75	
	VENTILATION DUCT GRAVITY	2.00	
	SERVING COMM. KITCHEN	3.00	
	Mechanical Inc. Hood Under 4,000 CFM 3.00 Over 4,000 CFM 5.00 SERVING COMM. KITCHEN UNDER 4 MC.F.M. $4.00 OVER 4 MC.F.M. $6.00		
	DUCT SYSTEM NON RESIDENT		
	SINGLE STORY 0 4M SQ. FT.	5.00	
	" OVER 4M SQ. FT.	10.00	
	MULTI STORY PER FLOOR	5.00	
	EVAP. COOLER	2.00	

SPECIAL INSPECTION FEE — $10 PER HOUR

REFRIGERATION COOLING UNITS

LESS THAN 7 TONS	4.00
OVER 7 TONS to 14 TONS	7.00
OVER 14 TONS	12.00
Gas Absorption System to 130,000 BTU	4.00
" 130,001 to 370,000 BTU	7.00
WINDOW UNIT	2.00

SINGLE FAMILY DWELLING

0 to 750 SQ. FT.	6.00
751 — 1500 "	7.00
1501 — 2500 "	10.00
2501 — 3000 "	11.00
EA. ADD. 500 SQ. FT.	1.00

TOTAL FEE $

JOHN E. WEAVER CHIEF BUILDING INSPECTOR

APPROVED BY _____ VALIDATED BY _____ ACCT. # _____ CASH ☐ CHECK ☑

TYPE CONST. | OCCUPANCY GROUP | CODE

	UNIT	TOTAL			
BLDG.			BUILDING PERMIT		
GARAGE			PLUMBING PERMIT		
PATIO			ELEC. PERMIT		
BATH			MECH. PERMIT		
AIR COND.			SEPTIC		
FIREPLACE			SMI		
TOTAL			TOTAL		

SIGN BELOW AND COMPLETE REVERSE

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT. THE LICENSE, WHERE INDICATED, IS IN FULL FORCE AND VALID.

X _____ Date _____

_____ Owner

_____ Contractor Lic. No. _____ Class _____

_____ Agent for Owner

10M-BAY 3052 9-76

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS

INSPECTION COPY

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY
4499 E. KINGS CANYON RD.
FRESNO, CALIFORNIA 93702
453-3886

APPLICATION FOR **PERMIT**

CLINTON D. BEERY
DIRECTOR OF PUBLIC WORKS

24 HR. INSPECTION
ANSWERING SERVICE
453-3895

JOHN I. WEAVER
CHIEF BUILDING INSPECTOR

ZONE 1 - 2 - 3 - 4 - 5 - 6

FOR APPLICANT TO FILL IN (Type or Print)

FOR APPLICANT TO FILL IN
TYPE OR PRINT

BUILDING

NEW		ALTERATION		PATIO	PORCH
STORIES	BUILDING SIZE SQ. FT.		GARAGE/CP		

JOB ADDRESS

BUILDING ADDRESS 1183 S. Demaree Ave
NEAREST TOWN NEAREST CROSS
OWNER Gary Simonian DATE
MAIL ADDRESS
CITY ZIP PHONE
DESIGNER ADDRESS PHONE
LENDER ADDRESS BRANCH

PROJECT
DRAINAGE FEE

LEGAL DESC.

CONTRACTOR	ADDRESS	PHONE
BLDG.		
PLUMBING		
ELEC.		
MECH.		
SEPTIC		

A.P.N. 316-160-43
SIZE OF LOT USE OF BLDGS NOW ON LOT
SEWER DRAINAGE FEE 97.44

ZONING

REQUIRED SETBACK	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR

APPROVED BY DATE
ZONING ACCEPTANCE APPROVED ☐ PENDING ☐
ZONE DISTRICT RA
SPECIAL PERMITS

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

PLUMBING

NO.			EACH	FEE
	PERMIT FEE		6.00	6.00
	WATER CLOSET	URINAL	5.00	
	KITCHEN SINK	DISPOSAL	5.00	
	DISHWASHER	BATH TUB	5.00	
	LAUNDRY TRAYS	SHOWER	5.00	
	DRINKING FONT.	LAV	5.00	
	WATER PIPING and/or SERVICE		5.00	
	FLOOR DRAIN		5.00	
	EA. LAWN SPRINKLING SYST. FOR S.F.D. WITH BACK FLOW DEVICES.		10.00	
	ALL OTHER BK. FLOW. DEV.		5.00	
	CONVERSION LPG to NAT. GAS		22.00	
	EA. GAS PIPING SYSTEM	1 - 5 outlets	5.00	
	Ea. Additional Outlet	6 or more	1.00 ea.	
	GAS APPLIANCE		6.00	

EA. BLDG. SEWER	15.00	
PRIVATE SEWERAGE DISPOSAL SYSTEM	25.00	

NEW SINGLE FAMILY DWELLING

1. All plumbing work in a one bathroom newly constructed single family dwelling (excluding sewer & septic system).	40.00	
2. All plumbing work in a two bathroom newly constructed single family dwelling (excluding sewer & septic system)	45.00	
3. All plumbing work in a three bathroom newly constructed single family dwelling (excluding sewer & septic system)	50.00	
For each additional bathroom over three 5.00 per bathroom fixture		

Min. $10.00 **TOTAL FEE** $

ELECTRICAL

NO.			EACH	FEE
	PERMIT FEE		6.00	
	EA. CIRCUIT (REMODEL WORK ONLY)		2.00	
	EA. WIRING OUTLET & FOR FIXTURES AT WHICH CURRENT IS USED OR CONTROLLED		.30	
	ELEC RANGES	DISHWASHER	3.00	
	DRYERS	HEATER / DISP	3.00	
	220 OUTLET 3.00	WELDER	3.00	
	0-1 HP 2.00	OVER 30-50 HP	11.00	
	OVER 1 TO 5 HP 5.00	OVER 50-100	18.00	
	OVER 5 TO 30 HP 7.00	OVER 100 HP	28.00	
	EA. TIME CLOCK		2.00	
	EA. ELEC. VALVE		1.00	
	EA. AC PUMP OR WELD MACH. OVER 5 HP		20.00	

SERVICE & OR SUB-PANELS

0 TO 200 AMPS	5.00	
201 TO 400 AMPS	16.00	
401 TO 600 AMPS	25.00	
OVER 600 AMPS	50.00	

NEW SINGLE FAMILY DWELLING

Area of Construction 0 to 750 Sq. Ft.	25.00	
Area of Construction 751 to 1000 Sq. Ft.	30.00	
Area of Construction 1001 to 1500 Sq. Ft.	40.00	
Area of Construction 1501 to 2000 Sq. Ft.	50.00	
Area of Construction 2001 to 2500 Sq. Ft.	60.00	
Area of Construction 2501 to 3000 Sq. Ft.	70.00	
EA. ADD 500 Sq. Ft.	5.00	

Min. $10.00 **TOTAL FEE** $

D 97.44 97.44 PC FC
I 97.44 TOTL
97.44 CKTD
.00 CACG
B 2189 TOI 2/22/80
2189 2/22/80

MECHANICAL

NO.			EACH	FEE
	PERMIT FEE		6.00	6.00
	EA. GAS PIPING SYSTEM	1-5 outlets	5.00	
	Ea. Additional Outlet	6 or more	1.00 ea	
	GAS APPLIANCE		6.00	
	MECH. HOOD			
	DUCT SYSTEM			
	SINGLE STORY, 0-4M SQ. FT.		5.00	
	SNGL. STORY OVER 4M SQ. FT.		10.00	
	MULTI story-PER FLOOR		5.00	
	EVAP. COOLER		10.00	
	WINDOW UNIT		2.00	

REFRIGERATION COOLING UNITS

LESS THAN 7 TONS	6.00	
OVER 7 TONS to 14 TONS	9.00	
OVER 14 TONS	14.00	

NEW SINGLE FAMILY DWELLING

0 to 750 SQ. FT.	10.00	
751 to 1500 SQ. FT.	15.00	
1501 to 2500 SQ. FT.	20.00	
EA. ADD. 500 SQ. FT.	1.00	

Min. $10.00 **TOTAL FEE** $

AFFIDAVIT

CALIFORNIA WORKMEN'S COMPENSATION LAW

☐ I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED I SHALL NOT EMPLOY ANY PERSON IN ANY MANNER SO AS TO BECOME SUBJECT TO THE WORKMAN'S COMPENSATION LAW OF CALIFORNIA.

☐ I HAVE COMPLIED WITH ALL THE REQUIREMENTS OF WORKMEN'S COMPENSATION LAW OF CALIFORNIA

CALIFORNIA CONTRACTOR LICENSE LAW

☐ I HEREBY CERTIFY THAT I AM EXEMPT FROM THE CONTRACTOR'S LICENSE LAWS OF THE STATE OF CALIFORNIA AS PROVIDED IN CALIFORNIA BUSINESS AND PROFESSION CODE SECTION NUMBERS

☐ THE UNDERSIGNED IS LICENSED BY THE DIRECTOR OF PROFESSIONAL AND VOCATIONAL STANDARDS TO ENGAGE IN THE CONTRACTING BUSINESS IN THE STATE OF CALIFORNIA AND SAID LICENSE IS, AND WILL BE MAINTAINED IN FULL FORCE AND EFFECT DURING THE PERFORMANCE OF WORK AUTHORIZED BY THIS PERMIT.

CONTRACTORS LICENSE # CLASSIFICATION

I DECLARE UNDER PENALTY OF PERJURY THAT THIS APPLICATION AND ALL THE FOREGOING IS TRUE AND CORRECT.

SIGNED PHONE #

TITLE DATE CASH ☐

APPROVED BY VALIDATED BY ACCOUNT # CHECK ☑

REMARKS:

TYPE CONST. UNIT	TOTAL	OCCUPANCY GROUP	CODE	
		PLAN CHECK		
		ENERGY SURCHARGE		
		S.M.I.		
		SUB TOTAL		
		BUILDING PERMIT		
		PLUMBING PERMIT		
BLDG		ELECTRICAL PERMIT		
GARAGE		MECH. PERMIT		
PATIO		SUB TOTAL		
BATH				
AIR COND.				
FIREPLACE		FC		
TOTAL COST OF IMPROVEMENTS		TOTAL	97	44

10M: BAY: 11-79

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS.

INSPECTION COPY

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY
FRESNO, CALIFORNIA 93702
488-3886

APPLICATION FOR **PERMIT**

CLINTON D. BEERY
DIRECTOR OF PUBLIC WORKS

24 HR. INSPECTION
ANSWERING SERVICE
488-3895

JOHN I. WEAVER
CHIEF BUILDING INSPECTOR

FOR APPLICANT TO FILL IN
TYPE OR PRINT

BUILDING

NEW | ALTERATION | PATIO
STORIES | BUILDING SIZE SQ. FT. | GARAGE/CP

FOR APPLICANT TO FILL IN (Type or Print) ZONE 1 - 2 - 3 - 4 - 5 - 6

BUILDING ADDRESS 1183 S. ARMSTRONG
NEAREST TOWN NEAREST CROSS ST.
OWNER Gary Simonian DATE
MAIL ADDRESS
CITY ZIP TEL. NO.

PROJECT
DRAINAGE FEE

CONTRACTOR	ADDRESS	PHONE
BLDG.		
PLUMBING		
ELEC.		
MECH.		
SEPTIC		

LEGAL DESC.

A.P.N. 316-160-43
SIZE OF LOT USE OF BLDGS. NOW ON LOT
DESIGNER LICENSE #
DRAINAGE FEE 97.44 TEL. NO.
SEWER CONNECTION APPROVAL

PLUMBING

NO.	(SUP. FEE 1.50)	EACH	FEE
	PERMIT FEE	3.00	3.00
	WATER CLOSET	3.00	
	BASIN (LAVATORY)	3.00	
	BATH TUB	3.00	
	SHOWER	3.00	
	KITCHEN SINK	3.00	
	DISHWASHER	3.00	
	LAUNDRY TRAYS	3.00	
	FLOOR DRAIN	3.00	
	URINAL	3.00	
	WASTE DISPOSAL	3.00	
	BACKFLOW DEVICE	3.50	
	WATER PIPING and/or SERVICE	2.50	
	HOUSE SEWER	9.00	
	COVERSION LPG to NAT. GAS	18.00	
	EA. GAS PIPING SYSTEM (1-5 outlets)	3.50	

GAS PIPING OUTLET (6 or more, each)	.75	
GAS APPLIANCE	4.50	
ROOF DRAIN EACH	1.00	
ROOF DRAIN MIN.	3.50	

SPECIAL INSPECTION FEE—$10 PER HOUR

SINGLE FAMILY DWELLING

1. All plumbing work, including water heater, in a one-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	27.50	
2. All plumbing work, including water heater, in a two-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	35.00	
3. All plumbing work, including water heater in a newly constructed, single family dwelling of three bathrooms; (excluding all other gas appliance tags)	40.00	
For each additional bathroom over three $3.00 per bathroom fixture.		

Min. $9.00 **TOTAL FEE** $

ZONING

REQUIRED SETBACK	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR

APPROVED BY DATE
ZONING ACCEPTANCE APPROVED ☐ PENDING ☐
ZONE DISTRICT RA SPECIAL PERMITS

WHEN VALIDATED
THIS APPLICATION IS YOUR PERMIT

D 97.44 FC
I 97.44 TOTL
97.44 CKTD
.00 CACG
19130 101 2/17/78

ELECTRICAL

NO.	(SUP. FEE $1.50)	EACH	FEE
	PERMIT FEE	3.00	3.00
	RECEPTACLES Switches lights Outlets		
	FIXTURES		
	TOTAL (of two lines above)		
FIRST 10 OR PORTION		4.00	
REMAINDER	@ 15 ea.		
	ELEC RANGES / DISHWASHER	1.50	
	DRYERS / HEATER / DISP	1.50	
	220 OUTLET 1.50 / WELDER 1.50		
	0-½ HP .75 / OVER 5-15 HP	3.00	
	OVER ½-2 HP 1.50 / OVER 5-50 HP	6.50	
	OVER 2-5 HP 2.50 / OVER 50 HP	17.00	

SPECIAL INSPECTION FEE—$10.00 PER HOUR

SERVICE & OR SUB-PANELS

0-99 AMPS	2.50	
100-125 AMPS	4.00	
126-200 AMPS	6.00	
201-399 AMPS	8.00	
OVER 350,000 CM WIRE	12.00	

SINGLE FAMILY DWELLING

Area of Construction 0 to 750 Sq. Ft.	18.50	
Area of Construction 751 to 1000 Sq. F	25.00	
Area of Construction 1001 to 1500 Sq. Ft.	34.00	
Area of Construction 1501 to 2000 Sq. Ft.	44.00	
Area of Construction 2001 to 2500 Sq. Ft.	54.00	
Area of Construction 2501 to 3000 Sq. Ft.	64.00	
EA. ADD. 500 Sq. Ft.	2.50	

Min. $5.00 **TOTAL FEE** $

MECHANICAL

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	EA. GAS PIPING SYSTEM (1-5 outlets)	3.50	
	GAS APPLIANCE	4.50	
	EA. ADD. OUTLET	.75	
	VENTILATION DUCT GRAVITY	2.00	
	SERVING COMM. KITCHEN	3.00	
	Mechanical Inc. Hood Under 4,000 CFM-3.00, Over 4,000 CFM-5.00 SERVING COMM. KITCHEN UNDER 4 MC.F.M. $4.00 OVER 4 MC.F.M. $6.00		
	DUCT SYSTEM-NON RESIDENT		
	SINGLE STORY, 0-4M SQ. FT.	5.00	
	SINGLE STORY OVER 4M SQ. FT.	10.00	
	MULTI story-PER FLOOR	5.00	
	EVAP. COOELR	2.00	

REFRIGERATION COOLING UNITS

LESS THAN 7 TONS	4.00	
OVER 7 TONS to 14 TONS	7.00	
OVER 14 TONS	12.00	
Gas Absorption System to 130,000 BTU	4.00	
" " " 130,001 to 370,000 BTU	7.00	
WINDOW UNIT	2.00	

SPECIAL INSPECTION FEE—$10 PER HOUR

SINGLE FAMILY DWELLING

0 to 750 SQ. FT.	6.00	
751 to 1500 SQ. FT.	7.00	
1501 to 2500 SQ. FT.	10.00	
2501 to 3000 SQ. FT.	11.00	
EA. ADD. 500 SQ. FT.	1.00	

TOTAL FEE $

JOHN I. WEAVER CHIEF BUILDING INSPECTOR
APPROVED BY _____ VALIDATED BY _____ ACCT. # _____ CASH ☐ CHECK ☐

TYPE CONST.	UNIT	TOTAL	OCCUPANCY GROUP	CODE
BLDG.			PLAN CHECK	
GARAGE			BUILDING PERMIT	
PATIO			PLUMBING PERMIT	
BATH			ELECTRICAL PERMIT	
AIR COND.			MECH. PERMIT	
FIREPLACE			SEPTIC	
			SMI	
	TOTAL		TOTAL	

SIGN BELOW AND COMPLETE REVERSE

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT. THE LICENSE WHERE INDICATED IS IN FULL FORCE AND VALID.

X _____ Date _____

_____ Owner

_____ Contractor Lic. No. _____ Class _____

_____ Agent for Owner

10 M: BAY : 8768 : 4-77

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS.

INSPECTION COPY

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY
4499 E. KINGS CANYON RD.
FRESNO, CALIFORNIA 93702
488-3886

CLINTON D. BEERY
DIRECTOR OF PUBLIC WORKS

APPLICATION FOR **PERMIT**

24 HR. INSPECTION
ANSWERING SERVICE
488-3895

JOHN T. WEAVER
CHIEF BUILDING INSPECTOR

ZONE 1 - 2 - 3 - 4 - 5 - 6

FOR APPLICANT TO FILL IN (Type or Print)

BUILDING ADDRESS 1193 S. Armstrong
NEAREST TOWN NEAREST CROSS ST.
OWNER Gary Simonian DATE 7/3/79
MAIL ADDRESS
CITY ZIP PHONE
DESIGNER ADDRESS PHONE
LENDER ADDRESS BRANCH

CONTRACTOR	ADDRESS	PHONE
BLDG.		
PLUMBING		
ELEC.		
MECH.		
SEPTIC		

FOR APPLICANT TO FILL IN TYPE OR PRINT

BUILDING

NEW		ALTERATION		PATIO	
STORIES	BUILDING SIZE SQ. FT.			GARAGE/CP	

JOB ADDRESS

PROJECT DRAINAGE FEE

LEGAL DESC.

A.P.N. 316-160-43
SIZE OF LOT USE OF BLDGS NOW ON LOT
SEWER DRAINAGE FEE 97.44

PLUMBING

NO	(SUP. FEE 1.50)		EACH	FEE
	PERMIT FEE		3.00	3.00
	WATER CLOSET	URINAL	3.00	
	KITCHEN SINK	DISPOSAL	3.00	
	DISHWASHER	BATH TUB	3.00	
	LAUNDRY TRAYS	SHOWER	3.00	
	DRINKING FONT	LAV	3.00	
	WATER PIPING and/or SERVICE		2.50	
	FLOOR DRAIN		3.0	
	BACKFLOW DEVICE		3.50	
	HOUSE SEWER		9.00	
	CONVERSION LPG to NAT. GAS		18.00	
	EA. GAS PIPING SYSTEM	1-5 outlets	3.50	
	Ea. Additional Outlet	6 or more	.75 ea	
	GAS APPLIANCE		4.50	

ROOF DRAIN EA. 1.00 MIN. 3.50		

SINGLE FAMILY DWELLING

1. All plumbing work, including water heater, in a one bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	27.50	
2. All plumbing work, including water heater, in a two bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	35.00	
3. All plumbing work, including water heater, in a newly constructed, single family dwelling of three bathrooms; (excluding all other gas appliance tags)	40.00	
For each additional bathroom over three $3.00 per bathroom fixture		

Min. $9.00 **TOTAL FEE** $

ZONING

REQUIRED SETBACK	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR

APPROVED BY DATE
ZONING ACCEPTANCE APPROVED ☐ PENDING ☐
ZONE DISTRICT RA SPECIAL PERMITS

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

ELECTRICAL

NO.	(SUP. FEE $1.50)		EACH	FEE
	PERMIT FEE		3.00	3.00
	RECEPTACLES Switches lights Outlets FIRST 10 OR PORTION		4.00	
	REMAINDER	@ 15 ea.		
	ELEC RANGES	DISHWASHER	1.50	
	DRYERS	HEATER / DISP	1.50	
	220 OUTLET 1.50	WELDER	1.50	
	0-½ HP .75	OVER 5-15 HP	3.00	
	OVER ½-2 HP 1.50	OVER 15-50 HP	6.50	
	OVER 2-5 HP 2.50	OVER 50 HP	17.00	

SERVICE & OR SUB-PANELS

0-99 AMPS	2.50
100-125 AMPS	4.00
126-200 AMPS	6.00
201-399 AMPS	8.00
OVER 350,000 CM WIHE	12.00

SINGLE FAMILY DWELLING

Area of Construction 0 to 750 Sq. Ft.	18.50
Area of Construction 751 to 1000 Sq. Ft.	25.00
Area of Construction 1001 to 1500 Sq. Ft.	34.00
Area of Construction 1501 to 2000 Sq. Ft.	44.00
Area of Construction 2001 to 2500 Sq. Ft.	54.00
Area of Construction 2501 to 3000 Sq. Ft.	64.00
EA. ADD 500 Sq. Ft.	2.50

Min. $5.00 **TOTAL FEE** $

D 97.44 FC
I 97.44 TOTL
97.44 CKTD
.00 CACG
35397 101 2/23/79

MECHANICAL

NO.				FEE
	PERMIT FEE		3.00	3.00
	EA. GAS PIPING SYSTEM	1-5 outlets	3.50	
	Ea. Additional Outlet	6 or more	.75 ea	
	GAS APPLIANCE		2.50	
	MECH. HOOD			
	DUCT SYSTEM-NON RESIDENT			
	SINGLE STORY, 0-4M SQ. FT.		5.00	
	SNGL STORY OVER 4M SQ. FT.		10.00	
	MULTI story-PER FLOOR		5.00	
	EVAP. COOLER		2.00	
	WINDOW UNIT		2.00	

REFRIGERATION COOLING UNITS

LESS THAN 7 TONS	4.00
OVER 7 TONS to 14 TONS	7.00
OVER 14 TONS	12.00

SINGLE FAMILY DWELLING

0 to 750 SQ. FT.	6.00
751 to 1500 SQ. FT.	7.00
1501 to 2500 SQ. FT.	10.00
2501 to 3000 SQ. FT.	11.00
EA. ADD. 500 SQ. FT.	1.00

TOTAL FEE $

AFFIDAVIT

CALIFORNIA WORKMEN'S COMPENSATION LAW

☐ I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED I SHALL NOT EMPLOY ANY PERSON IN ANY MANNER SO AS TO BECOME SUBJECT TO THE WORKMAN'S COMPENSATION LAW OF CALIFORNIA.

☐ I HAVE COMPLIED WITH ALL THE REQUIREMENTS OF WORKMEN'S COMPENSATION LAW OF CALIFORNIA.

CALIFORNIA CONTRACTOR LICENSE LAW

☐ I HEREBY CERTIFY THAT I AM EXEMPT FROM THE CONTRACTOR'S LICENSE LAWS OF THE STATE OF CALIFORNIA AS PROVIDED IN CALIFORNIA BUSINESS AND PROFESSION CODE SECTION NUMBERS

☐ THE UNDERSIGNED IS LICENSED BY THE DIRECTOR OF PROFESSIONAL AND VOCATIONAL STANDARDS TO ENGAGE IN THE CONTRACTING BUSINESS IN THE STATE OF CALIFORNIA AND SAID LICENSE IS, AND WILL BE MAINTAINED IN FULL FORCE AND EFFECT DURING THE PERFORMANCE OF WORK AUTHORIZED BY THIS PERMIT.

CONTRACTORS LICENSE # CLASSIFICATION

I DECLARE UNDER PENALTY OF PERJURY THAT THIS APPLICATION AND ALL THE FOREGOING IS TRUE AND CORRECT.

SIGNED PHONE #

TITLE DATE CASH ☐

APPROVED BY VALIDATED BY ACCOUNT # CHECK ☑

REMARKS

TYPE CONST.	OCCUPANCY GROUP		CODE	
UNIT	TOTAL	PLAN CHECK		
BLDG		BUILDING PERMIT		
GARAGE		PLUMBING PERMIT		
PATIO		ELECTRICAL PERMIT		
BATH		MECH. PERMIT		
AIR COND.		SEPTIC		
FIREPLACE		SMI		
TOTAL COST OF IMPROVEMENTS		TOTAL		

10M: BAY: 8665: 5-78

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS.

INSPECTION COPY

COUNTY OF FRESNO
RESOURCES & DEVELOPMENT DEPT.
DEVELOPMENT SERVICES DIVISION
4499 E. KINGS CANYON RD.
FRESNO, CALIFORNIA 93702

APPLICATION FOR PERMIT

24 HR. INSPECTION ANSWERING SERVICE
453-5031

LOCAL: 453-5029

TOLL FREE: 1 (800) 742-1011

FOR APPLICANT TO FILL IN (Type or Print in Black Ink)

ZONE 1-2-3

ADDRESS

ADDRESS 1183 S. Armstrong
NEAREST TOWN Fresno | NEAREST CROSS ST. Church | NEW ☐
OWNER Gary Simonian
MAIL ADDRESS 1183 S Armstrong
CITY Fresno TEL. NO. 255-0096
BLDG. CONTRACTOR Floyd Walker Inc ST. LIC. # 267289 TEL. NO. 251-0326
ADDRESS 1534 N. Maple
PLUMB CONTRACTOR ST. LIC. # TEL. NO.
ADDRESS
ELECT. CONTRACTOR ST. LIC. # TEL. NO.
ADDRESS
MECH. CONTRACTOR ST. LIC. # TEL. NO.
ADDRESS
DESIGNER ST. LIC. # TEL. NO.
ADDRESS

LICENSED CONTRACTORS DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Number 267289 License Class B-1
Contractor Floyd Walker Date 1-15-86

OWNER BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.).

☐ I am exempt under Sec. _____, B.&P.C. for this reason

Date _____ Owner _____

WORKERS' COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. C.).

Policy No. _____ Company _____

☐ Certified copy is hereby furnished.

X Certified copy is filed with the County of Fresno Department of Building & Safety.

Date 1-15-86 Applicant [signature]

9-1-86

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if work is for one hundred dollars ($100) or less.)

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Div. C.).

Lender's Name NONE
Lender's Address _____

I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspection purposes.

1-15-86 [signature]
Date Signature of Applicant or Agent

LEGAL DESC.
Refer to File

PROJECT
Repairs to a SFR as per Fire Damage Report # 1285

FLOOD MAP PAGE | ZONE
A.P.N. 316-160-43S

ZONING

REQUIRED SETBACKS	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR MIN.

APPROVED BY | DATE
ZONING ACCEPTANCE: APPROVED ☐ PENDING ☐
ZONE DISTRICT | REMARKS:

STD. LAND USE CODE

TYPE CONST.	OCCUP. GRP.	STORIES	BLDG. HT.

	SQ. FT.	UF	
BLDG.			
GAR/CP			
PATIO			
DECK			
Replace Ceiling	EST. VAL.	1300	00
TOTAL VAL. IMP.	$	1300	00

NO.	PLUMBING		EACH	FEE
	PERMIT FEE		6.00	6.00
	WATER CLOSET	URINAL	5.00	
	KITCHEN SINK	DISPOSAL	5.00	
	WASH MACH.	BATH TUB	5.00	
	LAVATORY	SHOWER	5.00	
	WATER PIPING and/or SERVICE		5.00	
	EA. LAWN SPRINKLER SYST. FOR S.F.D. WITH BACK FLOW DEVICES		10.00	
	ALL OTHER BK. FLOW DEV.		5.00	
	EA. GAS PIPING SYSTEM	1-5 outlets	5.00	
	EA. Additional Outlet	6 or more	1.00 ea.	
	GAS APPLIANCE		6.00	
	EA. BLDG. SEWER		15.00	

NEW SINGLE FAMILY DWELLING

All plumbing work in a newly constructed single family dwelling excluding sewer & septic system.	one bathroom	40.00
	two bathroom	45.00
	three bathroom	50.00
For each additional bathroom fixture		5.00

Min. $10.00 TOTAL FEE $

FEES BY			
	PLAN CHECK		
	ENERGY SURCHARGE		
	S.M.I.		50
CONSOLIDATED PERMIT FEE			
12 36	BUILDING PERMIT	13	00
5 99	ELECTRICAL PERMIT	6	30
	PLUMBING PERMIT		
	SEPTIC		
	MECH. PERMIT		
APPROVED BY			
VALIDATED BY			
ACCOUNT NO. 25	SEWER		
	DRAINAGE		
	MICROFILM		
CASH ☐ CHECK ☐	TOTAL	18	84

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

NO.	ELECTRICAL		EACH	FEE
1	PERMIT FEE		6.00	6.00
	EA. CIRCUIT (REMODEL WORK ONLY)		2.00	
1	EA. WIRING OUTLET & OR FIXTURES AT WHICH CURRENT IS USED OR CONTROLLED		30 EA.	30
	ELEC RANGES	DISHWASHER	3.00	
	DRYERS	HEATER / DISP	3.00	
	220 OUTLET	WELDER	3.00	
	0-1 HP 2.00	OVER 30-50 HP	11.00	
	OVER 1 TO 5 HP 5.00	OVER 50-100	18.00	
	OVER 5 TO 30 HP 7.00	OVER 100 HP	28.00	
	EA. TIME CLOCK		2.00	
	EA. ELEC. VALVE		1.00	
	TRANSFORMER			

SERVICE & OR SUB-PANELS

	0 TO 200 AMPS	5.00
	201 TO 400 AMPS	16.00
	401 TO 600 AMPS	25.00
	OVER 600 AMPS	50.00

NEW SINGLE FAMILY DWELLING

	Area of Construction 0 to 750 Sq. Ft.	25.00
	Area of Construction 751 to 1000 Sq. Ft.	30.00
	Area of Construction 1001 to 1500 Sq. Ft.	40.00
	Area of Construction 1501 to 2000 Sq. Ft.	50.00
	Area of Construction 2001 to 2500 Sq. Ft.	60.00
	Area of Construction 2501 to 3000 Sq. Ft.	70.00
	EA. ADD 500 Sq. Ft.	5.00

MIN. $10.00 | 6.30
MIN. $20.00 FOR WATER WELL PUMP | TOTAL FEE $ 6.30

NO.	SEPTIC		EACH	FEE
	PERMIT FEE		6.00	6.00
	NEW SYSTEM		25.00	
	REPAIR SYSTEM		15.00	
	TOTAL FEE		$	

NO.	MECHANICAL		EACH	FEE
	PERMIT FEE		6.00	6.00
	EA. GAS PIPING SYSTEM	1-5 outlets	5.00	
	EA. Additional Outlet	6 or more	1.00 ea.	
	GAS APPLIANCE		6.00	
	MECH. HOOD			
	DUCT SYSTEM			

REFRIGERATION COOLING UNITS

	LESS THAN 7 TONS	6.00
	OVER 7 TONS to 14 TONS	9.00
	OVER 14 TONS	14.00

NEW SINGLE FAMILY DWELLING

	0 to 750 SQ. FT.	10.00
	751 to 1500 SQ. FT.	15.00
	1501 to 2500 SQ. FT.	20.00
	EA. ADD. 500 SQ. FT.	1.00

Min. $10.00 TOTAL FEE $

B
E

H

025
BLDG 12.35
ELECTRC 5.99
SMI .50
IRTS TOTL 18.84
382110:45JAN.15'861 CHARGE 18.84
LINE 06

H-3821

FORM NO. 1002 7/84

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED OR IF NO INSPECTIONS ARE CALLED FOR WITHIN 180 DAYS.

INSPECTION COPY

JOB ADDRESS

INSPECTION RECORD

BUILDING INSPECTION	INSPECTOR'S APPROVAL	DATE	REMARKS	INSPECTOR'S TRIPS	DATE	CN	NR
Foundation: location forms setback				KING	1/16/86	✓	
Foundation: Garage							
Floor Girders & Joists							
Flood Prone Elev.							
Frame	[illegible]	1/17/86	NEW CEILING JOISTS - C/N				
Roof Sheath							
Roof Covering	F. KIRK	6-9-86					
Lath: (exterior)	F. KIRK	6-9-86					
Fireplace: damper							
Fireplace: roof							
Shower Wall Over Tub							
Shower Pan & Walls							
Patio and Porch Piers							
Pre Deck							
Pool Fencing and Gates							
Pool Steel: location forms setback							
Bond: Beam & Steel							
Grading Permit Issued / Finaled							
Shear Panel Nailing							
Insulation							
Fire Protection							
FINAL INSPECTION	Frank Kirk	6-9-86					

ELECTRICAL INSPECTION		INSPECTOR'S APPROVAL	DATE	REMARKS	INSPECTOR'S TRIPS	DATE	CN	NR
Conduit: Pvc Galv. Interior					KING	1/16/86	✓	
Conduit: Pvc Galv. Exterior								
Rough Elec.	Wiring CEILING LIGHT	[illegible]	1/17/86	C/N				
	Main Panel							
Temporary Meter								
Temporary Power Pole								
Ground Electrode								
Ground Clamp								
Supplemental Ground: Driven Rod								
Ufer Location								
Wiring to Well								
Pool Steel Bonding								
Pool Equipment Bonding								
FINAL INSPECTION	Frank Kirk	6-9-86						

PLUMBING INSPECTION	INSPECTOR'S APPROVAL	DATE	REMARKS	INSPECTOR'S TRIPS	DATE	CN	NR
Ground Plumbing: soil							
Water Pipe							
Vents							
Gas Pipe - Interior							
Gas Service L.P.G. Test							
Dryout Gas							
Tub Access							
Septic Tank							
House Sewer							
Septic T. & Pits Backfilled							
Temporary Meter							
Water Service							
Pump Seal							
FINAL INSPECTION							

MECHANICAL INSPECTION	INSPECTOR'S APPROVAL	DATE	REMARKS	INSPECTOR'S TRIPS	DATE	CN	NR
Ducts Underfloor							
Duct Overhead							
Fresh Air							
Furnace: gas vents comb. air							
Refrigeration Unit							
Evaporative Cooler							
FINAL INSPECTION							

OCCUPANCY BOND	AMOUNT	INSPECTOR'S SIGN	DATE	APPROVED BY	DATE	REFUND BY	DATE

REMARKS:

COUNTY OF FRESNO

RESOURCES & DEVELOPMENT DEPARTMENT

DIVISION OF BUILDING & SAFETY

REPORT OF FIRE DAMAGE INVESTIGATION

II 1285

Address 1183 S. Armstrong

City Fresno Nearest Cross Street Jensen

Located on the West side of street, between Jensen & Butler

Owner Gary Simonian Address of Owner Same

Name of Occupant (other than owner) _____

Size of Building _____ x _____ sq. ft. No. of Baths _____

Garage _____ x _____ sq. ft.

Carport _____ x _____ sq. ft.

Patio _____ x _____ sq. ft.

EXTENT OF DAMAGE TO STRUCTURE

Check applicable items damaged which will require replacement

STRUCTURAL

	1.	Roof covering	%
	2.	Rafters	%
✓	3.	Ceiling Joists 2	%
	4.	Interior Partitions	%
	5.	Exterior Walls	%
	6.	Floor	%
	7.	Floor Joists	%
	8.	Other(Explain)	%

ELECTRICAL

	1.	Service	Amps
	2.	Sub-panel	Amps
	3.	110 volt outlets #	
✓	4.	Fixtures # 1	
	5.	220 volt outlets #	
	6.	Circuits #	

MECHANICAL

	1.	Furnace #
	2.	Ducts
	3.	A/C Unit #

PLUMBING

	1.	Water Piping
	2.	Drainage Piping
	3.	Vent Piping
	4.	Water Heater #
	5.	Fixtures #
	6.	Gas Piping

Plan Required No

(Comments) Fire was confined to ceiling in 11'x13'6" dining room - Replace ceiling joists + 1 light fixture + wiring to fixture - No other damage done

J. Pierce 12/30/85

Inspector's Signature Date

Reported by _____ Date Received _____ Received By _____

Form #42 Rev. 8/81

316-160-435

Cross St.
(Church)

DATE	PERMIT NO.	NAME
	S.F.D./Gar 4/Bath A/C 4156	
3/4/76	FC#146944 C	Gary Simonian/Jack L.
3/4/76	B-146945 C	Kibler
3/4/76	HCC-146946 C	
3/4/76	FC-146948 C ($121.80)	tax
3/8/76	P-147224 C	C & E Plbg.
3/19/76	E-148310 C	C & C Electric
	Extend Patio Cover	
3/29/76	Bp-149036 C	Simonian/Kibler
	New Septic	
10/22/76	Sep-166376 C	Swartz and Son
	Flood Control	
2/24/77	FC-1551 C	Gary Simonian
2/17/78	FC-19130	Gary Simonian
2/23/79	FC-35397	Gary Simonian $97.44
2/22/80	FC-B-2189	Simonian $97.44
	Fire Damage #1285	6-9-86 mar
1/15/86	B-H-3821 C	Gary Simonian
	E-H-3821 C	Floyd Walker

1183 S. Armstrong

12/10/03
3 TO 4 WIRE CONVERTION ON 10 HP PUMP
E-050615 C 12-11-03 SC

10/26/15 RE-ROOF EXIST SFD & ATTACHED PATIO
B-74839 Scanned 2-18-16 15-107462

CONSTRUCTION PERMIT

COUNTY OF FRESNO
DEVELOPMENT SERVICES DIVISION
MAILING ADDRESS: 2220 TULARE STREET, 6th FLOOR FRESNO, CA 93721
OFFICE LOCATION: SOUTHWEST CORNER OF TULARE & 'M' STREETS, SUITE A

ACTIVE PERMITS YES NO

PHONE NUMBERS
24-HR REQUEST LINE
600-4131
LOCAL: 600-4560
TOLL FREE: 800-742-1011
FAX: 600-4201

Ref #:

1183 S ARMSTRONG FRESNO CA 93727

Project Address	Cross Street	Project Description
1183 S ARMSTRONG FRESNO CA 93727	CHURCH	REROOF EXISTING SFD AND ATTACHED PATIO

Permit #: 15-107462-FC Issued on: APN: 31616043S

Owner:	Applicant:	Contractor:
SIMONIAN GARY CHARLES & ELAINE JUNE TRS	CM ROOFINTG SERVICES *MIGUEL COLIM*	CM ROOFINTG SERVICES *MIGUEL COLIM*
Address: 1183 S ARMSTRONG FRESNO CA 93727	Address: 438 E SHAW AVE #216 FRESNO CA 93710	Address: 438 E SHAW AVE #216 FRESNO CA 93710
Phone:	Phone: Work: (559)-579-3776 Home: (559)--	Phone: Work: (559)-579-3776 Home: (559)--
	License #: 999179	License #: 999179

Approvals	Approved By	Date
Application Requirements	Permit Application Reviewer	October 26, 2015
Zoning Review	Mtunga, Tawanda	October 26, 2015

Zoning District	Required Setbacks:	Front		Side		Rear
		Min	Max	Interior	Street	Min
AL20						

PROJECT INFORMATION

Occupancy Pending RTMF: **No**
Roof Classification: **Class C or better**
Submittal Method: **Walk-in**
Reroof Valuation: **18000**
Soil Bearing Capacity(psf): **1000**
WMP Occupancy Pending: **Pick**

MECHANICAL

ELECTRICAL

PLUMBING

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code, and my license is in full force and effect.Lic.

Number 999179 Class C-39 Contractor CM ROOFINTG SERVICES

FOR OWNER BUILDER SEE FORM F174 ATTACHE

WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury on of the following declarations:

☑ I have and will maintain a certificate on consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor code, for the performance of the work for which this permit is issued.

☐ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code for the performance of the work for which this permit is issued.

My workers' compensation insurance carrier and policy number :

Carrier_____ Policy #_____ (This section does not need to be completed if the permit is for one hundred dollars ($100) or less.)

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California and agree that if I should become subject to the workers compensation provisions of Section 3700 of the Labor Code. I shall forthwith comply with those provisions.

Applicant CM ROOFINTG SERVICES

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Div. C).

Lenders Name_____ Address_____

City_____ State_____

I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspection purposes.

Applicant Or Agent [signature]

Date 10-26-15

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED OR IF NO INSPECTIONS ARE COMPLETED WITHIN 180 DAYS.

POST THIS CARD IN A CONSPICUOUS PLACE
DEPARTMENT OF PUBLIC WORKS AND PLANNING
DEVELOPMENT SERVICES DIVISION
2220 Tulare Street, Suite A, Fresno, CA 93721
Office: (559) 600-4560 or 1 (800) 742-1011 **FAX:** (559) 600-4201

THE COUNTY OF FRESNO 1856

24 HOUR INSPECTION REQUEST
(559) 600-4131
Before 2:30 p.m. for next-day inspection
This is your record of field inspection

AMANDA NUMBER: 15-107462

JOB ADDRESS: 1183 Armstrong

PERMIT NUMBER: _____

BUILDING			CORRECTIONS	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Flood Prone-Elevation			WL	11/6/15
Foundation: Forms & Setback			RJM	11-9-15
Foundation / Patio Piers				
Floor Girders & Joists				
Shear Panel Nailing				
Pre-Roof		10-27-15		
Roof Sheathing				
Roof Batten/Felt				
Roof Covering	RJM ok	11-9-15		
Exterior Lath/Siding				
Fireplace Damper				
Fireplace: Roof				
Frame				
Insulation				
Shower Wall Over Tub				
Shower Pan & Walls				
Bond Beam & Steel				
CF2R	JM	11/12/15		
Pool Steel, Bonding & Setback				
Pre-Deck				
Pool Fencing & Gates				
FINAL INSPECTION				
CERTIFICATE OF OCCUPANCY	JM	11/12/15		

ELECTRICAL			CORRECTIONS	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Conduit: PVC/Galv. Interior				
Conduit: PVC/Galv. Exterior				
Rough / Wiring				
Elec. / Main Panel _____ Amps				
Temporary Meter				
Temporary Power Pole				
Ufer Location/Driven Ground				
Water Pipe Bond Location				
Wiring To Well				
Pool Equipment Bonding				
FINAL INSPECTION				

PLUMBING			CORRECTIONS	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Ground Plumbing: Soil				
Water Pipe – Under Floor				
Water Pipe – Above Floor				
Vents & Top Out				
Gas Pipe – Interior				
Gas Test – Interior				
Gas Test – Exterior				
Second Floor Tub Test				
Septic System				
House Sewer				
Water Service PVC/Galv.				
Well Seal Pad				
FINAL INSPECTION				

MECHANICAL			CORRECTIONS	
TYPE OF INSPECTION	APPROVED BY	DATE	INSPECTOR	DATE
Ducts Underfloor				
Ducts Overhead				
Wood Burning Appliance				
Refrigeration Unit/Furnace				
Evaporative Cooler				
Gas Pipe				
Gas Test				
FINAL INSPECTION				

REMARKS	

CASH DEPOSIT	AMOUNT
Temporary Power Occupancy	
APPROVED TO POST BY:	DATE
APPROVED FOR REFUND BY:	DATE
REFUNDED BY:	DATE

MOBILE HOME		
TYPE OF INSPECTION	**APPROVED BY**	**DATE**
Perm Foundation/Tie-down		
Flood Prone-Elevation		
Forms & Setbacks		
Piers/Anchors		
Steps/Landings		
Elec. Service _____ Amps		
Grounding Electrode		
Wiring To Well		
Continuity Test		
Conduit/Feeders		
Gas Test – Exterior		
Gas Test Monometer		
Sewer		
Waste Piping		
Septic System		
Interior Water Pipe		
Water Service		
Well Seal Pad		
FINAL INSPECTION		
Certificate of Occupancy		

OTHER DEPARTMENT CONDITIONS	
GRADING	**FINAL**
G.V. #	
G.P. #	
FIRE DEPARTMENT	
ENVIRONMENTAL HEALTH	
ROADS	
C.U.P. #	
S.P.R. #	
ALL CONDITIONS MET FOR PROJECT (BUILDING INSPECTOR INITIAL)	

County of Fresno

REG-RECEIPT: 6209-74839
CASHIER ID: CIB1113 Oct 26, 2015
Date Printed: Oct 26, 2015 2:50 PM

15107462 FC	$189.30
SubTotal	$189.30
GST	$0.00
PST	$0.00
TOTAL DUE	$189.30

RECEIVED FROM:
CM ROOFINTG SERVICES (MIGUEL ANGLE COLIM)

CCARD	$189.30
TOTAL TENDERED	$189.30
CHANGE DUE	$0.00

Invoice

County of Fresno
Department of Public Works & Planning
Mailing Address: 2220 Tulare Street, 6th Floor Fresno, CA 93271
24-HR REQUEST LINE: 600-4131 LOCAL: 600-4560
TOLL FREE: 800742-1011 FAX: 600-4201

INVOICE TO:CM ROOFINTG SERVICES

INVOICE NO: 80324
INVOICE DATE: October 26, 2015
PERMIT #: Folder 15 107462 000 00 FC
REFERENCE #:

PROJECT LOCATION:1183 ARMSTRONG FRESNO CA

PROJECT DESCRIPTION: REROOF EXISTING SFD AND ATTACHED PATIO

FEE DESCRIPTION	AMOUNT	COMMENT
Re-Roof Permit	$179.00	
CA Bldg Standards Comm. Fee (SB-1473)	$1.00	
SMI	$1.80	
Workers Comp.	$7.50	
TOTAL	**$189.30**	

SUMMARY

BUILDING PERMIT	$179.00
OTHER	$10.30
TOTAL	**$189.30**
Total Billed:	$189.30
Payment Recieved:	$0.00
Balance Due:	**$189.30**

STATE OF CALIFORNIA

RESIDENTIAL ALTERATIONS

CEC-CF1R-ALT-01-E (Revised 03/15)

CALIFORNIA ENERGY COMMISSION

CF1R-ALT-01-E

(Page 1 of 6)

CERTIFICATE OF COMPLIANCE

Prescriptive Residential Alterations

Project Name: Re Roof

Date Prepared: 10-26-15

A. General Information

01	Project Name:	Re Roof	02	Date Prepared:	10-26-15
03	Project Location:	1183 S Armstrong Ave	04	Building Front Orientation (deg or cardinal):	
05	CA City:	Fresno CA	06	Number of Altered Dwelling Units:	1
07	Zip Code:		08	Fuel Type:	Gas
09	Climate Zone:		10	Total Conditioned Floor Area (ft2):	65 ~~N/A~~
11	Building Type	residential	12	Slab Area (ft2)	13 ~~N/A~~
13	Project Scope:		14	Exceptions to Minimum Aged Solar Reflectance and Minimum Thermal or SRI 150.2(b)1Hi	

B. Building Insulation Details (Section 150.2(b)1)

01	02	03	04	05	06		07	08	09	10	11
					Proposed					Required	
								Appendix JA4 Reference			
Tag/ID	Assembly Type	Frame Type	Frame Depth (inches)	Frame Spacing (inches)	Cavity R-value	Continuous Insulation R-value	U-factor	Table	Cell	U-Factor	Comments

C. Roof Replacement (Prescriptive Alteration, Section 150.2(b)1H)

01	02	03	04	05	06	07	08	09	10	11	12		13	14
							Proposed				Minimum Required			
Tag/ ID	Method of Compliance	Roof Pitch	Exception	CRRC Product ID Number	Product Type	R-value Deck Insulation	Initial Solar Reflectance	Aged Solar Reflectance	Thermal Emittance	SRI (Optional)	Aged Solar Reflectance (Max)	Aged Solar Reflectance (Min)	Thermal Emittance	SRI (Optional)
	Cool Roof	4-12	N/A	0890-0014	Shingles		0.92	0.22	0.92	24	0.22		0.92	24

NOTES

- Roof area covered by building integrated photovoltaic panels and solar thermal panels are exempt from the above Cool Roof requirements.
- Liquid field applied coatings must comply with installation criteria from section 110.8(i)4.

STATE OF CALIFORNIA
RESIDENTIAL ALTERATIONS
CEC-CF1R-ALT-01-E (Revised 03/15)

CALIFORNIA ENERGY COMMISSION

CF1R-ALT-01-E

CERTIFICATE OF COMPLIANCE

Prescriptive Residential Alterations

Project Name: Re Roof

Date Prepared: 10-26-15

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Miguel A Colimc	Documentation Author Signature:
Company: Cm Roofing Services	Signature Date: 10-26-15
Address: 438 E Shaw ave # 216	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Fresno CA 93716	Phone: 559 579-3776

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. That the energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Miguel Colimc	Responsible Designer Signature:
Company: Cm Roofing Services	Date Signed: 10-26-15
Address: 438 E Shaw ave # 216	License: 999179
City/State/Zip: Fresno CA 93710	Phone: 559 579 3770

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300.

FENESTRATION INSTALLATION

CEC-CF2R-ENV-01-E (Revised 09/15)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION		CF2R-ENV-01-E
Fenestration Installation		(Page 2 of 2)
Project Name: Re Roof	Enforcement Agency:	Permit Number: 74839
Dwelling Address: 1183 N Amstrons	City Fresno	Zip Code

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Installation documentation is accurate and complete.

Documentation Author Name: Miguel Colime	Documentation Author Signature:
Documentation Author Company Name: CM Roofing Services	Date Signed: 11-12-15
Address: 438 E Shaw ave #216	CEA/HERS Certification Identification (If applicable):
City/State/Zip: Fresno CA 93710	Phone: 559 579-3776

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Installation is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation, and attest to the declarations in this statement (responsible builder/installer), otherwise I am an authorized representative of the responsible builder/installer.
3. The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations, and the installation conforms to the requirements given on the plans and specifications approved by the enforcement agency.
4. I reviewed a copy of the Certificate of Compliance approved by the enforcement agency that identifies the specific requirements for the scope of construction or installation identified on this Certificate of Installation, and I have ensured that the requirements that apply to the construction or installation have been met.
5. I will ensure that a registered copy of this Certificate of Installation shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a registered copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Builder/Installer Name: Miguel A Colime	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner) CM Roofing Services	Position With Company (Title): Manager	
Address: 438 E Shaw ave #216	CSLB License: 999179	
City/State/Zip: Fresno CA 93710	Phone 559 347 8275	Date Signed: 11-12-15

For Informational Purposes Only. Not Valid for Compliance Purposes

FENESTRATION INSTALLATION

CEC-CF2R-ENV-01-E (Revised 09/15)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION		CF2R-ENV-01-E
Fenestration Installation		(Page 1 of 2)
Project Name: Re Roof	Enforcement Agency:	Permit Number: 74 839
Dwelling Address: 1183 N Ams trong	City Fresno	Zip Code

If more than one person has responsibility for installation of the items on this certificate, each person shall prepare and sign a certificate applicable to the portion of construction for which they are responsible. Alternatively, the person with chief responsibility for construction shall prepare and sign this certificate for the entire construction. The signer agrees that all applicable Mandatory Measures were met. Temporary labels are not to be removed before verification by the building inspector.

A. Fenestration/Glazing

Includes all Windows, Skylights, Greenhouse/Bay Windows, and Glazed Doors.

Note: If meeting Exception 1 to 150.1(c)3A, Installing ≤ 3ft^2 glass in door, it is assumed to meet the minimum required U-factor (0.32) & SHGC (0.25).
If meeting Exception 1 to 150.1(c)3A, Installing ≤ 3ft^2 tubular skylight, it is assumed to meet the minimum required U-factor (0.55) & SHGC (0.30).

01	02	03	04	05	06	07	08	09	10	11	12
Tag/ID	Manufacturer/ Brand	Fenestration Area (ft^2)	Orientation	Chromogenic	U-factor	Source	SHGC	Source	Fenestration Type	Exterior Shading Devices (Describe)	Comments/Special Features
0890-0014	Owens Corning										cool Roof Amber

B. Fenestration Installation	
01	For new construction, installed window U-factor and SHGC values should be equal to or less than listed on the CF1R.
02	For existing buildings the U-factor and SHGC values should be the same or better than the required Energy Commission prescriptive requirements.
03	Temporary labels should not be removed until verified by the building inspector.
04	The fenestration product manufacturer's installation specifications shall be followed when installing these products. The space between the fenestration product and rough opening shall be completely filled with insulation. If batt insulation is used, it is cut to size and placed properly around the fenestration product.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

Department of Public Works and Planning

Roof Certification

(For Compliance with Assembly Bill 3819)

Development Services Division

I, Miguel Colmc, certify that the roof covering I will) install at
(name of installer)

1183 S Amstrong Fresno CA
(project address)

will have a classification as defined in the California Building Code of:

( ) Class "A" (minimum requirement for SRA*)

(✓) Class "C" or better (minimum requirement for LRA**)

The slope on the main roof is 4 in 12. The following materials to be installed on these areas:

(✓) Composition Shingles ( ) Metal ( ) Built-Up Roofing

( ) Tile _____ lbs./sq.ft. (Manufactured by: Owens Corning)
(Style / Model: _____)

( ) Fire retardant wood shakes / shingles (Manufactured by: _____)

( ) Other: _____

The slope on any low-slope roof is 1 in 12. The following materials will be installed on these areas:

( ) No low-sloped roofs ( ) Same as main roof (✓) Built-up roofing

( ) Torch-down _____ ( ) Metal ( ) Other: ~~Roof~~ Roll Roofing

All materials will be installed in accordance with the latest edition of the California Building Code and the manufacturer listings.

(Signature of Installer) 10-26-15 (Date)

FIRE RESPONSIBILITY AREAS

* LRA (Local Responsibility Areas) include most areas of the County that are on the valley floor.

** SRA (State Responsibility Areas) includes most areas of the County East of the Friant-Kern Canal or West of Interstate Highway 5.

Boundary maps are available for public review at this office or at the State of California Forestry Department Offices

F336 Rev: 2/06
G:\4360Devs&Pln\FORMS\F336 roof certification_Revised.doc

2220 Tulare Street, Sixth Floor / Fresno, California 93721 / Phone (559) 262-4055 / 262-4029 / 262-4302 / 262-4022 / FAX 262-4893

DEPARTMENT OF PUBLIC WORKS AND PLANNING

PRE-ROOFING INSPECTION CHECKLIST

Job Address: 1183 S Armstrong Date: 10.22.15

EXISTING ROOF COVERING

☐ Wood Shake ☐ Wood Shingle ☐ Comp Shingle ☐ BUR

☐ Metal ☐ Clay/Cement ☐ Other ☑ Removed

No. of Roofing Layers: _____

PROPOSED ROOF COVERING

☐ Wood Shake ☐ Wood Shingle ☑ Comp Shingle ☐ BUR

☐ Metal ☐ Clay/Cement ☐ Other ☐ Removed

EXISTING ROOF SLOPE

AREA 1 Residence Slope 4 :12 Satisfactory ☐ YES ☐ NO

AREA 2 Rear Patio Slope 1 :12 Satisfactory ☐ YES ☐ NO

AREA 3 _____ Slope _____ :12 Satisfactory ☐ YES ☐ NO

Comments: Area 2 requires B.U.R or equal

EXISTING FLASHING/FLUES

A/C Plenum	OK	Replace	Cricket Required	☑ YES ☐ NO
Flashing	OK	Replace	Location: All Fireplaces	
Roof Jacks	OK	Replace	Location: AC Units	
Fireplace Flashing	OK	Replace	Cricket Required	☑ YES ☐ NO
Flue: Pipe	OK	Replace	Location: _____	Clearance ☐ OK ☐ Repair

Comments:

Provide CFR. ALT-05 form at final

ROOF VENTILATION

☐ OK ☐ Additional Square Inches Required ☐ _____ Square " UPPER ☐ _____ Square " LOWER

Comments:

Verify 1/300 of attic ventilation

ROOF STRUCTURE

Sheathing: ☑ OK ☐ Repair Needed ☐ Sheathing Inspection Required Framing: ☐ OK ☐ Repair Needed

Comments:

PWP-F-322

FOR APPLICANT TO FILL IN TYPE OR PRINT

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS — DIVISION OF BUILDING AND SAF

CLINTON D. BEERY, DIRECTOR OF PUBLIC WORKS
24 HR. INSPECTION ANSWERING SERVICE 488-3895

ROBERT E. HUBER, CHIEF BUILDING INSPECTOR
4499 E. KINGS CANYON ROAD, FRESNO, CALIF. 93702, 488-3886

APPLICATION FOR **PERMIT**

BUILDING

4. NEW ✓ | ALTERATION | DEMOLITION FEE 7/21/20 [illegible]

STORIES: 1 | BUILDING SIZE SQ. FT.: 4156 | PATIO: 994 | GAR./CP: 918

PERMIT FOR: DWELLING AND GARAGE

new septic

APN 316-160-135

FOR APPLICANT TO FILL IN (Type or Print) ZONE 1 · (2) · 3 · 4 · 5

BUILDING ADDRESS: 1183 SOUTH ARMSTRONG
NEAREST TOWN: FRESNO | NEAREST CROSS ST.: CHURCH
OWNER: MR + MRS GARY SIMONIAN | DATE: 2-2-76
MAIL ADDRESS: 1099 SOUTH ARMSTRONG
CITY: FRESNO | TEL. NO. 255 0096

LEGAL DESC. BLOCK | LOT NO. | C. TRACT

TRACT: THE EASTERLY 200 FEET OF THE SOUTHERLY 255 FEET OF THE SOUTH ½ OF THE NE ¼ OF THE NW ¼ OF SECTION 15 T. 14S. R. 21E. M.D.B.&M.

CONTRACTOR	LICENSE NO.	PHONE
BLDG. JACK L. KIBLER	B1 147193	229-5574
PLUMBING Mark Plumbing	Lewis + Jones	
ELECT. C&C Electric		299-9214
MECH.		

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

DATE	PERMIT NUMBER	CLASS	AMOUNT
10/22/70	68576	118 Chg Sep	18.00
[illegible]	145944	1st — FC	31
[illegible]	146945	1st — BLP	12
[illegible]	146946	1st — MCC	14
[illegible]	146947	1st MD —	2
[illegible]	146947	1st —	171
[illegible]	146947	Add —	171
[illegible]	146948	ADD — FC	121
3/1/76	147224	BLP	29.00
3/11/76	148310	ELP	45.50

FIRST PRINT LINE

SIZE OF LOT: 255' x 200' | NO. OF BLDGS. NOW ON LOT:
USE OF EXISTING BLDG. | NO. OF FAMILIES:
ARCHITECT OR ENGINEER:
ADDRESS | TEL. NO.:
SEWER CONNECTION APPROVAL | ENCROACHMENT APPROVAL:

PLANNING DEPARTMENT

REQUIRED SETBACK	FRONT MIN.	FRONT	SIDE INTERIOR	SIDE STREET	REAR
	25	25	15		20

APPROVED BY: [illegible] | DATE: 3-2-76
CERTIFICATE OF OCCUPANCY: APPROVED ☒ PENDING ☐
ZONE: R-A | SPECIAL PERMITS: SPL 3330

PLUMBING

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	WATER CLOSET	1.75	
	BASIN (LAVATORY)	1.75	
	BATH TUB	1.75	
	SHOWER	1.75	
	KITCHEN SINK	1.75	
	DISHWASHER	1.75	
	LAUNDRY TRAYS	1.75	
	FLOOR DRAIN	1.75	
	URINAL	1.75	
	WASTE DISPOSAL	1.75	
	CONVERSION LPG to NAT. GAS	10.00	
	HOUSE SEWER	5.00	
	WATER PIPING and/or SERVICE	1.50	
	EA. GAS PIPING SYSTEM (1 to 5 outlets)	2.00	
	GAS PIPING SYSTEM (6 or more, each)	.40	
	GAS APPLIANCE	2.50	
	SPECIAL (SEE ORDINANCE)		
	ROOF DRAIN 1 TO 4	2.00	
	EACH ADDITIONAL DRAIN	.50	

SPECIAL INSPECTION FEE-8.00 PER HOUR

SINGLE FAMILY DWELLING

1. All plumbing work, including water heater, in a one-bathroom newly constructed, single family dwelling, (excluding all other gas appliance tags)	15.00	
2. All plumbing work, including water heater, in a two-bathroom newly constructed, single family dwelling, (excluding all other gas appliance tags)	19.00	
3. All plumbing work, including water heater in a newly constructed, single family dwelling of three bathrooms, (excluding all other gas appliance tags)	22.00	
4. For each additional bathroom over three $1.75 per bathroom fixture.		

TOTAL FEE $ 28.00

ELECTRICAL

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	RECEPTACLES Switches Light Outlets		
	FIXTURES		
	TOTAL (of two lines above)		
	FIRST 10 OR PORTION	2.50	
	REMAINDER @ .10 ea.		
	ELECTRIC RANGES / DISHWASHER	1.00	
	DRYERS / HEATER / DISPOSAL	1.00	
	0 – ½ HP .50 / OVER 5 – 15 HP	2.00	
	OVER ½ 2 HP 1.00 / OVER 15 – 50HP	4.00	
	OVER 2 5 HP 1.50 / WELDERS	1.00	
	MOTORS		

SPECIAL INSPECTION FEE-8.00 PER HOUR

SERVICE CONDUCTORS & or SUB-PANELS

	NO. 8 OR NO. 6 WIRE	1.50
	NO. 4, NO. 2, OR NO. 1 WIRE	2.50
	NO. 1/0, 2/0, 3/0, OR 4/0 WIRE	3.50
	250,000 CM to 350,000 CM WIRE	5.00
	OVER 350,000 CM WIRE	7.50

SINGLE FAMILY DWELLING

	Area of Construction 0 to 750 Sq. Ft.	11.00
	" 751 to 1000" "	15.00
	" 1001 to 1500" "	20.00
	" 1501 to 2000" "	26.00
	" 2001 to 2500" "	32.00
	" 2501 to 3000" "	38.00
	4443 @ 2.50	11.00

TOTAL FEE $ 45.50

MECHANICAL

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	EA. GAS PIPING SYSTEM (1 to 5 outlets)	2.00	
	GAS APPLIANCE	2.50	
	VENTILATION DUCT GRAVITY	2.00	
	SERVING COMM. KITCHEN	3.00	
	Mechanical Inc. Hood Under 4,000 CFM-3.00, Over 4,000 CFM-5.00 SERVING COMM. KITCHEN UNDER 4 MC.F.M. $4.00 OVER 4 MC.F.M. $6.00		
	DUCT SYSTEM-NON RESIDENT		
	SINGLE STORY, 0-4M. SQ. FT.	5.00	
	" " OVER 4M SQ. FT.	10.00	
	MULTI STORY-PER FLOOR	4.00	
	EVAP. COOLER	2.00	

SPECIAL INSPECTION FEE-8.00 PER HOUR

REFRIGERATION COOLING UNITS

	LESS THAN 7 TONS	4.00
	OVER 7 TONS to 14 TONS	7.00
	Gas Absorption System to 130,000 BTU	4.00
	" " 130,001 to 370,000 BTU	7.00
	WINDOW UNIT	2.00

SINGLE FAMILY DWELLING

	0 to 750 SQ. FT.	6.00
	751 " 1500 " "	7.00
	1501 " 2500 " "	10.00
	2501 " 3000 " "	11.00
	443 @ 1.00	11.00

TOTAL FEE $ 140.00

ROBERT E. HUBER CHIEF BUILDING INSPECTOR

CHECKED BY _____ VALIDATED BY _____ ACCT. # _____ CASH ☐ CHECK ☐

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT. THE LICENSE, WHERE INDICATED, IS IN FULL FORCE AND VALID.

SIGN BELOW AND COMPLETE REVERSE

X [signature] Date FEB 2 1976

_____ Owner

X Contractor Firm Name Kibler Const.

Lic. No. 147193 Class B1

TYPE CONST.	UNIT	TOTAL	OCCUPANCY GROUP	CODE	
BLDG.	3.26	3-[illegible]	PLAN ½ CHECK ½	31	—
GARAGE	3.3	[illegible]	BUILDING PERMIT	129	—
[illegible]	2	600	PLUMBING PERMIT		
BATH	[illegible]	1200	ELEC. PERMIT		
AIR COND.	10	1800	MECH. PERMIT	14	—
[illegible]	3	[illegible]	[illegible]	2.00	
		[illegible]	[illegible]	2.98	
TOTAL		[illegible]	TOTAL	[illegible]	98

10M-BAY-13529-2-74

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS.

INSPECTION COPY

INSPECTION RECORD

BUILDING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Foundation: location forms setback	Schwartz	5/6/76		Schwartz	5/7/76	—	
Foundation: Garage	Schwartz	5/6/76		Young	5-14-76	—	
Floor Girders & Joists				Schwartz	7/20/76	—	
Pool Steel: location forms setback				Young	9-8-76	cubo	
Frame: bracing bolts	Schwartz	5/6/76					
Lath: (exterior)	Young	7-14-76					
Fireplace: damper	WEFurner	4-15-76					
Fireplace: roof							
Shower Walls over Tub							
Shower Pan & Walls	Schwartz	7/21/76					
Under Floor Area-Clean							
Bond Beam & Steel							
(1)							
(2)							
(3)							
FINAL INSPECTION Vlempsot	[illegible]	10/22/76	on via				

ELECTRICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Conduit: Pvc Galv.				Schwartz	6/1/76	—	
Rough Wiring	Schwartz	5/7/76					
Elec. Main Panel							
Temporary Meter	Schwartz	6/4/76					
Temporary Power Pole							
Ground Electrode 20'-1/2" W.S.	Schwartz	5/6/76					
Ground Clamp S.W. Water Servic	Schwartz	5/7/76					
FINAL INSPECTION	[illegible]	10/22/76					

PLUMBING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ground Plumbing: soil	R. Scott	3-12-76	Northand	R. Scott	3-12-76	✓	
Water Pipe	Schwartz	3/15/76		WEFurner	4-15-76	X	
Vents	WEFurner	4-15-76		Schwartz	5/7/76	—	
Gas Pipe	Schwartz	5/7/76					
Tub Access							
Drvout Gas	B.C.10-4-76 ~~Schwartz~~ Peterson	~~9/8/76~~					
Septic Tank	Schwartz	5/17/76					
House Sewer							
Septic T. & Pits Backfilled							
Temporary Meter							
NG line & test	B. Patton	10-4-76					
FINAL INSPECTION	[illegible]	10/22/76					

MECHANICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ducts Underfloor							
Duct Overhead	Schwartz	5/7/76					
Fresh Air In attic	Schwartz	5/17/76					
Furnace: gas vents comb. air							
Refrigeration Unit							
Evaporative Cooler							
FINAL INSPECTION	[illegible]	10/22/76					

OCCUPANCY BOND	AMOUNT	INSPECTOR'S SIGN	DATE	APPROVED BY	DATE	REFUND BY	DATE

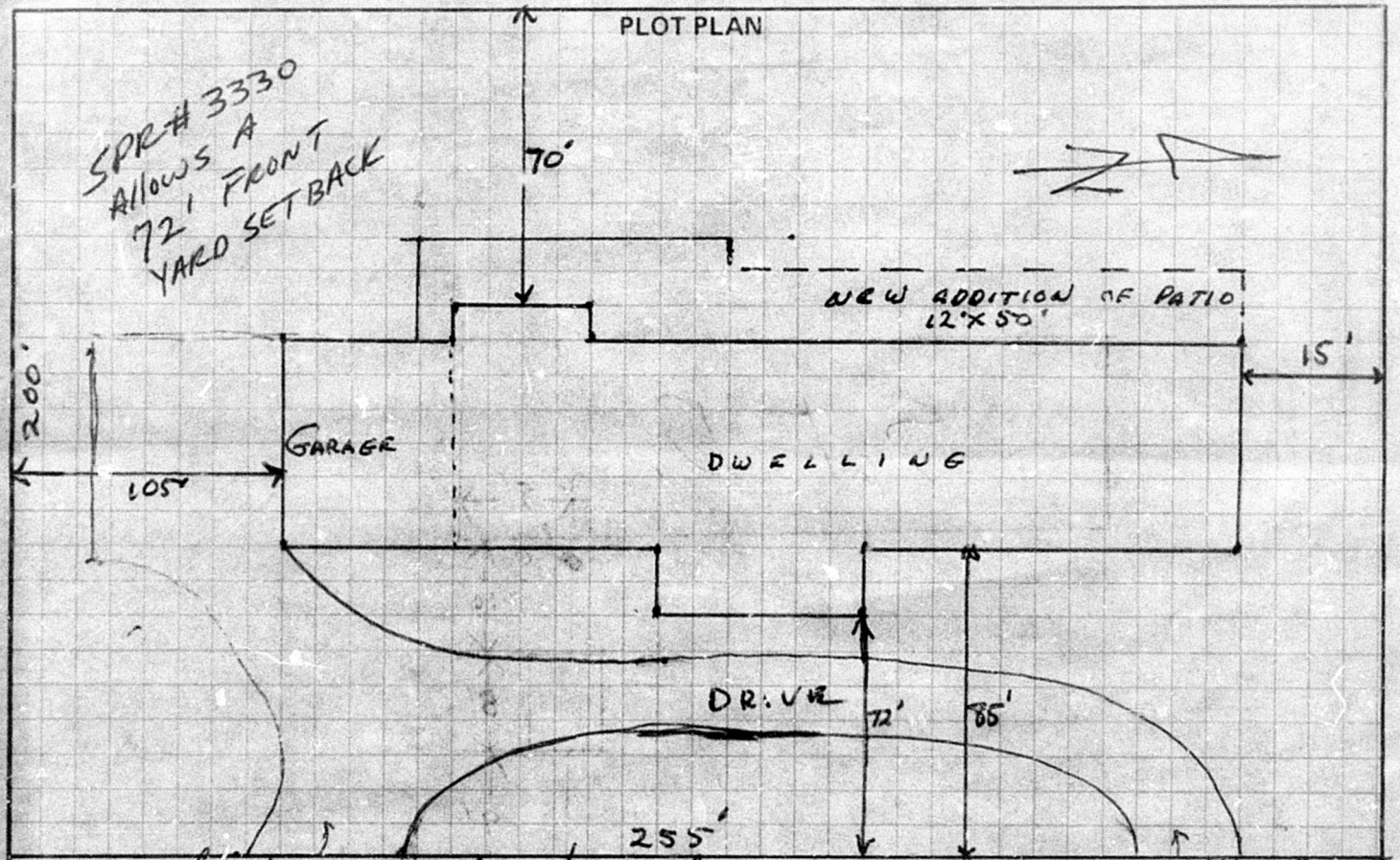
[illegible]INTON D. BEERY
[illegible]CTOR OF PUBLIC WORKS
TELEPHONE
488-3886

COUNTY OF FRESNO

DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY

ROBERT E. HUBER
CHIEF BUILDING INSPECTOR
4499 E. KINGS CANYON ROAD
FRESNO, CALIFORNIA 93702

PLOT PLAN



Approved By [signature] Armstrong Date AVE Bldg. Permit # 146945

Septic Tag: New # Repair #

APPLICATION FOR SEWAGE DISPOSAL SYSTEM

BUILDING ADDRESS 1183 SOUTH ARMSTRONG LOCALITY FRESNO CROSS ST. CHURCH

OWNER MR+MRS GARY SIMONIAN MAIL ADDRESS 1099 SOUTH ARMSTRONG

CITY FRESNO TEL. NO. 2550096

CONTRACTOR JACK L. KIBLER MAIL ADDRESS 1579 W. FAIRMONT TEL. NO. 2292574

CITY FRESNO LICENSE NO. 147193 CLASSIFICATION B1

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS

BUILDING TO BE SERVED RESIDENCE SFR NO. BEDROOMS 4 GARBAGE GRINDER YES OTHER

MINIMUM SEPTIC TANK 1500 GAL. MINIMUM SEEPAGE PIT OR LEACHING FIELD AREA 600 SQ. FT. FACTOR 40 SQ. FT. / 100 GAL.

RECTANGULAR:	CIRCULAR	SEEPAGE PITS	LEACHING FIELD
LENGTH 1ST COMP. ___ FT.	DIA. 1ST COMP. ___ IN.	NUMBER 2	TOTAL LENGTH ___ FT.
2ND COMP. ___ FT.	2ND COMP. ___ IN.	DIAMETER 4 FT.	TOTAL WIDTH ___ FT.
WIDTH ___ FT.	3RD COMP. ___ IN.	DEPTH 47 FT.	NO. OF LINES ___
LIQUID DEPTH ___ FT.	LIQUID DEPTH ___ IN.	LINING Brick	ROCK UNDER TILE ___ IN.
TOTAL LIQUID CAPACITY 1500 GAL.	TOTAL LIQUID CAPACITY ___ GAL.	LOT LINE ___ FT.	ROCK ABOVE TILE ___ IN.
		FOUNDATION ___ FT.	DIST. BOX ___
			SQUARE FEET 990

WATER WELL

DISTANCE TO NEAREST WELL ___ FT. COMMUNITY ___ PRIVATE ___

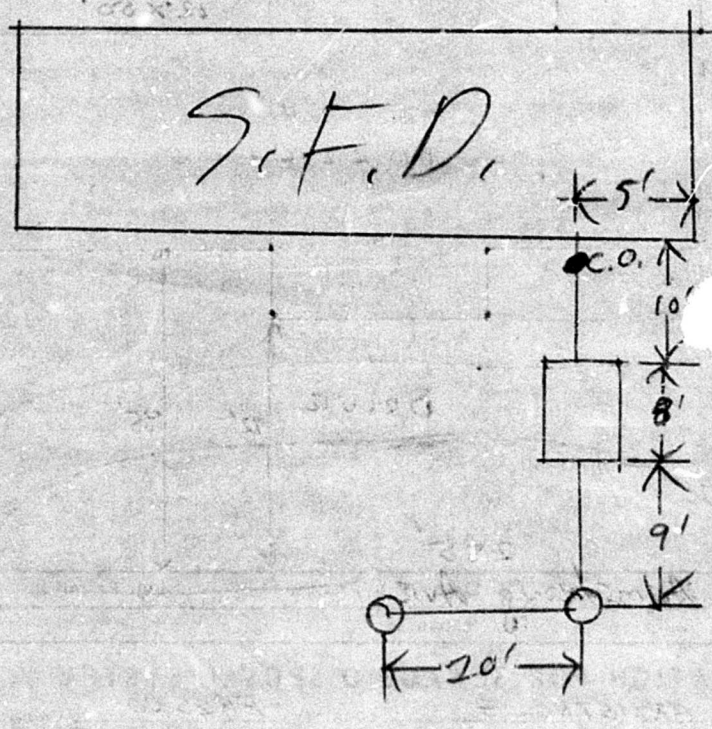
I HEREBY STATE THAT THE INFORMATION ABOVE IS CORRECT. I UNDERSTAND THAT THE PERMIT MUST BE OBTAINED BEFORE ANY CONSTRUCTION IS STARTED AND THAT AN INSPECTION OF THE SYSTEM IS REQUIRED BEFORE BACKFILLING.

SIGNATURE Jack L Kibler DATE FEB 2 1976

1. ON SITE SYSTEM ___ DATE ___
SEWER NOTIFICATION ___
2. APPLICATION APPROVED [signature] DATE 3-4-76
PRE-POUR INSPECTION ___ DATE ___
FINAL INSPECTION [signature] DATE 5/17/[illegible]

BUILDING DIVISION COPY

10M BAY: 2768:11-72



$$\begin{array}{r} 2.5 \\ 48 \\ \hline 875 \\ 900 \\ \hline 9675 \end{array}$$

FOR APPLICANT TO FILL IN TYPE OR PRINT

BUILDING

NEW	ALTERATION	DRAINAGE FEE
STORIES	BUILDING SIZE SQ. FT.	PATIO 600
		GAR./CP

PERMIT FOR: EXTEND PATIO COVER

BP 146905

LEGAL DESC. BLOCK | LOT NO. | C. TRACT

TRACT

DEPARTMENT OF PUBLIC WORKS — DIVISION OF BUILDING AND SAFETY

CLINTON D. BEERY, DIRECTOR OF PUBLIC WORKS

JOHN I. WEAVER, CHIEF BUILDING INSPECTOR

24 HR. INSPECTION ANSWERING SERVICE 488-3895

APPLICATION FOR **PERMIT**

4499 E. KINGS CANYON ROAD, FRESNO, CALIF. 93702, 488-3886

FOR APPLICANT TO FILL IN (Type or Print) ZONE 1 - 2 - 3 - 4 - 5

BUILDING ADDRESS 1183 S. ARMSTRONG

NEAREST TOWN | NEAREST CROSS ST.

OWNER | DATE

MAIL ADDRESS

CITY | TEL. NO.

CONTRACTOR	LICENSE NO.	PHONE
BLDG.		
PLUMBING		
ELECT.		
MECH.		

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

DATE	PERMIT NUMBER	CLASS	AMOUNT
MAR 29 76	149036	Lst—BLP	10
MAR 29 76	149037 B	LstMC—	0
MAR 29 76	149037	MLst—	10
MAR 29 76	149037	ACa—	10

FIRST PRINT LINE

SIZE OF LOT 255' x 210' | NO. OF BLDGS. NOW ON LOT

USE OF EXISTING BLDG. | NO. OF FAMILIES

ARCHITECT OR ENGINEER

ADDRESS | TEL. NO.

SEWER CONNECTION APPROVAL | ENCROACHMENT APPROVAL

PLANNING DEPARTMENT

	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR
REQUIRED SETBACK	35	72	15	—	20

APPROVED BY: TCC DATE 3/29/76

CERTIFICATE OF OCCUPANCY APPROVED ☑ PENDING ☐

ZONE RA | SPECIAL PERMITS SPR 3330

PLUMBING

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	WATER CLOSET	1.75	
	BASIN (LAVATORY)	1.75	
	BATH TUB	1.75	
	SHOWER	1.75	
	KITCHEN SINK	1.75	
	DISHWASHER	1.75	
	LAUNDRY TRAYS	1.75	
	FLOOR DRAIN	1.75	
	URINAL	1.75	
	WASTE DISPOSAL	1.75	
	CONVERSION LPG to NAT. GAS	10.00	
	HOUSE SEWER	5.00	
	WATER PIPING and/or SERVICE	1.50	
	EA. GAS PIPING SYSTEM (1 to 5 outlets)	2.00	
	GAS PIPING SYSTEM (6 or more, each)	.40	
	GAS APPLIANCE	2.50	
	SPECIAL (SEE ORDINANCE)		
	ROOF DRAIN 1 TO 4	2.00	
	EACH ADDITIONAL DRAIN	.50	

SPECIAL INSPECTION FEE-8.00 PER HOUR

SINGLE FAMILY DWELLING

1. All plumbing work, including water heater, in a one-bathroom newly constructed, single family dwelling, (excluding all other gas appliance tags)	15.00	
2. All plumbing work, including water heater, in a two-bathroom newly constructed, single family dwelling, (excluding all other gas appliance tags)	19.00	
3. All plumbing work, including water heater in a newly constructed, single family dwelling of three bathrooms, (excluding all other gas appliance tags)	22.00	
4. For each additional bathroom over three $1.75 per bathroom fixture.		

TOTAL FEE $

ELECTRICAL

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	RECEPTACLES Switches Light Outlets		
	FIXTURES		
	TOTAL (of two lines above)		
	FIRST 10 OR PORTION	2.50	
	REMAINDER @ .10 ea.		
	ELECTRIC RANGES / DISHWASHER	1.00	
	DRYERS / HEATER / DISPOSAL	1.00	
	0 – ½ HP .50 / OVER 5 – 15 HP	2.00	
	OVER ½ 2 HP 1.00 / OVER 15 – 50HP	4.00	
	OVER 2 5 HP 1.50 / WELDERS	1.00	
	MOTORS		

SPECIAL INSPECTION FEE-8.00 PER HOUR

SERVICE CONDUCTORS & or SUB-PANELS

	NO. 8 OR NO. 6 WIRE	1.50
	NO. 4, NO. 2, OR NO. 1 WIRE	2.50
	NO. 1/0, 2/0, 3/0, OR 4/0 WIRE	3.50
	250,000 CM to 350,000 CM WIRE	5.00
	OVER 350,000 CM WIRE	7.50

SINGLE FAMILY DWELLING

	Area of Construction 0 to 750 Sq. Ft.	11.00
	" 751 to 1000 "	15.00
	" 1001 to 1500 "	20.00
	" 1501 to 2000 "	26.00
	" 2001 to 2500 "	32.00
	" 2501 to 3000 "	38.00

TOTAL FEE $

MECHANICAL

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	EA. GAS PIPING SYSTEM (1 to 5 outlets)	2.00	
	GAS APPLIANCE	2.50	
	VENTILATION DUCT GRAVITY	2.00	
	SERVING COMM. KITCHEN	3.00	
	Mechanical Inc. Hood Under 4,000 CFM-3.00, Over 4,000 CFM-5.00 SERVING COMM. KITCHEN UNDER 4 MC.F.M. $4.00 OVER 4 MC.F.M. $6.00		
	DUCT SYSTEM-NON RESIDENT		
	SINGLE STORY, 0-4M SQ. FT.	5.00	
	" " OVER 4M SQ. FT.	10.00	
	MULTI STORY-PER FLOOR	4.00	
	EVAP. COOLER	2.00	

SPECIAL INSPECTION FEE-8.00 PER HOUR

REFRIGERATION COOLING UNITS

	LESS THAN 7 TONS	4.00
	OVER 7 TONS to 14 TONS	7.00
	Gas Absorption System to 130,000 BTU	4.00
	" " " 130,001 to 370,000 BTU	7.00
	WINDOW UNIT	2.00

SINGLE FAMILY DWELLING

	0 to 750 SQ. FT.	6.00
	751 " 1500 " "	7.00
	1501 " 2500 " "	10.00
	2501 " 3000 " "	11.00

TOTAL FEE $

JOHN I. WEAVER, CHIEF BUILDING INSPECTOR

CHECKED BY _____ VALIDATED BY _____ ACCT. # _____ CASH ☐ CHECK ☑

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT. THE LICENSE, WHERE INDICATED, IS IN FULL FORCE AND VALID.

SIGN BELOW AND COMPLETE REVERSE

X _____ Date MAR. 29 1976

___ Owner

___ Contractor Firm Name _____

Lic. No. 147196 Class B-1

TYPE CONST. V | OCCUPANCY GROUP J | CODE 11

	UNIT	TOTAL			
BLDG.			PLAN ¼ CHECK ½		
GARAGE			BUILDING PERMIT	10	00
F. PL.			PLUMBING PERMIT		
BATH			ELEC. PERMIT		
AIR COND.			MECH. PERMIT		
Patio	3	18.00	SMI		50
TOTAL			TOTAL		

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS.

INSPECTION COPY

INSPECTION RECORD

BUILDING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Foundation: location forms setback							
Foundation: Garage							
Floor Girders & Joists							
Pool Steel: location forms setback							
Frame: bracing bolts							
Lath: (exterior)							
Fireplace: damper							
Fireplace: roof							
Shower: Walls over Tub							
Shower Pan & Walls							
Under Floor Area-Clean							
Bond Beam & Steel							
(1)							
(2)							
(3)							
FINAL INSPECTION		10/22/X					

ELECTRICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Conduit: Pvc Galv.							
Rough Wiring							
Elec. Main Panel							
Temporary Meter							
Temporary Power Pole							
Ground Electrode							
Ground Clamp							
FINAL INSPECTION							

PLUMBING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ground Plumbing: soil						X	
Water Pipe							
Vents							
Gas Pipe							
Tub Access							
Dryout Gas							
Septic Tank							
House Sewer							
Septic T. & Pits Backfilled							
Temporary Meter							
FINAL INSPECTION							

MECHANICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ducts Underfloor							
Duct Overhead							
Fresh Air							
Furnace: gas vents comb. air							
Refrigeration Unit							
Evaporative Cooler							
FINAL INSPECTION							

OCCUPANCY BOND	AMOUNT	INSPECTOR'S SIGN	DATE	APPROVED BY	DATE	REFUND BY	DATE

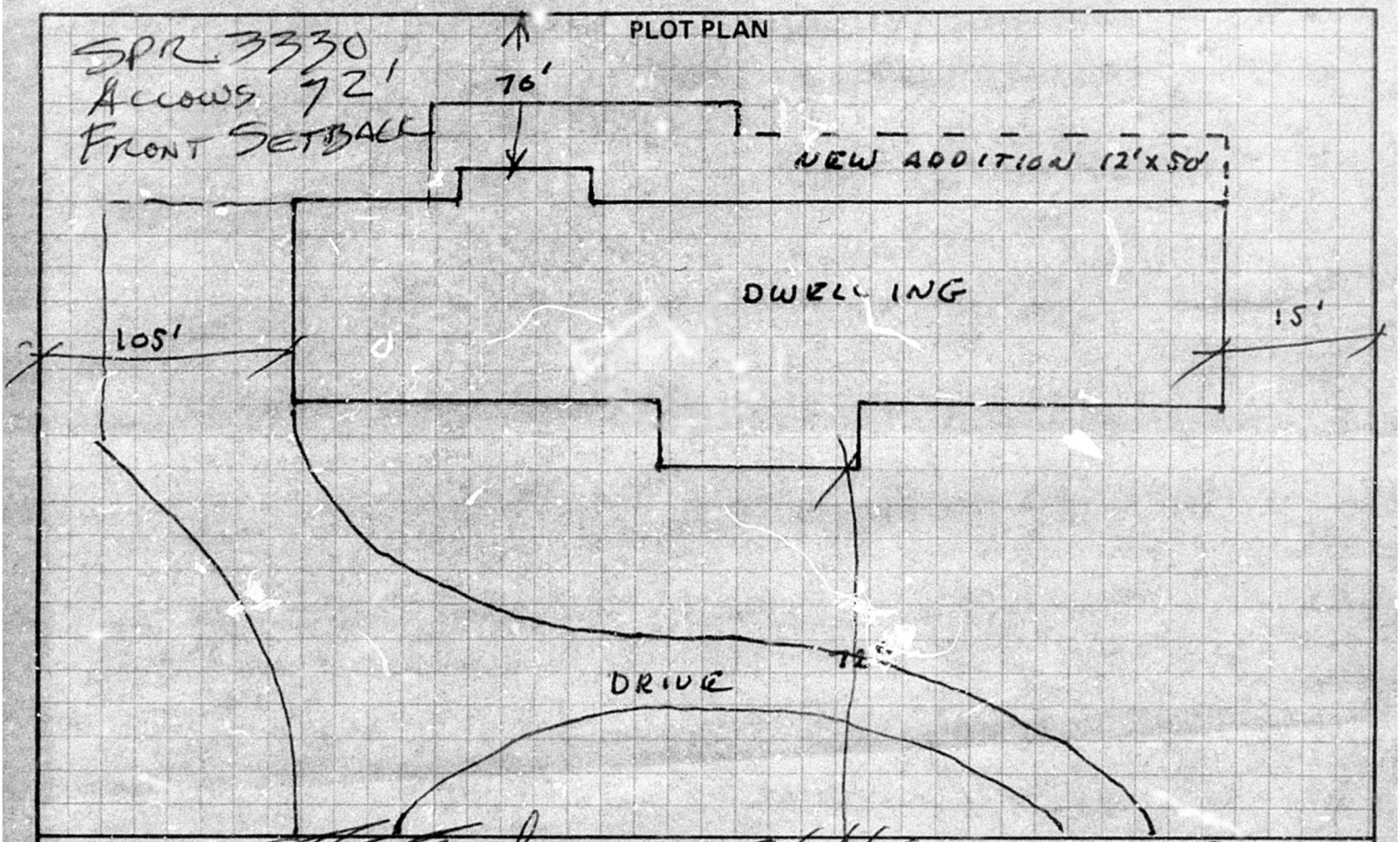
CLINTON D. BEERY
DIRECTOR OF PUBLIC WORKS
TELEPHONE
488-3886

COUNTY OF FRESNO

DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY

ROBERT E. HUBER
CHIEF BUILDING INSPECTOR
4499 E. KINGS CANYON ROAD
FRESNO, CALIFORNIA 93702

PLOT PLAN



Approved By [signature] Date 3/24/76 Bldg. Permit # 149036

Septic Tag: New # Repair #

APPLICATION FOR SEWAGE DISPOSAL SYSTEM

BUILDING ADDRESS 1183 S. ARMSTRONG LOCALITY FRESNO CROSS ST. CHURCH

OWNER MR+MRS GARY SOMONIAN MAIL ADDRESS 1099 S. ARMSTRONG

CITY FRESNO TEL. NO. 255 0096

CONTRACTOR JACK L. KIBLER MAIL ADDRESS 1579 W. FAIRMONT TEL. NO. 229 2574

CITY FRESNO LICENSE NO. 147193 CLASSIFICATION B1

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS

BUILDING TO BE SERVED RESIDENCE _____ NO. BEDROOMS _____ GARBAGE GRINDER _____ OTHER _____

MINIMUM SEPTIC TANK _____ GAL. MINIMUM SEEPAGE PIT OR LEACHING FIELD AREA _____ SQ. FT. FACTOR _____ SQ. FT. / 100 GAL.

RECTANGULAR:	CIRCULAR	SEEPAGE PITS	LEACHING FIELD
LENGTH 1ST COMP. _____ FT.	DIA. 1ST COMP. _____ IN.	NUMBER _____	TOTAL LENGTH _____ FT.
2ND COMP. _____ FT.	2ND COMP. _____ IN.	DIAMETER _____ FT.	TOTAL WIDTH _____ FT.
WIDTH _____ FT.	3RD COMP. _____ IN.	DEPTH _____ FT.	NO. OF LINES _____
LIQUID DEPTH _____ FT.	LIQUID DEPTH _____ IN.	LINING _____	ROCK UNDER TILE _____ IN.
TOTAL LIQUID CAPACITY _____ GAL.	TOTAL LIQUID CAPACITY _____ GAL.	LOT LINE _____ FT.	ROCK ABOVE TILE _____ IN.
		FOUNDATION _____ FT.	DIST. BOX _____
			SQUARE FEET _____

WATER WELL

DISTANCE TO NEAREST WELL _____ FT. COMMUNITY _____ PRIVATE _____

I HEREBY STATE THAT THE INFORMATION ABOVE IS CORRECT. I UNDERSTAND THAT THE PERMIT MUST BE OBTAINED BEFORE ANY CONSTRUCTION IS STARTED AND THAT AN INSPECTION OF THE SYSTEM IS REQUIRED BEFORE BACKFILLING.

SIGNATURE [signature] DATE MAR 29 1976

1. ON SITE SYSTEM _____ DATE _____
   SEWER NOTIFICATION _____
2. APPLICATION APPROVED [signature] DATE 3/24/76
   PRE-POUR INSPECTION _____ DATE _____
   FINAL INSPECTION _____ DATE _____

BUILDING DIVISION COPY

10M BAY 7558 11 72

LICENSED CONTRACTORS DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Number _____ License Class _____

Contractor _____ Date _____

OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code; or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.)

☐ I am exempt under Sec. _____, B.&P.C. for this reason

Owner _____ Date _____

WORKERS' COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab.C.).

Policy No. _____ Company _____

☐ Certified copy is hereby furnished.

☐ Certified copy is filed with the County of Fresno department of Building & Safety.

Date _____ Applicant _____

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if work performed is for one hundred dollars ($100) or less.)

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ.C.).

Lender's Name _____

Lender's Address _____

I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspection purposes.

Signature of Applicant or Agent _____ Date _____

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY
4499 E. KINGS CANYON RD
FRESNO, CALIFORNIA 93702
453-3886

APPLICATION FOR **PERMIT**

24 HR. INSPECTION ANSWERING SERVICE
453-3895

JOHN I. WEAVER
CHIEF BUILDING INSPECTOR

JOB ADDRESS

FOR APPLICANT TO FILL IN (Type or Print)

ZONE 1 - 2 - 3 - 4 - 5 - 6

BUILDING ADDRESS: 1123 SOUTH ARMSTRONG AVE

NEAREST TOWN _____ NEAREST CROSS ST. _____

OWNER: GARY SIMONIAN

MAIL ADDRESS _____

CITY _____ TEL. NO. _____

BLDG. CONT. _____ ST. LIC. # _____ TEL. NO. _____

ADDRESS _____

PLUMB. CONT. _____ ST. LIC. # _____ TEL. NO. _____

ADDRESS _____

ELEC. CONT. _____ ST. LIC. # _____ TEL. NO. _____

ADDRESS _____

MECH. CONT. _____ ST. LIC. # _____ TEL. NO. _____

ADDRESS _____

ARCH. OR ENGINEER _____ ST. LIC. # _____ TEL. NO. _____

ADDRESS _____

LEGAL DESC. _____

PROJECT: DRAINAGE FEE

A.P.N. 316-166-43

ZONING

REQUIRED SETBACK	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR

APPROVED BY _____ DATE _____

ZONING ACCEPTANCE APPROVED ☐ PENDING ☐

ZONE DISTRICT RA REMARKS _____

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

NO.	PLUMBING		EACH	FEE
	PERMIT FEE		6.00	6.00
	WATER CLOSET	URINAL	5.00	
	KITCHEN SINK	DISPOSAL	5.00	
	WASH MACH.	BATH TUB	5.00	
	LAVATORY	SHOWER	5.00	
	WATER PIPING and/or SERVICE		5.00	
	EA. LAWN SPRINKLING SYST. FOR S.F.D. WITH BACK FLOW DEVICES		10.00	
	ALL OTHER BK. FLOW. DEV.		5.00	
	EA. GAS PIPING SYSTEM	1-5 outlets	5.00	
	Ea. Additional Outlet	6 or more	1.00 ea.	
	GAS APPLIANCE		6.00	
	EA. BLDG. SEWER		15.00	
	PRIVATE SEWERAGE DISPOSAL SYSTEM		25.00	

NEW SINGLE FAMILY DWELLING

All plumbing work in a newly constructed single family dwelling excluding sewer & septic system	one bathroom	40.00
	two bathroom	45.00
	three bathroom	50.00
For each additional bathroom fixture		5.00

Min. $10.00 **TOTAL FEE** $

NO.	ELECTRICAL		EACH	FEE
	PERMIT FEE		6.00	
	EA. CIRCUIT (REMODEL WORK ONLY)		2.00	
	EA. WIRING OUTLET & OR FIXTURES AT WHICH CURRENT IS USED OR CONTROLLED		.30 EA.	
	ELEC RANGES	DISHWASHER	3.00	
	DRYERS	HEATER / DISP	3.00	
	OUTLET 3.00	WELDER	3.00	
	0-1 HP 2.00	OVER 30-50 HP	11.00	
	OVER 1 TO 5 HP 5.00	OVER 50-100	18.00	
	OVER 5 TO 30 HP 7.00	OVER 100 HP	28.00	
	EA. AG PUMP OR WIND MACH. Min.		20.00	
	EA. TIME CLOCK		2.00	
	EA. ELEC. VALVE		1.00	
	TRANSFORMER			

SERVICE & OR SUB-PANELS

	0 TO 200 AMPS	5.00
	201 TO 400 AMPS	16.00
	401 TO 600 AMPS	25.00
	OVER 600 AMPS	50.00

NEW SINGLE FAMILY DWELLING

	Area of Construction 0 to 750 Sq. Ft.	25.00
	Area of Construction 751 to 1000 Sq. Ft.	30.00
	Area of Construction 1001 to 1500 Sq. Ft.	40.00
	Area of Construction 1501 to 2000 Sq. Ft.	50.00
	Area of Construction 2001 to 2500 Sq. Ft.	60.00
	Area of Construction 2501 to 3000 Sq. Ft.	70.00
	EA. ADD. 500 Sq. Ft.	5.00

Min. $10.00 **TOTAL FEE** $

NO.	MECHANICAL		EACH	FEE
	PERMIT FEE		6.00	6.00
	EA. GAS PIPING SYSTEM	1-5 outlets	5.00	
	Ea. Additional Outlet	6 or more	1.00 ea.	
	GAS APPLIANCE		6.00	
	MECH. HOOD			
	DUCT SYSTEM			

REFRIGERATION COOLING UNITS

	LESS THAN 7 TONS	6.00
	OVER 7 TONS to 14 TONS	9.00
	OVER 14 TONS	14.00

NEW SINGLE FAMILY DWELLING

	0 to 750 SQ. FT.	10.00
	751 to 1500 SQ. FT.	15.00
	1501 to 2500 SQ. FT.	20.00
	EA. ADD. 500 SQ. FT.	1.00

Min. $10.00 **TOTAL FEE** $

D 1 97.44 FC FC
97.44 TOTL
97.44 CKTD
.00 CACG
C5125 101 2/23/81

C5125 2/23/81

TYPE CONST.	OCCUPANCY GROUP	STORIES

SQ. FT.		
BUILDING	@	
GARAGE/CP	@	
PATIO	@	
	TOTAL COST IMP. $	

APPROVED BY _____

VALIDATED BY _____

ACCOUNT # _____

PLAN CHECK	
ENERGY SURCHARGE	
S.M.I.	
SUB TOTAL	
BUILDING PERMIT	
PLUMBING PERMIT	
ELECTRICAL PERMIT	
MECH. PERMIT	
SUB TOTAL	
SEWER	
DRAINAGE	97.44
TOTAL	97.44

CASH ☐ CHECK ☑

10M: BAY: 7-80

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED OR IF NO INSPECTIONS ARE CALLED FOR WITHIN 120 DAYS.

INSPECTION COPY

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY
FRESNO, CALIFORNIA 93702
488-3886

APPLICATION FOR PERMIT

24 HR. INSPECTION ANSWERING SERVICE 488-3895

CLINTON D. BEERY
DIRECTOR OF PUBLIC WORKS

JOHN I. WEAVER
CHIEF BUILDING INSPECTOR

FOR APPLICANT TO FILL IN (Type or Print) ZONE 1 - 2 - 3 - 4 - 5 - 6

BUILDING ADDRESS 1099 So. Armstrong
NEAREST TOWN Fresno NEAREST CROSS ST. DATE 11-23-77
OWNER Gary Simonian
MAIL ADDRESS 4133 Sunnyslope
CITY Fresno ZIP 93727 TEL. NO. 255-3225

CONTRACTOR	ADDRESS	PHONE
BLDG.		
PLUMBING		
ELEC.		
MECH.		
SEPTIC		

FOR APPLICANT TO FILL IN TYPE OR PRINT

BUILDING

NEW | ALTERATION | PATIO
STORIES | BUILDING SIZE SQ. FT. | GARAGE/CP

PROJECT 2 hp dom. Pump

LEGAL DESC.

15 1/4

A.P.N. 316-160-16 S
SIZE OF LOT | USE OF BLDGS. NOW ON LOT
DESIGNER | LICENSE #
DRAINAGE FEE | TEL. NO.
SEWER CONNECTION APPROVAL

ZONING

REQUIRED SETBACK	FRONT * MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR

APPROVED BY [illegible] DATE 11-23-77
ZONING ACCEPTANCE APPROVED X PENDING ☐
ZONE DISTRICT AE-20 SPECIAL PERMITS

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

PLUMBING

NO.	(SUP. FEE 1.50)	EACH	FEE
	PERMIT FEE	3.00	3.00
	WATER CLOSET	3.00	
	BASIN (LAVATORY)	3.00	
	BATH TUB	3.00	
	SHOWER	3.00	
	KITCHEN SINK	3.00	
	DISHWASHER	3.00	
	LAUNDRY TRAYS	3.00	
	FLOOR DRAIN	3.00	
	URINAL	3.00	
	WASTE DISPOSAL	3.00	
	BACKFLOW DEVICE	3.50	
	WATER PIPING and/or SERVICE	2.50	
	HOUSE SEWER	9.00	
	COVERSION LPG to NAT. GAS	18.00	
	EA. GAS PIPING SYSTEM (1-5 outlets)	3.50	

GAS PIPING OUTLET (6 or more, each)	.75	
GAS APPLIANCE	4.50	
ROOF DRAIN EACH	1.00	
ROOF DRAIN MIN.	3.50	

SPECIAL INSPECTION FEE—$10 PER HOUR

SINGLE FAMILY DWELLING

1. All plumbing work, including water heater, in a one-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	27.50	
2. All plumbing work, including water heater, in a two-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	35.00	
3. All plumbing work, including water heater in a newly constructed, single family dwelling of three bathrooms; (excluding all other gas appliance tags)	40.00	
For each additional bathroom over three $3.00 per bathroom fixture.		

Min. $9.00 TOTAL FEE $

ELECTRICAL

NO.	(SUP. FEE $1.50)	EACH	FEE
1	PERMIT FEE	3.00	3.00
	RECEPTACLES Switches Light Outlets		
	FIXTURES		
	TOTAL (of two lines above)		
	FIRST 10 OR PORTION	4.00	
	REMAINDER @ 15 ea.		
	ELEC RANGES / DISHWASHER	1.50	
	DRYERS / HEATER / DISP	1.50	
	220 OUTLET 1.50 / WELDER 1.50		
	0-½ HP .75 / OVER 5-15 HP	3.00	
1	OVER ½-2 HP 1.50 / OVER 5-50 HP	6.50	1.50
	OVER 2-5 HP 2.50 / OVER 50 HP	17.00	

SPECIAL INSPECTION FEE—$10.00 PER HOUR

SERVICE & OR SUB-PANELS

1	0-99 AMPS	2.50 2.50
	100-125 AMPS	4.00
	126-200 AMPS	6.00
	2[illegible] AMPS	8.00
	[illegible]50,000 CM WIRE	12.00

SINGLE FAMILY DWELLING

Area of Construction 0 to 750 Sq. Ft.	18.50
Area of Construction 751 to 1000 Sq. F	25.00
Area of Construction 1001 to 1500 Sq. Ft.	34.00
Area of Construction 1501 to 2000 Sq. Ft.	44.00
Area of Construction 2001 to 2500 Sq. Ft.	54.00
Area of Construction 2501 to 3000 Sq. Ft.	64.00
EA. ADD. 500 Sq. Ft.	2.50

Min. $5.00 TOTAL FEE $7.00

D 7.00 ELP
1 7.00 TOTL
7.00 CATD
5865 101 11/23/77
.00 CACB
15865 101 11/23/77

MECHANICAL

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	EA. GAS PIPING SYSTEM (1-5 outlets)	3.50	
	GAS APPLIANCE	4.50	
	EA. ADD. OUTLET	.75	
	VENTILATION DUCT GRAVITY	2.00	
	SERVING COMM. KITCHEN	.00	
	Mechanical Inc. Hood Under 4,000 CFM-3.00, Over 4,000 CFM-5.00 SERVING COMM. KITCHEN UNDER 4 MC.F.M. $4.00 OVER 4 MC.F.M. $6.00		
	DUCT SYSTEM-NON RESIDENT		
	SINGLE STORY, 0-4M SQ. FT.	5.00	
	SINGLE STORY OVER 4M SQ. FT.	10.00	
	MULTI story-PER FLOOR	5.00	
	EVAP. COOELR	2.00	

REFRIGERATION COOLING UNITS

LESS THAN 7 TONS	4.00
OVER 7 TONS to 14 TONS	7.00
OVER 14 TONS	12.00
Gas Absorption System to 130,000 BTU	4.00
" " " 130,001 to 370,000 BTU	7.00
WINDOW UNIT	2.00

SPECIAL INSPECTION FEE—$10 PER HOUR

SINGLE FAMILY DWELLING

0 to 750 SQ. FT.	6.00
751 to 1500 SQ. FT.	7.00
1501 to 2500 SQ. FT.	10.00
2501 to 3000 SQ. FT.	11.00
EA. ADD. 500 SQ. FT.	1.00

TOTAL FEE $

JOHN I. WEAVER CHIEF BUILDING INSPECTOR
APPROVED BY [illegible] VALIDATED BY [illegible] ACCT. # _____ CASH ☐ CHECK ☐

SIGN BELOW AND COMPLETE REVERSE

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT. THE LICENSE WHERE INDICATED IS IN FULL FORCE AND VALID.

X Gary Simonian Date 11-23-77
_____ Owner
_____ Contractor Lic. No. _____ Class _____
_____ Agent for Owner

TYPE CONST.	UNIT	TOTAL	OCCUPANCY GROUP	CODE
BLDG.			PLAN CHECK	
GARAGE			BUILDING PERMIT	
PATIO			PLUMBING PERMIT	
BATH			ELECTRICAL PERMIT	7 —
AIR COND.			MECH. PERMIT	
FIREPLACE			SEPTIC	
			SMI	
	TOTAL		TOTAL	

10 M: BAY : 8768 : 4-77

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS.

INSPECTION COPY

INSPECTION RECORD

BUILDING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Foundation: location forms setback							
Foundation: Garage							
Floor Girders & Joists							
Pool Steel: location forms setback							
Frame: bracing bolts							
Lath: (exterior)							
Fireplace: damper							
Fireplace: roof							
Shower Walls over Tub							
Shower Pan & Walls							
Under Floor Area-Clean							
Bond Beam & Steel							
(1)							
(2)							
(3)							
FINAL INSPECTION							

ELECTRICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Conduit: Pvc Galv.				Paule 12-1-77			
Rough Wiring							
Elec. Main Panel	R G Booth 12-21-77						
Temporary Meter							
Temporary Power Pole							
Ground Electrode							
Ground Clamp							
UF from pole to pump	Paule 12-1-77						
FINAL INSPECTION	R G Booth 12-21-77						

PLUMBING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ground Plumbing: soil							
Water Pipe							
Vents							
Gas Pipe							
Tub Access							
Dryout Gas							
Septic Tank							
House Sewer							
Septic T. & Pits Backfilled							
Temporary Meter							
FINAL INSPECTION							

MECHANICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ducts Underfloor							
Duct Overhead							
Fresh Air							
Furnace: gas vents comb. air							
Refrigeration Unit							
Evaporative Cooler							
FINAL INSPECTION							

OCCUPANCY BOND	AMOUNT	INSPECTOR'S SIGN	DATE	APPROVED BY	DATE	REFUND BY	DATE

Zone 2

DATE	PERMIT NO.	NAME
11/23/77	2 HP Pump E-15865	Gary Simonian

1099 S. Armstrong

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY

Number 2921
Date 8/6/71
Valuation $500.00

STATEMENT OF FACTS SUPPORTING
AGRICULTURAL EXEMPTION

Name SAM SIMONIAN Location of Property 1139 So. ARMSTRONG

Hereby declare(s):

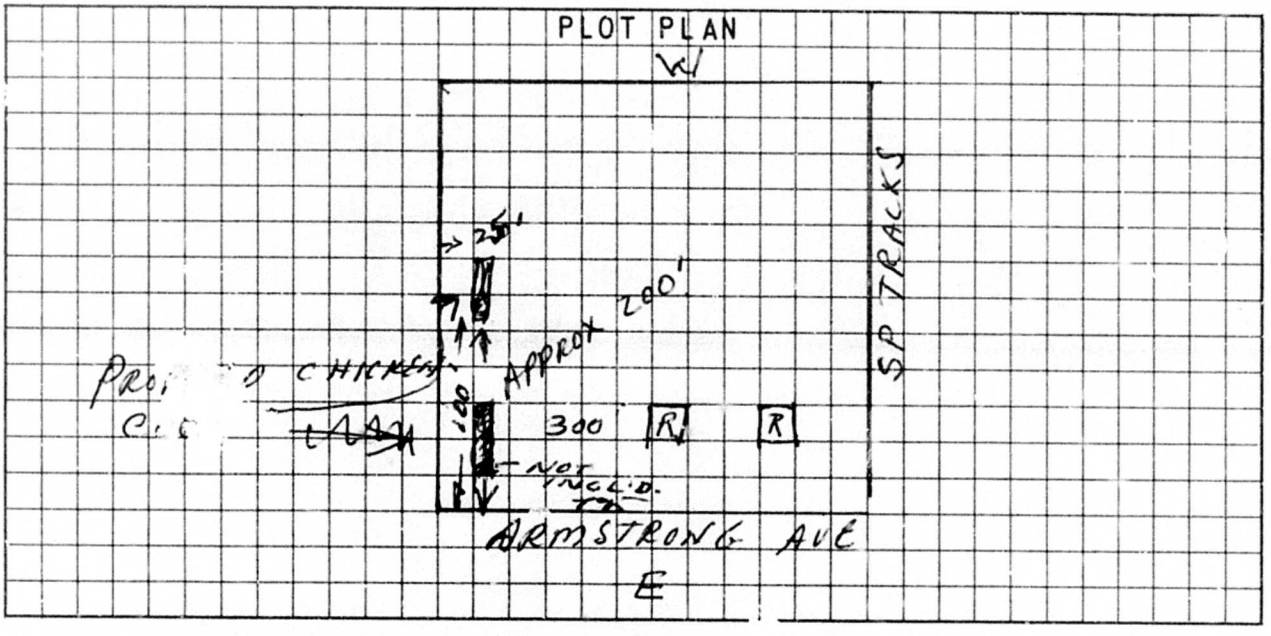
That he plan(s) to construct a building or structure, to wit, a CHICKEN COOP (10'X100' APPROX)

For Relocations:
to be moved from: _____ to: _____

Mover to be: _____ Public Works Notified: _____

on the property situated in Fresno County, State of California (Legal Description):
* S ½ of NE 4 NW 4 SEC 15 - 14/21

Indicate Location on:



That all of the above-described property is owned by the declarant(s) and contains three acres or more (state amount of acreage) 40.0 ACRES

That the above-described property is primarily used for agricultural purposes, to-wit: (describe farming operation): VINEYARD

And the above-described building or structure is accessory to the agricultural development or use of such property, in that (explain use): CHICKEN COOPS

That for the reasons stated herein, which declarant under penalty of perjury states are true to the best of his knowledge, declarant requests that the construction herein proposed be exempted from all requirements of Division IV of Fresno County Ordinance Code, pursuant to the provisions of Section 755 of said Code.

PLANNING DEPARTMENT

REQUIRED SETBACK	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR
	100		25		25
APPROVED BY					
ZONE	RA		8-6-71		

Signature: Sam Simonian

Mailing Address: 1139 So Armstrong

Validation by: RC Huber 8-6-71

Comments: _____

The installation of all electrical and gas equipment requires permits and inspection.

Form #17 Rev. 2/70

LICENSE CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Number 386238 License Class C-39

CAMACK ROOFING

OWNERS BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Section 7031.5, Business and Professions Code. Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 700) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License law does not apply to an owner of Property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: the Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.)

☐ I am exempt under Sec. _____, B.&P.C. for this reason

Owner _____

Date _____

WORKER'S COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab C.).

Policy No. _____ Company _____

☐ Certified copy is hereby furnished

☒ Certified copy is filed with the County of Fresno Department of Building and Safety. (Expiration Date 1-1-95)

Applicant [signature]

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if work is for one hundred dollars ($100) or less.)

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date _____ Applicant _____

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Div. C.)

Lender's Name NONE

Address _____

City _____ Zip _____

I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspection purposes.

Applicant or Agent [signature]

Date 3-17-94

ELECTRICAL

NO.	PERMIT ISSUANCE FEE		EACH	
	120V OUTLET(S) / FIXTURE(S)			
	SPECIAL USE OUTLETS			
	0-1 HP MOTOR	OVER 30-50 HP		
	OVER 1 TO 5 HP	OVER 50- 100 HP		
	OVER 5 TO 30 HP	OVER 100 HP		
	TIME CLOCK			
	TRANSFORMER			

SERVICE & OR SUB-PANELS

	0 TO 200 AMPS	
	201 TO 400 AMPS	
	401 TO 600 AMPS	
	OVER 600 AMPS	

NEW SINGLE FAMILY DWELLING

By Area of Construction _____ Sq. Ft. _____

EA ADD 500 Sq. Ft. @ _____

Min. _____

FOR WATER WELL PUMP TOTAL FEE $ _____

APPLICATION FOR PERMIT

COUNTY OF FRESNO
PUBLIC WORKS & DEVELOPMENT SERVICES DEPT.
MAILING ADDRESS: 2220 TULARE ST., 6TH FLOOR
FRESNO, CA 93721
OFFICE LOCATION: SOUTH-WEST CORNER TULARE & "M" STREETS, SUITE "A"

ACTIVE PERMITS YES NO

PHONE NUMBERS:
24 HOURS ANSWERING SERVICE
FOR INSPECTIONS: 453-5031
LOCAL: (209) 453-5029
TOLL FREE: 1 (800) 742-1011
FAX (209) 453-3993

ADDRESS 1139 S. ARMSTRONG

PROJECT ADDRESS: 1139 S. ARMSTRONG ( ) NEW

CITY FRESNO CROSS ST. CHURCH P.C. NO.

PROPERTY OWNER ALICE SIMONIAN

MAIL ADDRESS 1139 S. ARMSTRONG

CITY FRESNO ZIP TEL NO 255-3225

CONTRACTOR CAMACK ROOFING ST. LIC. # 386238 TEL NO 348-9565

ADDRESS 3089 McKELVY CLOVIS, CA 93611

DESIGNER _____ ST. LIC. # _____ TEL NO _____

ADDRESS _____

LEGAL DESC. _____

PROJECT REROOF RESIDENCE
REMOVE & MAKE FOR COMP
4:12 SCALE
2700 #

A.P.N. 316-160-676

ZONING

REQUIRED SETBACKS	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR MIN.

ZONE _____ REMARKS: _____

DIST. _____

TYPE CONST.	OCCUP. GRP.	STORES	BLDG. HT.
BLDG. EST		5400	—
GAR.			
PATIO			
DECK			
TOTAL VALUATION $			

APPROVALS

ZONING BY		DATE
PLAN CHECK BY		DATE
FEES BY	[signature]	DATE 3/17/94
COMPLETED BY	[signature]	DATE 3/17/94
VALIDATED BY	[signature]	DATE "
ACCOUNT NO.	SLUC	CONSOLIDATED ( ) YES ( ) NO

FEES

BUILDING PLAN CHECK		
PLUMBING PLAN CHECK		
ELECTRICAL PLAN CHECK		
MECHANICAL PLAN CHECK		
PLAN CHECK SUB TOTAL		
OVERTIME		
BUILDING PERMIT	102	50
PLUMBING PERMIT		
ELECTRICAL PERMIT		
MECHANICAL PERMIT		
ENERGY SURCHARGE		
S.M.I.		54
MICROFILM		
SWIMMING POOL PERMIT		
MOBILEHOME ISSUANCE		
MOBILEHOME LOT PREP		
MOBILEHOME INSTALLATIONS		
MOBILEHOME ACCESSORY		
TOTAL FEE	103.	04

PLUMBING

NO.	PERMIT ISSUANCE FEE		EACH	
	On-site piping (sewer / water / gas)			
	SEPTIC			
	TEST HOLE			
	WATER PIPING	FLOOR DRAIN		
	KITCHEN SINK	LAVATORY		
	WASH MACH.	BATH TUB		
	WATER CLOSET	SHOWER		
	DRINKING FOUNTAIN	URINAL		
	BACK FLOW DEVICE			
	GAS APPLIANCE OR VENT			
	GAS PIPING SYSTEM			

NEW SINGLE FAMILY DWELLING

By Number of Bathrooms _____ Bathrooms(s) _____

additional bathroom fixtures @ _____

Min. _____ TOTAL FEE $ _____

MECHANICAL

NO.	PERMIT ISSUANCE FEE	EACH	
	DUCT SYSTEM		
	WOODBURNING DEVICE		
	GAS APPLIANCE		
	GAS PIPING SYSTEM		
	EVAPORATIVE COOLER		

REFRIGERATION COOLING UNITS

	LESS THAN 7 TONS	
	OVER 7 TONS to 14 TONS	
	OVER 14 TONS	

NEW SINGLE FAMILY DWELLING

By Area of Construction _____ Sq. Ft. _____

EA ADD 500 Sq. Ft. @ _____

Min. _____ TOTAL FEE $ _____

R-
BLDG 102.50
SMI .54
PATTE TOTL 103.04
178109:05MAR.17'94 CHECK 103.04
LINE 04

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED OR IF NO INSPECTIONS ARE COMPLETED WITHIN 180 DAYS

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

INSPECTION COPY

FORM # 1 (Rev. 8/93)

INSPECTION RECORD

JOB ADDRESS _____ PERMIT NO. _____

BUILDING

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTION NOTICE BY	DATE
Flood Prone-Elev.			CJ 3-18-94	N.R.
Foundation: Forms & setback				
Foundation Piers				
Floor Girders & Joists				
Shear Panel Nailing				
Pre-roof	K King	3-21-94		
Roof Sheathing 3/8 PLY	K Pierson	4/13/94		
Roof Covering	Paula	4-15-94		
Exterior Lath/Siding				
Frame				
Insulation				
Shower Wall Over Tub				
Shower Pan & Walls				
Bond Beam & Steel				
Pool Steel, Bonding & setback				
Pre Deck				
Pool Fencing and Gates				
M/H Steps & Landings				
Smoke Alarm	Paula	4-15-94		
Final Inspection	Paula	4-15-94		

ELECTRICAL

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTION NOTICE BY	DATE
Conduit: Pvc Galv. Interior				
Conduit: Pvc Galv. Exterior				
Rough Elec. — Wiring				
Rough Elec. — Main Panel _____ amps				
M/H Continuity Test				
Temporary Power Pole / Meter				
Ufer Location/Driven Ground				
Wiring to Wall				
Water Pipe Bond Location				
Pool Equipment Bonding				
FINAL INSPECTION				

PLUMBING

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTION NOTICE BY	DATE
Ground Plumbing: soil				
Water Pipe - under floor				
Water Pipe - above floor				
Vents & Top Out				
Gas Pipe - Interior / Monometer				
Gas Service L.P.G. Test				
Dryout Gas - Interior				
Second Floor Tub test				
Septic System				
House Sewer				
Water Service PVC/gal				
Well Seal Pad				
FINAL INSPECTION				

MECHANICAL

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTION NOTICE BY	DATE
Ducts Underfloor				
Ducts Overhead				
Fireplace Damper				
Fireplace: Roof				
Refrigeration Unit/Furnace				
Evaporative Cooler				
Gas Pipe				
Gas test				
FINAL INSPECTION				

SITE REQUIREMENTS

1) Flood Prone: ☐ Yes ☐ No
   Map No. _____ ; Zone _____
2) Proposed Bldg. Height By Zoning:
   Stories : _____ ; Height _____ Ft.
3) School Fees Due? ☐ Yes ☐ No
   District(s) _____
   Receipt No. _____
   Satisfied By _____ Date _____
4) Grading Permit Req.? ☐ Yes ☐ No
   Permit # _____ Date _____
   Finaled By _____ Date _____
5) Land Use Permit(s)
   Permit No. _____
   Permit No. _____
   Pemit No. _____
   Is Occupancy Pending? ☐ Yes ☐ No
   Site Conditions Satisfied
   By _____ Date _____
6) Soil Capasity _____ PSF

Fire Protection: SRA ☐YES ☐NO

REQ.	ITEM	INSP.	DATE
	30' SETBACK		
	ON-SITE WATER		
	ROOF COVERING		
	DRIVEWAY		
	TURNOUTS		
	ADDRESS		

REMARKS/COMMENTS

OCCUPANCY BOND	AMOUNT
APPROVED TO POST BY:	DATE
APPROVED FOR REFUND BY:	DATE
REFUNDED BY:	DATE

HAZARDOUS MATERIAL STORAGE FOR NON-RESIDENTIAL CONSTRUCTION

I certify that the occupants of this building (will / will not) need to comply with the applicable requirements of Section 25505, 25533 & 25534 of the Health and Safety Code and the requirements for a permit for construction or modification [illegible] the air Pollution Control District.

Applicant _____

PRE-ROOFING INSPECTION CHECKLIST

Job Address: 1139 So Armstrong Date: 3-21-94 By: K King

EXISTING ROOF COVERING

☑ Wood Shake ☐ Wood Shingle ☐ Comp Shingle ☐ BUR

☐ Metal ☐ Clay/Cement ☐ Other ☐ Removed

No. of Roofing Layers _____ ☐ OK ☐ Must Remove

PROPOSED ROOF COVERING

☐ Wood Shake ☐ Wood Shingle ☑ Comp. Shingle ☐ BUR

☐ Metal ☐ Clay/Cement ☐ Fire Retardant Roof Required

EXISTING ROOF SLOPE

AREA 1 4 Slope _____:12 Satisfactory ☒ Yes ☐ No

AREA 2 _____ Slope _____:12 Satisfactory ☐ Yes ☐ No

Comments: _____

EXISTING FLASHING/FLUES

A/C Plenum	☐ OK	☐ Replace	Cricket Required	☐ Yes	☐ No
Flashing	☐ OK	☑ Replace	Location		
Roof jacks	☐ OK	☑ Replace	Location		
Fireplace flashings	☐ OK	☑ Replace	Cricket Required	☐ Yes	☐ No
Flue: Pipe	☐ OK	☑ Replace	Location:	Clearance: ☐ OK	☐ Repair

Comments: Check clearances on sheeting inspection

ROOF VENTILATION

☑ OK ☐ Additional Square Inches Required

Comments: Replace existing

ROOF STRUCTURE

Sheathing: ☐ OK ☐ Repair Needed ☒ Sheathing Inspection Required Framing: ☐ OK ☐ Repair Needed

Smoke Detector Required ☒ Yes ☐ Existing OK

Comments: Call for sheeting inspection. Maintain side & end clearances on plywood

F-322 (8/93)

CONSTRUCTION PERMIT

County of Fresno

DEVELOPMENT SERVICES DIVISION

MAILING ADDRESS: 2220 TULARE STREET, 6th FLOOR FRESNO, CA 93721
OFFICE LOCATION: SOUTHWEST CORNER OF TULARE & 'M' STREETS, SUITE A

ACTIVE PERMITS YES NO

PHONE NUMBERS
24-HR REQUEST LINE
262-4131
LOCAL: 262-4469
TOLL FREE: 800-742-1011
FAX: 262-4893

1139 S ARMSTRONG FRESNO

Project Address	Cross Street	Project Description:
1139 S ARMSTRONG FRESNO CA 93727	California	UPGRADE ELEC SERVICE FOR EXISTING SFR 0-200AMPS

Permit #: 09-103293-FC Issued on APN: 31616059S

Owner:	Applicant:	Contractor:
SIMONIAN GARY CHARLES & ELAINE JUNE TRS	INDUSTRIAL ELECTRIC	INDUSTRIAL ELECTRIC
Address: 1183 S ARMSTRONG FRESNO CA 93727 \	Address: 5809 E BROWN FRESNO CA 93727 \	Address: 5809 E BROWN FRESNO CA 93727 \
Phone:	Phone: (559) 291-7862 St. Lic.: 733446	Phone: (559) 291-7862 St. Lic.: 733446

APPROVALS	Approved By	Date
Application Requirements	Permit Application Reviewer	July 20, 2009
Issuance Review	William, Bill	July 20, 2009

Zoning District	Required Setbacks:	Front		Side		Rear
		Min	Max	Interior	Street	Min

PROJECT INFORMATION

Contractor License Class C10 Facility Fee 1 Exempt

MECHANICAL

ELECTRICAL

1 Service/sub-panel 0 - 200 amps

PLUMBING

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code, and my license is in full force and effect.Lic. Number_____Class_____ Contractor_____

OWNER'S BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Section 7031.5 Business and Professions Code). Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure prior to its issuance also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00).

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044 Business and Professions Code: The Contractor's License law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).

☐ I am exempt under Sec._____ B&PC for this reason.

Owner_____ Date _____

WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury on of the following declarations:

☐ I have and will maintain a certificate on consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor code, for the performance of the work for which this permit is issued.

☐ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number :

Carrier_____Policy #_____ (This section does not need to be completed if the permit is for one hundred dollars ($100) or less.)

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California and agree that if I should become subject to the workers compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Applicant_____

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Div. C).
Lenders
Name_____Address_____

City _____State _____

I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspection purposes.
Applicant
Or Agent_____

Date_____

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED OR IF NO INSPECTIONS ARE COMPLETED WITHIN 180 DAYS.

INSPECTION RECORD

JOB ADDRESS 1139 S Armstrong PERMIT NUMBER 09-103293-FC

(CORRECTION NOTICE DOES NOT NECESSARILY COORDINATE WITH ADJACENT INSPECTION)

BUILDING

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTION INSPECTOR	CORRECTION DATE
Flood Prone-Elevation				
Foundation: Forms & Setback				
Foundation / Patio Piers				
Floor Girders & Joists				
Shear Panel Nailing				
Pre-Roof				
Roof Sheathing				
Roof Batten/Felt				
Roof Covering				
Exterior Lath/Siding				
Fireplace Damper				
Fireplace: Roof				
Frame				
Insulation				
Shower Wall Over Tub				
Shower Pan & Walls				
Bond Beam & Steel				
Pool Steel, Bonding & Setback				
Pre-Deck				
Pool Fencing and Gates				
FINAL INSPECTION				
CERTIFICATE OF OCCUPANCY				

OCCUPANCY REQUIREMENTS

1) Flood Prone: ☐ Yes ☐ No
   Map No. _____ Zone _____
2) Proposed Building Height By Zoning:
   Stories _____ Height _____
3) School Fees Due: ☐ Yes ☐ No
   District(s) _____
   Satisfied By _____
   Receipt No. _____
4) Grading Permit Required? ☐ Yes ☐ No
   Permit # _____ Date _____
   Finaled By _____ Date _____
5) Land Use Permit(s)
   Permit No _____
   Permit No _____
   Permit No _____
   Is Occupancy Pending? ☐ Yes ☐ No
   Site Conditions Satisfied
   By _____ Date _____
6) Soil Capacity (Surface) _____ PSF

FIRE PROTECTION: SRA ☐ Yes ☐ No

REQ.	ITEM	INSPECTOR	DATE
	On-Site Water		
	Roof Covering		
	30' Setbacks		
	Driveway		
	Turnouts		
	Address		

ELECTRICAL

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTIONS INSPECTOR	CORRECTIONS DATE
Conduit: PVC/Galv. Interior				
Conduit: PVC/Galv. Exterior				
Rough Wiring				
Elec. Main Panel 200 Amps				
Temporary Meter				
Temporary Power Pole				
Ufer Location/Driven Ground South				
Water Pipe Bond Location West				
Wiring to Well				
Pool Equipment Bonding				
FINAL INSPECTION				

MOBILE HOME

TYPE OF INSPECTION	APPROVED BY	DATE
Perm Foundation/Tie-down		
Flood Prone-Elevation		
Forms & Setbacks		
Piers/Anchors		
Steps/Landings		
Elec. Service ____ Amps		
Grounding Electrode		
Wiring To Well		
Continuity Test		
Conduit/Feeders		
Gas Test – Exterior		
Gas Test Manometer		
Sewer		
Waste Piping		
Septic System		
Interior Water Pipe		
Water Service		
Well Seal Pad		
FINAL INSPECTION		
Certificate of Occupancy		

PLUMBING

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTIONS INSPECTOR	CORRECTIONS DATE
Ground Plumbing: Soil				
Water Pipe – Under Floor				
Water Pipe – Above Floor				
Vents & Top Out				
Gas Pipe – Interior				
Gas Test – Interior				
Gas Test – Exterior				
Second Floor Tub Test				
Septic System				
House Sewer				
Water Service PVC/Galv.				
Well Seal Pad				
FINAL INSPECTION				

REMARKS

Mechanical

TYPE OF INSPECTION	APPROVED BY	DATE	CORRECTIONS INSPECTOR	CORRECTIONS DATE
Ducts Underfloor				
Ducts Overhead				
Wood Burning Appliance				
Refrigeration Unit/Furnace				
Evaporative Cooler				
Gas Pipe				
Gas Test				
FINAL INSPECTION				

CASH DEPOSIT Temporary Power Occupancy	AMOUNT
APPROVED TO POST BY:	DATE
APPROVED FOR REFUND BY:	DATE
REFUNDED BY:	DATE

HAZARDOUS MATERIAL STORAGE FOR NON-RESIDENTIAL CONSTRUCTION

I certify that the occupants of this building (will/will not) need to comply with the applicable requirements of Section 25505, 25533, & 25534 of the Health and Safety Code and the requirements for a permit for construction or modification by the Air Pollution District.

Applicant _____

Form 035A Rev 5/05

INVOICE

County of Fresno
Department of Public Works & Planning

Mailing Address: 2220 Tulare Street, 6th Floor Fresno, CA 93721
24-HR REQUEST LINE: 262 4131 LOCAL: 262-4469
TOLL FREE: 800-742-1011 FAX: 262-4893

INVOICE TO: INDUSTRIAL ELECTRIC

INVOICE NO.: 31166
INVOICE DATE: Jul 20, 2009
PERMIT #: 09 103293 FC
REFERENCE #:

PROJECT LOCATION: 1139 S ARMSTRONG
PROJECT DESCRIPTION: UPGRADE ELEC SERVICE FOR EXISTING SFR 0-200AMPS

FEE DESCRIPTION	AMOUNT	COMMENT
Workers Comp.	$7.50	
CA Bldg Standards Comm. Fee (SB-1473)	$1.00	
Service/sub-panel 0 - 200 amps	$29.00	Qty 1
Electrical Permit Issuance	$38.00	
TOTAL	**$75.50**	

SUMMARY:

ELECTRICAL PERMIT	$67.00
CA Bldg Standards Comm. Fee (SB-1473)	$1.00
Workers Comp.	$7.50
TOTAL	**$75.50**

TOTAL BILLED:	$75.50
PAYMENT RECEIVED:	$0.00
BALANCE DUE:	**$75.50**

County of Fresno
Department of Public Works && Planning
dress: 2220 Tulare Street, 6th Floor Fresno
REG-RECEIPT:51 - 489
CASHIER ID : KDH1234 Jul 20 2009
Date Printed: 7/20/2009 14:53:50

09103293FC	$75.50
SubTotal	$75.50
PST	
GST	
TOTAL DUE	
RECEIVED FROM : INDUSTRIAL ELECTRIC	
CHECK	$75.50
TOTAL TENDERED	$75.50
CHANGE DUE	$0.00

JOB ADDRESS: 1139 's Cimmaron
PROJECT: Ele
PLAN CHECK NO. _____ PERMIT NO. _____

1) Is there a jacket for this address?
(✓) Yes ; ( ) No - ( )Notified cashier

2) Are there existing septic records?
( ) No ; (✓) Yes
If yes, do they need to be attached?
( ) Yes; (✓) No

3) Is a grading permit required?
(✓) No ; ( ) Yes ; ( ) Unknown
Has one been issued?( ) Yes ; ( )No

4) Does the permit form include:
A. (✓) Address
B. (✓) Nearest town
C. (✓) Cross street
D. (✓) Owner's name/address/phone
E. (✓) Contractor name/address/phone
F. (✓) Designer's name/address/phone
G. (✓) Exact project
H. (✓) Legal Description
I. (✓) APN (Assessor's Parcel Number)
J. (✓) Zone District
K. (✓) Min. & Max. Setbacks
L. (✓) SLUC
M. (✓) Flood Map & Zone
N. (✓) Building Height
(1) Stories: _____
(2) Plate: _____
(3) Ridge: _____
O. ( ) School District
P. ( ) Grading Permit
Q. ( ) Land Use Permit
R. ( ) SRA Requirements & Fee
S. ( ) Valuation Code

5) Must an Owner / Bldr. Verification be mailed?
( ) No, why? ( ) Completed (✓) Contractor
( ) Yes/Unknown - Date mailed_____

6) Is a Certificate of Insurance required?
( ) No (✓) Yes, Is it on file?( ) Yes ( ) No
Expiration Date: _____

7) Does the permit form include:
A. ( ) Owner-Bldr/Cont. declaration
B. (✓) Contractor's license class
C. (✓) Worker's Comp. declaration
D. ( ) Lender's name/address
E. ( ) Certification signature

8) Is this a legal lot?
Mapping: ( ) Yes; (✓) Unknown
Zoning : ( ) Yes; (✓) Unknown
Merger: ( ) Yes; (✓) No

9) Is the proposed use allowed?
(✓) Yes ( ) Need Operational Statement

10) Has a special zoning clearance been submitted to allow this use?
(✓) No ( ) Yes #_____

11) Are development fees due?
A. Drainage
( ) No - Why? ( ) Outside (✓) Exempt
( ) Possibly - Date sent_____
B. Sewer: ( ) Yes (✓) No
C. Water: ( ) Yes (✓) No
D. School District: ( ) Yes (✓) No
E. Other: _____

12) Is a well log required?
( ) Yes ( ) No

13) Does this require a septic review?
( ) No ( ) Yes, date logged:_____
Why? ( ) Test hole; ( ) Small lot
( ) Engr. Report ; ( ) Other_____

14) Does the Site Plan include:
A. ( ) All property lines
B. ( ) Adjacent streets & closest cross-street
C. ( ) Parcel Size
D. ( ) Easements
E. ( ) North Arrow
F. ( ) Accurate Property Dimensions
G. ( ) Existing & Proposed Buildings
H. ( ) Well & Septic Location
I. ( ) Driveway Location
J. ( ) Proposed Setbacks
K. ( ) Width of Road
L. ( ) O.P.S.H. (If applicable)
M. ( ) Turn-Around Area
N. ( ) Overhangs into Required Yards
O. ( ) LPG Tank / Water tank
P. ( ) Flood Prone Stamp

15) Does the Plot Plan form include:
A. ( ) A vicinity (location) map
B. ( ) APN (Assessor's Parcel Number)
C. ( ) Address
D. ( ) Owner's Name and Address
E. ( ) Septic Size
F. ( ) Leaching Factor
G. ( ) Dry-well Limitations
H. ( ) Water Well Information
I. ( ) Signature

16) Special Requirements:
A. ( ) Lot Coverage, _____% allowed
B. ( ) Setbacks for Major Streets
C. ( ) Street Sides for Garages
D. ( ) Accessory bldg. in req. yards
E. ( ) Space between buildings
F. ( ) CNEL for FAT
G. ( ) Soil Subsidence Areas
H. ( ) Westland's Water District
I. ( ) Alta Irrigation District
J. ( ) Friant Redevelopment
K. ( ) Water Filtration H.D. Clearance
L. ( ) State Floodway Maps
M. ( ) Flood Prone Certification
N. ( ) Earthquake - Special Study
O. ( ) Pull Land Use/SPR Envelope
P. ( ) WWD/CSA
Q. ( ) Specific Plan Areas

17) ( ) ALCC Clearance

18) Zoning, plot plan & plan check letter signed?
( ) Yes; ( ) No

19) Other _____

Processed By: BD Date: 7/20/09

NOTE: The following items must be cleared before permits are issued:

C:\Documents and Settings\rlani\My Documents\checklist.doc

2033 FOR APPLICANT TO FILL IN TYPE OR PRINT

BUILDING

COUNTY OF FRESNO — DEPARTMENT OF PUBLIC WORKS
DIVISION OF BUILDING AND SAFETY

CLINTON D. BERRY
DIRECTOR OF PUBLIC WORKS

TELEPHONE
251-4201

APPLICATION FOR
PERMIT

WILLIAM J. HESS
CHIEF BUILDING INSPECTOR

4499
E. KINGS CANYON ROAD
FRESNO, CALIF. 93702

NEW		ALTERATION	
DRAINAGE FEE			
STORIES	BUILDING SIZE SQ. FT. 635	PATIO	
		GAR./CP	

USE OF STRUCTURE: Carport

Legal Desc. BLOCK | LOT NO. | C. TRACT

TRACT S½ NE¼ NW¼ SEC. 15-14/21

SIZE OF LOT | NO. OF BLDGS. NOW ON LOT

USE OF EXISTING BLDG. | NO. OF FAMILIES

ARCHITECT OR ENGINEER

ADDRESS | TEL. NO.

SEWER CONNECTION APPROVAL | ENCROACHMENT APPROVAL

FOR APPLICANT TO FILL IN (Type or Print) ZONE 1 (2) (3) 4 - 5

BUILDING ADDRESS 1139 S. Armstrong
LOCALITY FRESNO NEAREST CROSS ST. Church
OWNER Sam Simonian DATE 6/5/68
MAIL ADDRESS 1139 S Armstrong
CITY Fresno 255-3225 TEL. NO. [redacted]
BUILDING CONTRACTOR Simon Simonian LICENSE NO. 96460 PHONE 255-0623
PLUMBING " " "
ELECTRICAL " " "
MECHANICAL " " "

PLANNING DEPARTMENT

REQUIRED SETBACK	FRONT MIN.	FRONT MAX.	SIDE INTERIOR	SIDE STREET	REAR	ZONE C-4
	35		15		20	CERTIFICATE OF OCCUPANCY
APPROVED BY			DATE 6/5/68			APPROVED ☑ PENDING ☐

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

JUN -5-68 Expires 98159 BP A ***6.00

PLUMBING

NO.		EACH	FEE
	PERMIT FEE	$2.00	2.00
	WATER CLOSET	1.75	
	BASIN (LAVATORY)	1.75	
	BATH TUB	1.75	
	SHOWER	1.75	
	KITCHEN SINK	1.75	
	DISHWASHER	1.75	
	LAUNDRY TRAYS	1.75	
	FLOOR DRAIN	1.75	
	URINAL	1.75	
	WASTE DISPOSAL	1.75	
	HOUSE SEWER	5.00	
	WATER PIPING and/or SERVICE	1.50	
	EA. GAS PIPING SYSTEM (1 to 5 outlets)	2.00	
	GAS PIPING SYSTEM (6 or more, each)	.40	
	GAS TAG	3.00	
	SPECIAL (SEE ORDINANCE)		

SINGLE FAMILY DWELLING

1. All plumbing work, including water heater, in a one-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	$12.00	
2. All plumbing work, including water heater, in a two-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	16.00	
3. All plumbing work, including water heater in a newly constructed, single family dwelling of three bathrooms; (excluding all other gas appliance tags)	19.00	
4. For each additional bathroom over three $1.75 per bathroom fixture.		
TOTAL FEE	$	

ELECTRICAL

NO.		EACH	FEE
	PERMIT FEE	$2.00	2.00
	RECEPTACLES Switches Light Outlets		
	FIXTURES		
	TOTAL (of two lines above)		
	FIRST 10 OR PORTION	2.00	
	REMAINDER @ .10 ea.		
	ELECTRIC RANGES / DISHWASHER	.75	
	DRYERS / HEATER / DISPOSAL	.75	
	MOTORS		
	0–½ HP .50 / OVER 5–15 HP 1.75		
	OVER ½–2 HP .75 / OVER 15–50 HP 3.00		
	OVER 2–5 HP. 1.25 / WELDERS .75		

SERVICE CONDUCTORS and SUB PANELS

	NO. 8 OR NO. 6 WIRE	1.00	
	NO. 4, NO. 2, OR NO. 1 WIRE	2.00	
	NO. 1/0, 2/0, 3/0, OR 4/0 WIRE	3.00	
	250,000 CM to 350,000 CM WIRE	4.00	
	OVER 350,000 CM WIRE	6.00	

SINGLE FAMILY DWELLING

AREA OF CONSTRUCTION 0 to 750 Sq. Ft.	9.50	
" " 751 to 1000 " "	12.50	
" " 1001 to 1500 " "	17.00	
" " 1501 to 2000 " "	22.50	
" " 2001 to 2500 " "	28.00	
" " 2501 to 3000 " "	33.00	
TOTAL FEE	$	

HEATING AND COMFORT COOLING

NO.		EACH	FEE
	PERMIT FEE	$2.00	2.00
	(DUCTS, REGISTERS, etc.) REGISTER CONTROLS (FIRST 10)	1.00	
	REGISTER CONTROLS (OVER 10 TO 20)	1.50	
	VENTILATION DUCT GRAVITY	2.00	
	" " Mechanical Inc. Hood Under 4,000 CFM-3.00, Over 4,000 CFM 5.00		

REFRIGERATION COOLING UNITS

2 TONS to 7 TONS	4.00	
OVER 7 TONS to 14 TONS	7.00	
Gas Absorption System to 130,000 BTU	4.00	
" " " 130,001 to 370,000 BTU	7.00	

SINGLE FAMILY DWELLING

0 to 750 SQ. FT.	6.00	
751 " 1500 " "	8.00	
1501 " 2500 " "	10.00	
2501 " 3000 " "	11.00	
TOTAL FEE	$	

F.C

WILLIAM J. HESS CHIEF BUILDING INSPECTOR
CHECKED BY MK VALIDATED BY ACCT. # CASH ☐ CHECK ☑

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT, AND THAT THE LICENSE, WHERE INDICATED, IS IN FULL FORCE AND EFFECT.
TYPE CONTRACTOR: BLDG. ☐ ELEC. ☐ PLUMB. ☐ MECH. ☐
CLASSIFICATION LICENSE NO. FIRM NAME DATE 6/5/68
X BY Sam Simonian
SIGNATURE OF CONTRACTOR OR OWNER-OWNER TO FILL IN REVERSE SIDE)

BLDG.			
GARAGE	9.50		
F. PL.			
BATH			
AIR COND.			
TOTAL			

TYPE CONST.	OCCUPANCY GROUP	CODE
V	I	I
BUILDING PERMIT	6	
PLUMBING PERMIT		
ELEC. PERMIT		
MISC.		
TOTAL		

FORM 90-874 BAY: 10658: 1-68

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 90 DAYS.

INSEPECTOR'S COPY

INSPECTION RECORD

	INSPECTION	INSPECTOR'S SIGN	DATE	INSPECTOR'S SIGN	DATE	CN	NR	OTHER
BUILDING	FOUNDATION: location forms setback			3-26-69				
	FOUNDATION: GARAGE			no work has been				
	FLOOR GIRDERS & JOISTS			started as of this date				
	PORCH & PATIO PIERS							
	FRAME: ext. lath, bracing bolts							
	LATH (exterior)							
	LATH (interior)							
	SHOWER WALLS OVER TUB							
	SHOWER PAN & WALLS							
	UNDER FLOOR AREA-CLEAN							
	FINAL INSPECTION							

	INSPECTION		INSPECTOR'S SIGN	DATE	INSPECTOR'S SIGN	DATE	CN	NR	OTHER
ELECTRICAL	CONDUIT								
	ROUGH ELEC.	WIRING							
		MAIN PANEL							
	FINAL ELEC.								

	INSPECTION	INSPECTOR'S SIGN	DATE	INSPECTOR'S SIGN	DATE	CN	NR	OTHER
PLUMBING	GROUND PLUMBING							
	VENTS							
	WATER PIPE							
	GAS PIPE							
	TUB ACCESS							
	DRYOUT GAS							
	SEPTIC TANK/HOUSE SEWER							
	SEPTIC T. & PITS BACKFILLED							
	FINAL INSPECTION							

DIV

☐ Work not started ... days

☐ Progress stopped in excess of 120 days

① DATE 3-27-69 INSPECTOR [illegible]

Form 94 sent

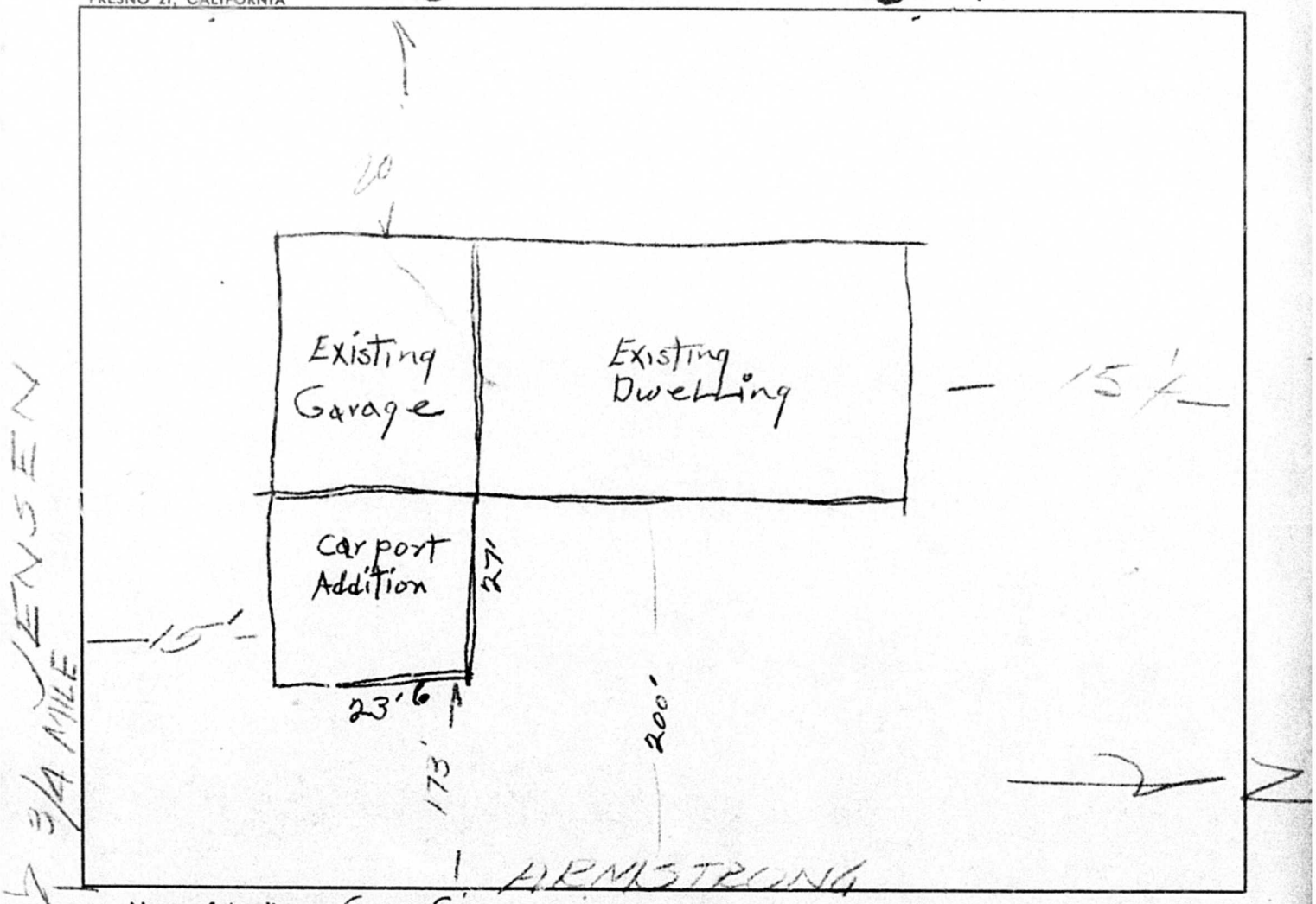
	INSPECTION	INSPECTOR'S SIGN	DATE	INSPECTOR'S SIGN	DATE	CN	NR	OTHER
MECH. and MISC.								
	DUCTS UNDERFLOOR							
	DUCTS OVERHEAD							
	FRESH AIR							
	FURNACE gas vent comb. air							
	REFRIGERATION UNIT							
	FINAL INSPECTION							

5033

FRESNO COUNTY PLANNING COMMISSION

ROOM 102 - HALL OF RECORDS ANNEX
FRESNO 21, CALIFORNIA

PLOT PLAN



Name of Applicant Sam Simonian Phone 255-3225

Address of Applicant 1139 S. Armstrong

Building Site Address Same

— OFFICE USE ONLY —

Zone Classification RA

Register Number

Bldg. Permit Number 98159

Approved by

Date Approved 6/5/68

BUILDING DIVISION COPY

UARCO INC. - OAKLAND 69348

FOR APPLICANT TO FILL IN
TYPE OR PRINT

COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS — DIVISION OF BUILDING AND SAFETY

CLINTON D. BEERY
DIRECTOR OF PUBLIC WORKS

ROBERT E. HUBER
CHIEF BUILDING INSPECTOR

24 HR. INSPECTION ANSWERING SERVICE 488-3895

APPLICATION FOR **PERMIT**

4499 E. KINGS CANYON ROAD
FRESNO, CALIF. 93702
488-3886

BUILDING

NEW | ALTERATION | ADD | REPAIR | DEMOLITION

STORIES | BUILDING SIZE SQ. FT. | PATIO | GAR./CP

PERMIT FOR: Ag Pump

FOR APPLICANT TO FILL IN (Type or Print) ZONE 1 2 3 4 5

BUILDING ADDRESS 1139 S Armstrong

NEAREST TOWN | NEAREST CROSS ST.

OWNER Sam Simonian | DATE 9/15

MAIL ADDRESS

CITY Fresno | TEL. NO.

LEGAL DESC. BLOCK | LOT NO. | C. TRACT

TRACT

CONTRACTOR	LICENSE NO.	PHONE
BLDG.		
PLUMBING Patterson Pump		
ELECT. Pedeschio Pumps		875 4528
MECH.		

WHEN VALIDATED THIS APPLICATION IS YOUR PERMIT

DATE	PERMIT NUMBER	CLASS	AMOUNT

SEP 15-74 152723 # 55 # Lic — ELP 650

FIRST PRINT LINE

SIZE OF LOT | NO. OF BLDGS. NOW ON LOT

USE OF EXISTING BLDG. | NO. OF FAMILIES

ARCHITECT OR ENGINEER

ADDRESS | TEL. NO.

SEWER CONNECTION APPROVAL | ENCROACHMENT APPROVAL

PLANNING DEPARTMENT

REQUIRED SETBACK | MIN. | MAX. | INTERIOR | BY KEY

APPROVED BY | DATE

CERTIFICATE OF OCCUPANCY | APPROVED ☐ | WORKING ☐

ZONE | SPECIAL PERMITS

PLUMBING

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	WATER CLOSET	1.75	
	BASIN (LAVATORY)	1.75	
	BATH TUB	1.75	
	SHOWER	1.75	
	KITCHEN SINK	1.75	
	DISHWASHER	1.75	
	LAUNDRY TRAYS	1.75	
	FLOOR DRAIN	1.75	
	URINAL	1.75	
	WASTE DISPOSAL	1.75	
	CONVERSION LPG to NAT. GAS	10.00	
	HOUSE SEWER	5.00	
	WATER PIPING and/or SERVICE	1.50	
	EA. GAS PIPING SYSTEM (1 to 5 outlets)	2.00	
	GAS PIPING SYSTEM (6 or more, each)	.40	
	GAS APPLIANCE	2.50	
	SPECIAL (SEE ORDINANCE)		
	ROOF DRAIN 1 TO 4	2.00	
	EACH ADDITIONAL DRAIN	.50	

SPECIAL INSPECTION FEE-8.00 PER HOUR

SINGLE FAMILY DWELLING

1. All plumbing work, including water heater, in a one-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	15.00	
2. All plumbing work, including water heater, in a two-bathroom newly constructed, single family dwelling; (excluding all other gas appliance tags)	19.00	
3. All plumbing work, including water heater in a newly constructed, single family dwelling of three bathrooms; (excluding all other gas appliance tags)	22.00	
4. For each additional bathroom over three $1.75 per bathroom fixture.		

TOTAL FEE $

ELECTRICAL

NO.		EACH	FEE
1	PERMIT FEE	3.00	3.00
	RECEPTACLES Switches Light Outlets		
	FIXTURES		
	TOTAL (of two lines above)		
	FIRST 10 OR PORTION	2.50	
	REMAINDER @ .10 ea.		
	ELECTRIC RANGES / DISHWASHER	1.00	
	DRYERS / HEATER / DISPOSAL	1.00	
	0 – ½ HP .50 / OVER 5 – 15 HP	2.00	
	OVER ½ 2 HP 1.00 / OVER 15 – 50HP	4.00	
	OVER 2 5 HP 1.50 / WELDERS	1.00	
	MOTORS 7 HP		2.00

SPECIAL INSPECTION FEE-8.00 PER HOUR

SERVICE CONDUCTORS & SUB-PANELS

1	NO. 8 OR NO. 6 WIRE	1.50	1.50
	NO. 4, NO. 2, OR NO. 1 WIRE	2.50	
	NO. 1/0, 2/0, 3/0, OR 4/0 WIRE	3.50	
	250,000 CM to 350,000 CM WIRE	5.00	
	OVER 350,000 CM WIRE	7.50	

SINGLE FAMILY DWELLING

Area of Construction 0 to 750 Sq. Ft.	11.00
" " 751 to 1000 "	15.00
" " 1001 to 1500" "	20.00
" " 1501 to 2000" "	26.00
" " 2001 to 2500" "	32.00
" " 2501 to 3000" "	38.00

TOTAL FEE $650

MECHANICAL

NO.		EACH	FEE
	PERMIT FEE	3.00	3.00
	EA. GAS PIPING SYSTEM (1 to 5 outlets)	2.00	
	GAS APPLIANCE	2.50	
	VENTILATION DUCT GRAVITY	2.00	
	SERVING COMM. KITCHEN	3.00	
	Mechanical Inc. Hood Under 4,000 CFM-3.00, Over 4,000 CFM-5.00 SERVING COMM. KITCHEN UNDER 4 MC.F.M. $4.00 OVER 4 MC.F.M. $6.00		
	DUCT SYSTEM-NON RESIDENT		
	SINGLE STORY 0-4M SQ. FT.	5.00	
	" " OVER 4M SQ. FT.	10.00	
	MULTI STORY-PER FLOOR	4.00	
	EVAP. COOLER	2.00	

SPECIAL INSPECTION FEE-8.00 PER HOUR

REFRIGERATION COOLING UNITS

	LESS THAN 7 TONS	4.00
	OVER 7 TONS to 14 TONS	7.00
	Gas Absorption System to 130,000 BTU	4.00
	" " " 130,001 to 370,000 BTU	7.00
	WINDOW UNIT	2.00

SINGLE FAMILY DWELLING

0 to 750 SQ. FT.	6.00
751 " 1500 " "	7.00
1501 " 2500 " "	10.00
2501 " 3000 " "	11.00

TOTAL FEE $

ROBERT E. HUBER — CHIEF BUILDING INSPECTOR

CHECKED BY [illegible] VALIDATED BY [illegible] ACCT. 55 CASH ☐ CHECK ☐

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT. THE LICENSE, WHERE INDICATED, IS IN FULL FORCE AND VALID.

SIGN BELOW AND COMPLETE REVERSE

X _____ Date _____

_____ Owner

_____ Contractor Firm Name _____

Lic. No. _____ Class _____

TYPE CONST.	UNIT	TOTAL	OCCUPANCY GROUP	CODE
BLDG.			PLAN %	
GARAGE			CHECK %	
F.T.L.			BUILDING PERMIT	
BATH			PLUMBING PERMIT	
AIR COND.			ELEC. PERMIT	650
			MECH. PERMIT	
TOTAL			TOTAL	

20M-GAY-8201-10-74

THIS PERMIT SHALL EXPIRE BY LIMITATION AND BECOME NULL AND VOID IF THE WORK IS NOT COMMENCED WITHIN 120 DAYS.

INSPECTION COPY

INSPECTION RECORD

BUILDING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Foundation: location forms setback							
Foundation: Garage							
Floor Girders & Joists							
Pool Steel: location forms setback							
Frame: bracing bolts							
Lath: (exterior)							
Fireplace: damper							
Fireplace: roof							
Shower Walls over Tub							
Shower Pan & Walls							
Under Floor Area-Clean							
Bond Beam & Steel							
(1)							
(2)							
(3)							
FINAL INSPECTION							

ELECTRICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Conduit: Pvc Galv.							
Rough Wiring	D. Alexander	9/26/25					
Elec. Main Panel	D. Alexander	9/26/25		D. Alexander	9/26/25 ✓		
Temporary Meter	D. Alexander	9/26/25					
Temporary Power Pole							
Ground Electrode	D. Alexander	9/26/25					
Ground Clamp	D. Alexander	9/26/25					
FINAL INSPECTION	D. Alexander	9/26/25					

PLUMBING INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ground Plumbing: soil							
Water Pipe							
Vents							
Gas Pipe							
Tub Access							
Dryout Gas							
Septic Tank							
House Sewer							
Septic T. & Pits Backfilled							
Temporary Meter							
FINAL INSPECTION							

MECHANICAL INSPECTION	INSPECTOR'S SIGN	DATE	REMARKS	INSPECTOR'S SIGN	DATE	CN	NR
Ducts Underfloor							
Duct Overhead							
Fresh Air							
Furnace: gas vents comb. air							
Refrigeration Unit							
Evaporative Cooler							
FINAL INSPECTION							

	AMOUNT	INSPECTOR'S SIGN.	DATE	APPROVED BY	DATE	REFUND BY	DATE
OCCUPANCY BOND							

DATE	PERMIT NO.	NAME
	Carport	
6/5/68	B-98159 X	Sam Simonian
	Ag Pump	
9/15/75	E-135723 C	"/Pistacchio Pump
	Ag Exempt	
8/6/71	AGEX-2421 C	Sam Simonian

316-160-595

REROOF RESIDENCE
(ALICE SIMONIAN)

BLDG 102.50 C
SMI .54
PATTE TOTL 103.04
R- 178109:05MAR.17'94 CHECK 103.04
LINE 04 4-15-94 SC

07/20/09 UPGRADE ELECT SERVICE FOR EXISTING
SFR 0-200AMPS
E-09-103293 scanned

1139 South Armstrong

Human Services System
Department of Community Health
Gary M. Carozza, Director

Adult Services Department
Children & Family Services Department
Employment & Temporary Assistance Department

April 10, 2001

Mr. Bill Kermoyan
Kermoyan Farm
901 South Armstrong
Fresno, California 93727

Dear Mr. Kermoyan:

SUBJECT: Underground Storage Tank Abandonment Completion
LOCATION: 901 S. Armstrong, Fresno, CA

This letter confirms the permanent closure of underground storage tanks at the above site as required by the California Code of Regulations, Title 23, Article 7. The closure occurred on October 19, 2000 with the removal of two (2)underground storage tanks. With the provision that the information provided to this office is accurate and representative of existing conditions, no further action is required at this time. The site should now be properly closed, including backfilling as necessary.

This letter does not relieve you of any liability under the California Health and Safety Code or Water Code for past, present, or future operations at the site. Nor, does it relieve you of the responsibility to clean up existing, additional, or previously unidentified conditions at the site which cause or threaten to cause pollution, or nuisance, or otherwise pose a threat to water quality or public health.

Please call me at (559) 445-3271 if you have any questions.

Sincerely,

Lisa Smoot

Lisa Smoot, R.E.H.S.
Environmental Health Analyst III
Environmental Health System

LMS:csw

cc: Jim Williams, Statewide Excavation, Inc.

1221 Fulton Mall / P.O. Box 11867 / Fresno, California 93775 / (559) 445-3271 / FAX (559) 445-3301
Equal Employment Opportunity • Affirmative Action • Disabled Employer

RECEIVED
APR 2 2001
Department of Community Health
Environmental Health System

COMMERCIAL TANK SALES
3259 So. Elm Ave.
Fresno, Ca., 93702-5222
559-233-8265 FAX # 559-233-7757

On this 19th day of October ,2000 , 2 tanks were accepted by COMMERCIAL TANK SALES to be cut, sheared or otherwise processed to be smelted for recycling in accordance with all federal, state, and local regulations. Each tank has been cleaned and rendered gas free for "hot" work and a 2" hole has been cut into each tank for inspection purposes. All tanks will have a triple rinse certificate or manifest and a copy of the removal permit.

Tank # 1	2000 gallon UST	Fresno County # 6528	OCS
Tank # 2	2000 gallon ust	" " #6529	OCS

LEGAL OWNER: Bill Kenoyan Farm
Address : 901 Armstorng
City : Fresno, Ca. 93703

CONTRACTOR: Statewide Excavating, Inc
Address: : 5408 E. Jensen Ave.
City: Fresno, Ca. 93725
Strunk Trenching
3275 N. Sebel
Sanger, Ca. 93657

FILE # 1417

David Barker

David Barker, owner

Date: 10/19/00

BSK

567 W. Shaw Ave., Ste. B
Fresno, CA 93704
(559) 497-2880
FAX (559) 497-2886

RECEIVED
APR 2 2001
Department of Community Health
Environmental Health System

November 17, 2000

BSK 01-40-0754

Mr. Bill Kermoyan
% Larry Strunk
3275 N. Bethel Avenue
Sanger, California 93657

SUBJECT: Report of UST Removal Soil Sampling and Analysis
901 S. Armstrong Avenue
Fresno, California

Dear Mr. Kermoyan:

BSK & Associates (BSK) conducted soil sampling and analyses in conjunction with the removal of one 2,000-gallon underground storage tank (UST) and one 2,000 gallon diesel UST at the subject site. The USTs were formally used to store gasoline and diesel fuels. Our scope of services was in accordance with our October19, 2000 proposal for Mr. Bill Kermoyan (Client), and the agreement you signed on October 20, 2000.

The UST was removed on October 20, 2000. BSK technician, Mr. Richard Newman, was present to collect a sample of the soil from beneath each UST for laboratory analyses and to document the removal activities. Ms. Lisa Smoot and Mr. John Smith of the Fresno County Community Health Department (FCCHD) were on-site to observe the soil sampling activities, approve soil the sampling location, and specify the analytical tests for the samples.

FIELD METHODOLOGY AND OBSERVATIONS

When Mr. Newman arrived at the site, the soils around the UST had been excavated, the dispenser piping had been removed, and the tank was rinsed. The dispenser were located above the respective USTs. When the USTs were removed from the excavations, each were observed to be slightly rusted, but with no visible pitting or holes. Soils excavated from around the UST consisted mainly of fine to medium grained sand.

One soil sample (S-1-T1@ 11') was collected from the north end of the diesel tank at a depth of 11 feet below ground surface (bgs). One soil sample (S-2-T2 @ 12.5 ') was also obtained from beneath

A California Corporation
Geotechnical Engineering • Engineering Geology • Environmental Services • Construction Inspection & Testing • Analytical Testing

the fill end of the gasoline tank at a depth of about 12.5 feet bgs. The soil samples were collected by pushing a stainless steel tube into soil removed from the indicated depth by a backhoe operated by Williams Excavation. The approximate soil sampling locations are shown on Figure 1, Site Map. The soils excavated from below the UST had no visible discoloration or petroleum hydrocarbon odor. The stainless steel tubes were capped with teflon sheets and plastic caps, labeled, and placed in an ice chest cooled with Blue Ice.

Ms. Smoot specified that the soil sample collected beneath the diesel tank be analyzed for total petroleum hydrocarbons as referenced to diesel (TPHd) and the sample collected from beneath the gasoline tank be analyzed for total petroleum hydrocarbons as referenced to gasoline(TPHg), methyl tertiary butyl ether (MTBE), and benzene, toluene, ethylbenzene and total xylenes (BTEX).

The samples were transported directly from the site to BSK Analytical Laboratories in Fresno, California for analysis. Chain-of-custody (COC) protocol was maintained throughout the transfer. A copy of the COC is attached with the laboratory report. The laboratory used EPA Method 8015 (M) for analysis of TPHg and TPHd, EPA Methods 8015/8020 for MTBE and EPA Method 8020 for BTEX analysis.

FINDINGS

TPHg, MTBE and BTEX were not detected in the sample collected from beneath the gasoline tank. Detection limits for these methods were 1, 0.05 and 0.005 milligrams per kilogram (mg/kg), respectively. TPHd was detected in the sample at 2.3. The laboratory detection limit for this sample was 2 mg/kg.

LIMITATIONS

This report was prepared for Client in accordance with generally accepted standards of environmental practice in California at the time the service was performed. Our services were conducted solely for the purpose of evaluating environmental conditions of the soil with respect to the presence of petroleum hydrocarbons as referenced to diesel at the location sampled. No soils/foundation engineering (geotechnical engineering) implications are stated or should be inferred. Evaluation of the conditions at the site for the purpose of this investigation is made from a limited number of observation points. Subsurface conditions may vary away from the data points available. Additional work, including further subsurface investigation, can reduce the inherent uncertainties associated with this type of investigation.

We appreciate the opportunity to be of service. Please call if you have questions or need additional information.

Respectfully submitted,
BSK & ASSOCIATES

Mark J. Pomaville
Project Scientist

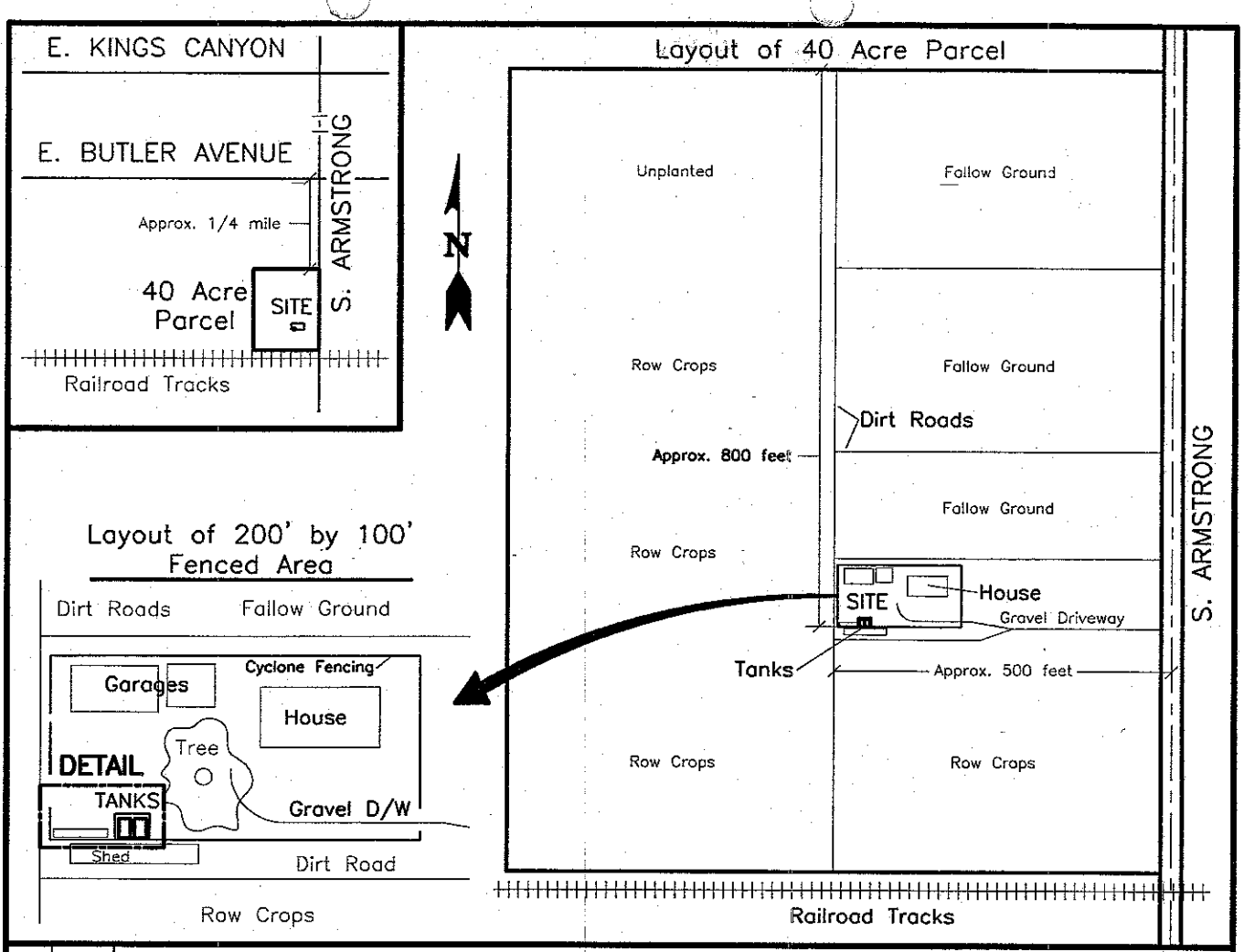
Ralph T. Boyajian P.E.
Principal Engineer

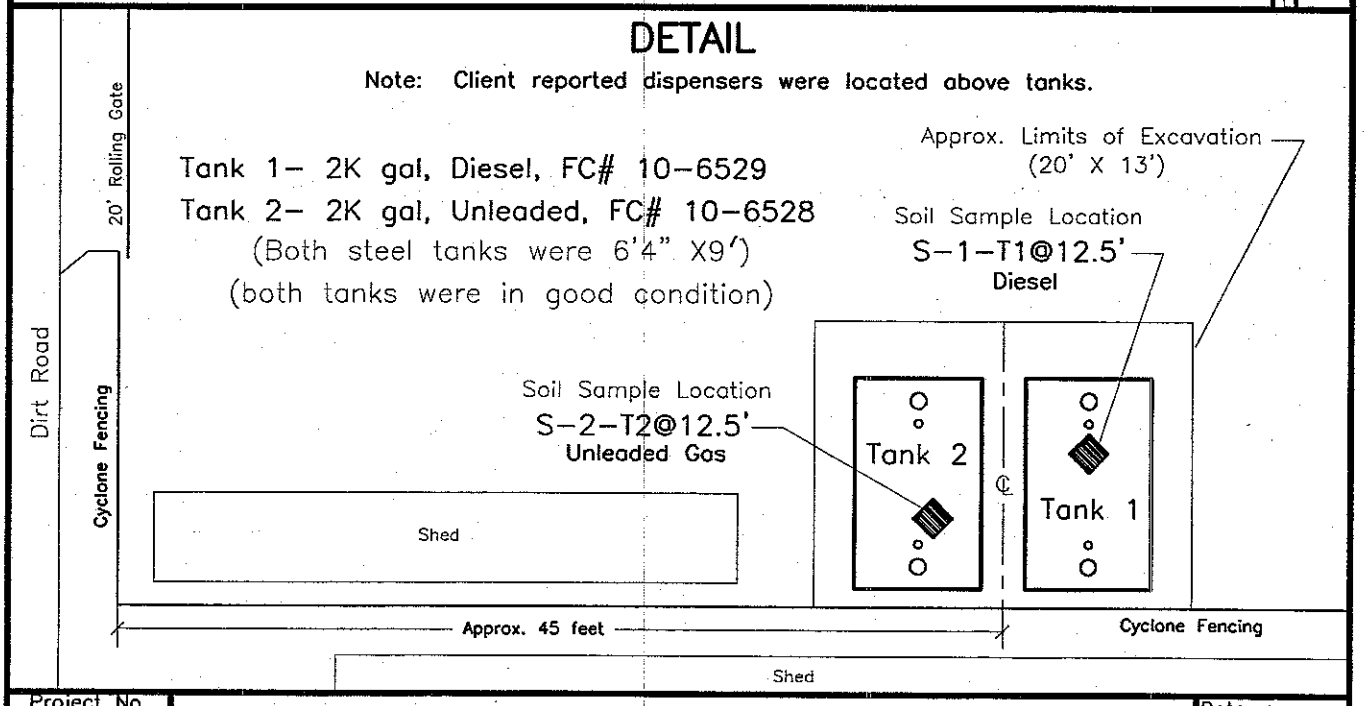
REGISTERED PROFESSIONAL ENGINEER
RALPH T. BOYAJIAN
No. 27722
Exp. 3/31/02
CIVIL
STATE OF CALIFORNIA

MJP/RTB/clh

Attachments: Figure 1 – Site Map
Laboratory Report and Chain-of Custody Documentation

Distribution: Client (1 original, 1 copy)
BSK Project File 310 (1 original)





Project No. 01–40–0754	SITE MAP UST REMOVAL AND SOIL SAMPLING Kermoyan Residence, 901 S. Armstrong, Fresno, California	Date: 10/20/00
Drawn By: R.V.N.		Scale: N.T.S.
Checked By:		Drawing No. 754–A–01
Approved By:	BSK & Associates	Fig. 1 / Rev. 1

BSK ANALYTICAL LABORATORIES

Cover Letter

10/31/2000

Mark Pomaville
BSK and Associates - Geotechnical
567 West Shaw Suite C-1
Fresno, CA 93704

BSK Submission Number: 2000100734

Dear Mark Pomaville:

BSK Analytical Laboratories adheres to a quality assurance plan that has been approved by the State of California Department of Health Services. Our Environmental Laboratory Accreditation Program (ELAP) certification number is 1180.

BSK Analytical Laboratories has prepared this certificate of analysis in response to your request for analytical services. All information was taken from your Chain of Custody or related correspondence. BSK completed all sample handling and analytical procedures within the Laboratory's standard acceptability criteria with any exceptions noted below.

If additional clarification of any information is required, please contact our Client Services Department at (800)877-8310 or (559)497-2888.

Sincerely,

BSK Analytical Laboratories

Authorizing Signature(s)

Juliane Adams
Organic Laboratory Supervisor

Ko Yang
Inorganic Laboratory Supervisor

Cynthia Pigman
QA/QC Supervisor

1414 Stanislaus Street • Fresno, CA 93706-1623 • Phone 559-497-2888, In CA 800-877-8310 • Fax 559-485-6935

BSK ANALYTICAL LABORATORIES

Mark Pomaville
BSK and Associates - Geotechnical
567 West Shaw Suite C-1
Fresno, CA 93704

Certificate of Analysis

Report Issue Date: 10/31/2000

BSK Submission #: 2000100734

BSK Sample ID #: 68698

Project ID: 01400754 Project Desc:
Submission Comments:

Sample Type: Solid
Sample Description: S-1-T1 at 11' Diesel
Sample Comments:

Date Sampled: 10/19/2000
Time Sampled: 1045
Date Received: 10/19/2000

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date	Analysis Date
TPH as Diesel	EPA 8015(M)	2.3	mg/Kg	2	1	2	10/27/2000	10/27/2000

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting
: PQL x Dilution
ND: None Detected at DLR

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Cover Letter for comments.
E: Analysis performed by External laboratory.
See External Laboratory Report attachments.

Report Authentication Code:

1414 Stanislaus Street Fresno, CA 93706-1623 Phone 559-497-2888, In CA 800-877-8310 Fax 559-485-6935

BSK ANALYTICAL LABORATORIES

Mark Pomaville
BSK and Associates - Geotechnical
567 West Shaw Suite C-1
Fresno, CA 93704

Certificate of Analysis

Report Issue Date: 10/31/2000

BSK Submission #: 2000100734

BSK Sample ID #: 68699

Project ID: 01400754 Project Desc:
Submission Comments:

Sample Type: Solid
Sample Description: S-2-T2 at 12.5` Gas
Sample Comments:

Date Sampled: 10/19/2000
Time Sampled: 1100
Date Received: 10/19/2000

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date	Analysis Date
TPH as Gasoline	EPA 8015(M)	**ND**	mg/Kg	1	1	1	10/23/2000	10/23/2000
Methyl-t-Butyl Ether	EPA 8015/8020	**ND**	mg/Kg	0.05	1	0.05	10/23/2000	10/23/2000
Benzene	EPA 8020	**ND**	mg/Kg	0.005	1	0.005	10/23/2000	10/23/2000
Ethylbenzene	EPA 8020	**ND**	mg/Kg	0.005	1	0.005	10/23/2000	10/23/2000
Toluene	EPA 8020	**ND**	mg/Kg	0.005	1	0.005	10/23/2000	10/23/2000
Total Xylenes	EPA 8020	**ND**	mg/Kg	0.005	1	0.005	10/23/2000	10/23/2000

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
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: PQL x Dilution
ND: None Detected at DLR

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Cover Letter for comments.
E: Analysis performed by External laboratory.
See External Laboratory Report attachments.

Report Authentication Code:

1414 Stanislaus Street Fresno, CA 93706-1623 Phone 559-497-2888, In CA 800-877-8310 Fax 559-485-6935

BSK ANALYTICAL LABORATORIES

1414 Stanislaus Street Fresno, CA 93706-1623
(209) 497-2888, 800 877-8310 (209) FAX 485-6935

2000100734
BSK_G
1019023

10/19/2000
TAT: Standard

Analyses Request Chain of Custody

Client Name: BSK-G	Report Attention: MARK POMAVILLE	Phone #: 497-2880
Address: 537 W. SHAW AVE, SUITE B	Project, Quote or PO #: 0140-0754	FAX #: 497-2886
City, State, Zip: FRESNO CA 93704	Copy to:	System #:

Sampled by:

Requested Analyses

LAB use only: Sample #	Type	# Cont.	Date Sampled	Time Sampled	Sample Description/Location	Comment or Station Code	TPH-D	TPH-G BTEX MTBE
1	S	1	10-19-00	1045	S-1-T1 @ 11' ~~[illegible]~~ DIESEL	086098	X	
2	S	1	↓	1100	S-2-T2 @ 12.5' GAS	086099		X

Matrix Type: L - Liquid S - Solid G - Gas
Type of Hazards Associated with Samples:

Additional Services:
Rush Priority: [ ] - 2 Day [ ] - 5 Day
[ ] - QC Data package: Level II, III or IV (circle one)
[ ] - Formal Chain of Custody

Additional Services Authorized by:
(Signature)

Payment Received with Delivery
Date: Amount: $
Check # Initials
Receipt #

Signature	Print Name	Company	Date	Time
Received / Relinquished by:				
Received / Relinquished by:				
Received / Relinquished by:	L.V. Newman	BSK-G	10-19-00	1225
Received for Laboratory by:	[illegible]	BSK	10-19-00	12:25

Notice: Payment for services rendered as noted herein are due in full within 30 days from when invoiced. If not so paid, account balances are deemed delinquent. Delinquent balances are subject to monthly service/re-billing charges and interest calculated at 1 1/2% per month, 18% per annum. BSK & Associates shall be entitled to recover on delinquent accounts, costs of collections, including attorneys' fees incurred prior to or in litigation whether concluded by judgment, settlement, compromise, or otherwise. The person signing for the Client/Company expressly acknowledges that they are either the Client or authorized agent of the Client.

UNDERGROUND STORAGE TANKS

FACILITY

UNIFIED PROGRAM CONSOLIDATED FORM

FRESNO COUNTY HUMAN SERVICES SYSTEM-DEPARTMENT OF COMMUNITY HEALTH-ENVIRONMENTAL HEALTH SYSTEM
1221 Fulton Mall, Post Office Box 11867, Fresno, California 93775 (559) 445-3271

(one page per site)

Page 1 of 5

TYPE OF ACTION *(Check one item only)*
- ☐ 1. NEW SITE PERMIT
- ☐ 3. RENEWAL PERMIT
- ☐ 4. AMENDED PERMIT
- ☐ 5. CHANGE OF INFORMATION *(Specify change - local use only)* _____
- ☐ 6. TEMPORARY SITE CLOSURE
- ☐ 7. PERMANENTLY CLOSED SITE
- ☒ 8. TANK REMOVED 400

I. FACILITY / SITE INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3: BILL KERMOYAN FARMS

FACILITY ID # 1: (EPA) CAC002332609

NEAREST CROSS STREET 401: KINGSCANYON ROAD

FACILITY OWNER TYPE 402:
- ☐ 1. CORPORATION
- ☒ 2. INDIVIDUAL
- ☒ 3. PARTNERSHIP
- ☐ 4. LOCAL AGENCY/DISTRICT*
- ☐ 5. COUNTY AGENCY*
- ☐ 6. STATE AGENCY*
- ☐ 7. FEDERAL AGENCY*

BUSINESS TYPE 403:
- ☐ 1. GAS STATION
- ☐ 2. DISTRIBUTOR
- ☒ 3. FARM
- ☐ 4. PROCESSOR
- ☐ 5. COMMERCIAL
- ☐ 6. OTHER

TOTAL NUMBER OF TANKS REMAINING AT SITE 404: 0

Is facility on Indian Reservation or trustlands? 405: ☐ Yes ☒ No

*If owner of UST a public agency: name of supervisor of division, section or office which operates the UST. (This is the contact person for the tank records.) 406: (JOB-SITE) 901 S. ARMSTRONG AVE.

II. PROPERTY OWNER INFORMATION

PROPERTY OWNER NAME 407: BILL KERMOYAN

PHONE 408: (559) 251-7312

MAILING OR STREET ADDRESS 409: 4581 E. WELDON AVE.

CITY 410: FRESNO

STATE 411: CA.

ZIP CODE 412: 93703

PROPERTY OWNER TYPE 413:
- ☐ 1. CORPORATION
- ☒ 2. INDIVIDUAL
- ☒ 3. PARTNERSHIP
- ☐ 4. LOCAL AGENCY / DISTRICT
- ☐ 5. COUNTY AGENCY
- ☐ 6. STATE AGENCY
- ☐ 7. FEDERAL AGENCY

III. TANK OWNER INFORMATION

TANK OWNER NAME 414: BILL KERMOYAN

PHONE 415: (559) 251-7312

MAILING OR STREET ADDRESS 416: 4581 E. WELDON AVE.

CITY 417: FRESNO

STATE 418: CA.

ZIP CODE 419: 93703

TANK OWNER TYPE 420:
- ☐ 1. CORPORATION
- ☒ 2. INDIVIDUAL
- ☐ 3. PARTNERSHIP
- ☐ 4. LOCAL AGENCY / DISTRICT
- ☐ 5. COUNTY AGENCY
- ☐ 6. STATE AGENCY
- ☐ 7. FEDERAL AGENCY

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER

TY (TK) HQ 4 4 - Call (916) 322-9669 if questions arise 421

V. PETROLEUM UST FINANCIAL RESPONSIBILITY

INDICATE METHOD(S) 422:
- ☒ 1. SELF-INSURED
- ☐ 2. GUARANTEE
- ☐ 3. INSURANCE
- ☐ 4. SURETY BOND
- ☐ 5. LETTER OF CREDIT
- ☐ 6. EXEMPTION
- ☐ 7. STATE FUND
- ☐ 8. STATE FUND & CFO LETTER
- ☐ 9. STATE FUND & CD
- ☐ 10. LOCAL GOV'T MECHANISM
- ☐ 99. OTHER: _____

VI. LEGAL NOTIFICATION AND MAILING ADDRESS

Check one box to indicate which address should be used for legal notifications and mailing. Legal notifications and mailings will be sent to the tank owner unless box 1 or 2 is checked. 423:
- ☐ 1. FACILITY
- ☐ 2. PROPERTY OWNER
- ☒ 3. TANK OWNER

VII. APPLICANT SIGNATURE

Certification: I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF APPLICANT: Larry Strunk

DATE 424: 10-19-2000

PHONE 425: CARE OF OWNER 233-7701

NAME OF APPLICANT *(print)* 426: LARRY STRUNK

TITLE OF APPLICANT 427: CARE OF OWNER

STATE UST FACILITY NUMBER *(For local use only)* 428:

1998 UPGRADE CERTIFICATE NUMBER *(For local use only)* 429:

HSS-1016

UNDERGROUND STORAGE TANKS

TANK PAGE 1

UNIFIED PROGRAM CONSOLIDATED FORM

FRESNO COUNTY HUMAN SERVICES SYSTEM-DEPARTMENT OF COMMUNITY HEALTH-ENVIRONMENTAL HEALTH SYSTEM
1221 Fulton Mall, Post Office Box 11867, Fresno, California 93775 (559) 445-3271

(two pages per tank)

Page 2 of 5

TYPE OF ACTION *(Check one item only)*
☐ 1. NEW SITE PERMIT ☐ 4. AMENDED PERMIT ☐ 5. CHANGE OF INFORMATION) ☐ 6. TEMPORARY SITE CLOSURE
☐ 3. RENEWAL PERMIT *(Specify reason - for local use only)* *(Specify change - for local use only)* ☐ 7. PERMANENTLY CLOSED ON SITE ☒ 8. TANK REMOVED 430

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3: BILL KERMOYAN FARMS
FACILITY ID #: EPA CDC 002332609 1

LOCATION WITHIN SITE *(Optional)* 431: 901 S. ARMSTRONG AVE FRESNO, CA. 93727

I. TANK DESCRIPTION

TANK ID # 432	TANK MANUFACTURER 433	COMPARTMENTALIZED TANK 434
UNKNOWN	UNKNOWN	☐ Yes ☒ No If "Yes", complete one page for each compartment.
DATE INSTALLED (YEAR/MO) 435	**TANK CAPACITY IN GALLONS 436**	**NUMBER OF COMPARTMENTS 437**
15 YEARS AGO	2000	ONE

ADDITIONAL DESCRIPTION *(For local use only)* 438

II. TANK CONTENTS

TANK USE 439
☒ 1. MOTOR VEHICLE FUEL *(If marked, complete Petroleum Type)*
☐ 2. NON-FUEL PETROLEUM
☐ 3. CHEMICAL PRODUCT
☐ 4. HAZARDOUS WASTE *(Includes Used Oil)*
☐ 95. UNKNOWN

PETROLEUM TYPE 440
☒ 1a. REGULAR UNLEADED ☐ 2. LEADED ☐ 5. JET FUEL
☐ 1b. PREMIUM UNLEADED ☐ 3. DIESEL ☐ 6. AVIATION FUEL
☐ 1c. MIDGRADE UNLEADED ☐ 4. GASOHOL ☐ 99. OTHER

COMMON NAME *(from Hazardous Materials Inventory page)* 441 | CAS # *(from Hazardous Materials Inventory page)* 442

III. TANK CONSTRUCTION

TYPE OF TANK *(Check one item only)* 443
☒ 1. SINGLE WALL ☐ 3. SINGLE WALL WITH EXTERIOR MEMBRANE LINER ☐ 5. SINGLE WALL WITH INTERNAL BLADDER SYSTEM
☐ 2. DOUBLE WALL ☐ 4. SINGLE WALL IN A VAULT ☐ 95. UNKNOWN ☐ 99. OTHER

TANK MATERIAL - primary tank *(Check one item only)* 444
☒ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPATIBLE W/100% METHANOL ☐ 99. OTHER

TANK MATERIAL - secondary tank *(Check one item only)* 445
☐ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 8. FRP COMPATIBLE W/100% METHANOL ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 9. FRP NON-CORRODIBLE JACKET ☐ 99. OTHER
☐ 5. CONCRETE ☐ 10. COATED STEEL

TANK INTERIOR LINING OR COATING *(Check one item only)* 446
☐ 1. RUBBER LINED ☐ 3. EPOXY LINING ☐ 5. GLASS LINING ☐ 95. UNKNOWN DATE INSTALLED 447
☐ 2. ALKYD LINING ☐ 4. PHENOLIC LINING ☒ 6. UNLINED ☐ 99. OTHER *(For local use only)*

OTHER CORROSION PROTECTION IF APPLICABLE *(Check one item only)* 448
☒ 1. MANUFACTURED CATHODIC PROTECTION ☐ 3. FIBERGLASS REINFORCED PLASTIC ☐ 95. UNKNOWN DATE INSTALLED 449
☐ 2. SACRIFICIAL ANODE ☐ 4. IMPRESSED CURRENT ☐ 99. OTHER *(For local use only)*

SPILL AND OVERFILL *(Check all that apply)*
YEAR INSTALLED 450 TYPE *(For local use only)* 451
☐ 1. SPILL CONTAINMENT
☐ 2. DROP TUBE
☐ 3. STRIKER PLATE
N/A

OVERFILL PROTECTION EQUIPMENT: YEAR INSTALLED 452
☐ 1. ALARM ☐ 3. FILL TUBE SHUT OFF VALVE N/A
☐ 2. BALL FLOAT N/A ☐ 4. EXEMPT

IV. TANK LEAK DETECTION

IF SINGLE WALL TANK *(Check all that apply)*: 453
☐ 1. VISUAL (EXPOSED PORTION ONLY)
☐ 2. AUTOMATIC TANK GAUGING (ATG)
☐ 3. CONTINUOUS ATG
☐ 4. STATISTICAL INVENTORY RECONCILIATION (SIR) + BIENNIAL TANK TESTING
☐ 5. MANUAL TANK GAUGING (MTG)
☐ 6. VADOSE ZONE
☐ 7. GROUNDWATER
☐ 8. TANK TESTING
☒ 99. OTHER NONE

IF DOUBLE WALL TANK OR TANK WITH BLADDER *(Check one item only)*: 454
☐ 1. VISUAL (SINGLE WALL IN VAULT ONLY)
☐ 2. CONTINUOUS INTERSTITIAL MONITORING
☐ 3. MANUAL MONITORING

V. TANK CLOSURE INFORMATION / PERMANENT CLOSURE IN PLACE

ESTIMATED DATE LAST USED (YR/MO/DAY) 455	ESTIMATED QUANTITY OF SUBSTANCE REMAINING 456	TANK FILLED WITH INERT MATERIAL? 457
UNKNOWN	80 gallons	☐ Yes ☒ No

HSS-1017

UNDERGROUND STORAGE TANKS

TANK PAGE 2

UNIFIED PROGRAM CONSOLIDATED FORM

FRESNO COUNTY HUMAN SERVICES SYSTEM-DEPARTMENT OF COMMUNITY HEALTH-ENVIRONMENTAL HEALTH SYSTEM

VI. PIPING CONSTRUCTION *(Check all that apply)*

	UNDERGROUND PIPING	ABOVEGROUND PIPING
SYSTEM TYPE	☐ 1. PRESSURE ☒ 2. SUCTION ☐ 3. GRAVITY 458	☐ 1. PRESSURE ☐ 2. SUCTION ☐ 3. GRAVITY 459
CONSTRUCTION/ MANUFACTURER	☒ 1. SINGLE WALL ☐ 3. LINED TRENCH ☐ 99. OTHER 460 ☐ 2. DOUBLE WALL ☐ 95. UNKNOWN MANUFACTURER _____ 461	☐ 1. SINGLE WALL ☐ 95. UNKNOWN 462 ☐ 2. DOUBLE WALL ☐ 99. OTHER MANUFACTURER _____ 463
MATERIALS AND CORROSION PROTECTION	☒ 1. BARE STEEL ☐ 6. FRP COMPATIBLE W/ 100% METHANOL ☐ 2. STAINLESS STEEL ☐ 7. GALVANIZED STEEL ☐ 3. PLASTIC COMPATIBLE WITH CONTENTS ☐ 95. UNKNOWN ☐ 4. FIBERGLASS ☐ 8. FLEXIBLE (HDPE) ☐ 99. OTHER ☐ 5. STEEL W/ COATING ☐ 9. CATHODIC PROTECTION 464	☐ 1. BARE STEEL ☐ 6. FRP COMPATIBLE W/ 100% METHANOL ☐ 2. STAINLESS STEEL ☐ 7. GALVANIZED STEEL ☐ 3. PLASTIC COMPATIBLE WITH CONTENTS ☐ 8. FLEXIBLE (HDPE) ☐ 99. OTHER ☐ 4. FIBERGLASS ☐ 9. CATHODIC PROTECTION ☐ 5. STEEL W/ COATING ☐ 95. UNKNOWN 465

VII. PIPING LEAK DETECTION *(Check all that apply)*

UNDERGROUND PIPING

SINGLE WALL PIPING 466

PRESSURIZED PIPING *(Check all that apply)*:

- ☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS
- ☐ 2. MONTHLY 0.2 GPH TEST
- ☐ 3. ANNUAL INTEGRITY TEST (0.1 GPH)

CONVENTIONAL SUCTION SYSTEMS:

- ☐ 5. DAILY VISUAL MONITORING OF PUMPING SYSTEM + TRIENNIAL PIPING INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):

- ☐ 7. SELF MONITORING

GRAVITY FLOW:

- ☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

☒ No. N/A

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING *(Check all that apply)*:

- 10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
  - ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
  - ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
  - ☐ c. NO AUTO PUMP SHUT OFF
- ☐ 11. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITH FLOW SHUT OFF OR RESTRICTION
- ☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM:

- ☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY *(Check all that apply)*

- ☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS
- ☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITHOUT FLOW SHUT OFF OR RESTRICTION
- ☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)
- ☐ 17. DAILY VISUAL CHECK

ABOVEGROUND PIPING

SINGLE WALL PIPING 467

PRESSURIZED PIPING *(Check all that apply)*:

- ☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS
- ☐ 2. MONTHLY 0.2 GPH TEST
- ☐ 3. ANNUAL INTEGRITY TEST (0.1 GPH)
- ☐ 4. DAILY VISUAL CHECK

CONVENTIONAL SUCTION SYSTEMS *(Check all that apply)*:

- ☐ 5. DAILY VISUAL MONITORING OF PIPING AND PUMPING SYSTEM
- ☐ 6. TRIENNIAL INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):

- ☐ 7. SELF MONITORING

GRAVITY FLOW *(Check all that apply)*:

- ☐ 8. DAILY VISUAL MONITORING
- ☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING *(Check all that apply)*:

- 10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (check one)
  - ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
  - ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
  - ☐ c. NO AUTO PUMP SHUT OFF
- ☐ 11. AUTOMATIC LEAK DETECTOR
- ☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM:

- ☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY *(Check all that apply)*

- ☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS
- ☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST)
- ☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)
- ☐ 17. DAILY VISUAL CHECK

VIII. DISPENSER CONTAINMENT

DISPENSER CONTAINMENT

- ☐ 1. FLOAT MECHANISM THAT SHUTS OFF SHEAR VALVE
- ☐ 2. CONTINUOUS DISPENSER PAN SENSOR + AUDIBLE AND VISUAL ALARMS
- ☐ 3. CONTINUOUS DISPENSER PAN SENSOR WITH AUTO SHUT OFF FOR DISPENSER + AUDIBLE AND VISUAL ALARMS
- ☐ 4. DAILY VISUAL CHECK
- ☐ 5. TRENCH LINER / MONITORING
- ☒ 6. NONE 469

DATE INSTALLED 468: N/A

IX. OWNER/OPERATOR SIGNATURE

I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF OWNER/OPERATOR: Larry Strunk	DATE: 10-19-2000 470
NAME OF OWNER/OPERATOR (print) 471: LARRY STRUNK	TITLE OF OWNER/OPERATOR 472: CARE OF OWNER

Permit Number *(For local use only)* 473	Permit Approved *(For local use only)* 474	Permit Expiration Date *(For local use only)* 475

HSS-1018

UNDERGROUND STORAGE TANKS

TANK PAGE 1

UNIFIED PROGRAM CONSOLIDATED FORM

FRESNO COUNTY HUMAN SERVICES SYSTEM-DEPARTMENT OF COMMUNITY HEALTH-ENVIRONMENTAL HEALTH SYSTEM
1221 Fulton Mall, Post Office Box 11867, Fresno, California 93775 (559) 445-3271

(two pages per tank)

Page 4 of 5

TYPE OF ACTION *(Check one item only)*
☐ 1. NEW SITE PERMIT ☐ 4. AMENDED PERMIT ☐ 5. CHANGE OF INFORMATION) ☐ 6. TEMPORARY SITE CLOSURE
☐ 3. RENEWAL PERMIT *(Specify reason - for local use only)* *(Specify change - for local use only)* ☐ 7. PERMANENTLY CLOSED ON SITE ☒ 8. TANK REMOVED 430

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3: BILL KERMOYAN FARMS
FACILITY ID # 1: EPA CAC002332609

LOCATION WITHIN SITE *(Optional)* 431: 901 S. ARMSTRONG AVE FRESNO, CA 93727

I. TANK DESCRIPTION

TANK ID # 432	TANK MANUFACTURER 433	COMPARTMENTALIZED TANK 434 ☐ Yes ☒ No If "Yes", complete one page for each compartment.
UNKNOWN	UNKNOWN	
DATE INSTALLED (YEAR/MO) 435	**TANK CAPACITY IN GALLONS 436**	**NUMBER OF COMPARTMENTS 437**
15 YEARS AGO	2000	ONE

ADDITIONAL DESCRIPTION *(For local use only)* 438

II. TANK CONTENTS

TANK USE 439
☒ 1. MOTOR VEHICLE FUEL *(If marked, complete Petroleum Type)*
☐ 2. NON-FUEL PETROLEUM
☐ 3. CHEMICAL PRODUCT
☐ 4. HAZARDOUS WASTE *(Includes Used Oil)*
☐ 95. UNKNOWN

PETROLEUM TYPE 440
☐ 1a. REGULAR UNLEADED ☐ 2. LEADED ☐ 5. JET FUEL
☐ 1b. PREMIUM UNLEADED ☒ 3. DIESEL ☐ 6. AVIATION FUEL
☐ 1c. MIDGRADE UNLEADED ☐ 4. GASOHOL ☐ 99. OTHER

COMMON NAME *(from Hazardous Materials Inventory page)* 441
CAS # *(from Hazardous Materials Inventory page)* 442

III. TANK CONSTRUCTION

TYPE OF TANK *(Check one item only)* 443
☒ 1. SINGLE WALL ☐ 3. SINGLE WALL WITH EXTERIOR MEMBRANE LINER ☐ 5. SINGLE WALL WITH INTERNAL BLADDER SYSTEM
☐ 2. DOUBLE WALL ☐ 4. SINGLE WALL IN A VAULT ☐ 95. UNKNOWN ☐ 99. OTHER

TANK MATERIAL - primary tank *(Check one item only)* 444
☒ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPATIBLE W/100% METHANOL ☐ 99. OTHER

TANK MATERIAL - secondary tank *(Check one item only)* 445
☐ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 8. FRP COMPATIBLE W/100% METHANOL ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 9. FRP NON-CORRODIBLE JACKET ☐ 99. OTHER
☐ 5. CONCRETE ☐ 10. COATED STEEL

TANK INTERIOR LINING OR COATING *(Check one item only)*
☐ 1. RUBBER LINED ☐ 3. EPOXY LINING ☐ 5. GLASS LINING ☐ 95. UNKNOWN 446 DATE INSTALLED 447
☐ 2. ALKYD LINING ☐ 4. PHENOLIC LINING ☒ 6. UNLINED ☐ 99. OTHER *(For local use only)*

OTHER CORROSION PROTECTION IF APPLICABLE *(Check one item only)*
☒ 1. MANUFACTURED CATHODIC PROTECTION ☐ 3. FIBERGLASS REINFORCED PLASTIC ☐ 95. UNKNOWN 448 DATE INSTALLED 449
☐ 2. SACRIFICIAL ANODE ☐ 4. IMPRESSED CURRENT ☐ 99. OTHER *(For local use only)*

SPILL AND OVERFILL *(Check all that apply)*
YEAR INSTALLED 450 TYPE *(For local use only)* 451
☐ 1. SPILL CONTAINMENT N/A
☐ 2. DROP TUBE
☐ 3. STRIKER PLATE

OVERFILL PROTECTION EQUIPMENT: YEAR INSTALLED 452
☐ 1. ALARM ☐ 3. FILL TUBE SHUT OFF VALVE N/A
☐ 2. BALL FLOAT N/A ☐ 4. EXEMPT

IV. TANK LEAK DETECTION

IF SINGLE WALL TANK *(Check all that apply)*: 453
☐ 1. VISUAL (EXPOSED PORTION ONLY)
☐ 2. AUTOMATIC TANK GAUGING (ATG)
☐ 3. CONTINUOUS ATG
☐ 4. STATISTICAL INVENTORY RECONCILIATION (SIR) + BIENNIAL TANK TESTING
☐ 5. MANUAL TANK GAUGING (MTG)
☐ 6. VADOSE ZONE
☐ 7. GROUNDWATER
☐ 8. TANK TESTING
☒ 99. OTHER NONE

IF DOUBLE WALL TANK OR TANK WITH BLADDER *(Check one item only)*: 454
☐ 1. VISUAL (SINGLE WALL IN VAULT ONLY)
☐ 2. CONTINUOUS INTERSTITIAL MONITORING
☐ 3. MANUAL MONITORING

V. TANK CLOSURE INFORMATION / PERMANENT CLOSURE IN PLACE

ESTIMATED DATE LAST USED (YR/MO/DAY) 455	ESTIMATED QUANTITY OF SUBSTANCE REMAINING 456	TANK FILLED WITH INERT MATERIAL? 457
UNKNOWN	80 gallons	☐ Yes ☒ No

HSS-1017

UNDERGROUND STORAGE TANK

TANK PAGE 2

UNIFIED PROGRAM CONSOLIDATED FORM

FRESNO COUNTY HUMAN SERVICES SYSTEM-DEPARTMENT OF COMMUNITY HEALTH-ENVIRONMENTAL HEALTH SYSTEM

VI. PIPING CONSTRUCTION *(Check all that apply)*

	UNDERGROUND PIPING	ABOVEGROUND PIPING
SYSTEM TYPE	☒ 1. PRESSURE ☒ 2. SUCTION ☐ 3. GRAVITY 458	☐ 1. PRESSURE ☐ 2. SUCTION ☐ 3. GRAVITY 459
CONSTRUCTION/ MANUFACTURER	☒ 1. SINGLE WALL ☐ 3. LINED TRENCH ☐ 99. OTHER 460 ☐ 2. DOUBLE WALL ☐ 95. UNKNOWN MANUFACTURER _____ 461	☐ 1. SINGLE WALL ☐ 95. UNKNOWN 462 ☐ 2. DOUBLE WALL ☐ 99. OTHER MANUFACTURER _____ 463
MATERIALS AND CORROSION PROTECTION	☒ 1. BARE STEEL ☐ 6. FRP COMPATIBLE W/ 100% METHANOL ☐ 2. STAINLESS STEEL ☐ 7. GALVANIZED STEEL ☐ 3. PLASTIC COMPATIBLE WITH CONTENTS ☐ 95. UNKNOWN ☐ 4. FIBERGLASS ☐ 8. FLEXIBLE (HDPE) ☐ 99. OTHER ☐ 5. STEEL W/ COATING ☐ 9. CATHODIC PROTECTION 464	☐ 1. BARE STEEL ☐ 6. FRP COMPATIBLE W/ 100% METHANOL ☐ 2. STAINLESS STEEL ☐ 7. GALVANIZED STEEL ☐ 3. PLASTIC COMPATIBLE WITH CONTENTS ☐ 8. FLEXIBLE (HDPE) ☐ 99. OTHER ☐ 4. FIBERGLASS ☐ 9. CATHODIC PROTECTION ☐ 5. STEEL W/ COATING ☐ 95. UNKNOWN 465

VII. PIPING LEAK DETECTION *(Check all that apply)*

UNDERGROUND PIPING

SINGLE WALL PIPING 466

PRESSURIZED PIPING *(Check all that apply)*:

- ☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS
- ☐ 2. MONTHLY 0.2 GPH TEST
- ☐ 3. ANNUAL INTEGRITY TEST (0.1 GPH)

CONVENTIONAL SUCTION SYSTEMS:

- ☐ 5. DAILY VISUAL MONITORING OF PUMPING SYSTEM + TRIENNIAL PIPING INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):

- ☐ 7. SELF MONITORING

GRAVITY FLOW:

- ☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

☒ 10. N/A

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING *(Check all that apply)*:

- 10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
  - ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
  - ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
  - ☐ c. NO AUTO PUMP SHUT OFF
- ☐ 11. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITH FLOW SHUT OFF OR RESTRICTION
- ☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM:

- ☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY *(Check all that apply)*

- ☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS
- ☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITHOUT FLOW SHUT OFF OR RESTRICTION
- ☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)
- ☐ 17. DAILY VISUAL CHECK

ABOVEGROUND PIPING

SINGLE WALL PIPING 467

PRESSURIZED PIPING *(Check all that apply)*:

- ☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS
- ☐ 2. MONTHLY 0.2 GPH TEST
- ☐ 3. ANNUAL INTEGRITY TEST (0.1 GPH)
- ☐ 4. DAILY VISUAL CHECK

CONVENTIONAL SUCTION SYSTEMS *(Check all that apply)*:

- ☐ 5. DAILY VISUAL MONITORING OF PIPING AND PUMPING SYSTEM
- ☐ 6. TRIENNIAL INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):

- ☐ 7. SELF MONITORING

GRAVITY FLOW *(Check all that apply)*:

- ☐ 8. DAILY VISUAL MONITORING
- ☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING *(Check all that apply)*:

- 10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (check one)
  - ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
  - ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
  - ☐ c. NO AUTO PUMP SHUT OFF
- ☐ 11. AUTOMATIC LEAK DETECTOR
- ☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM:

- ☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY *(Check all that apply)*

- ☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS
- ☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST)
- ☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)
- ☐ 17. DAILY VISUAL CHECK

VIII. DISPENSER CONTAINMENT

DISPENSER CONTAINMENT

- ☐ 1. FLOAT MECHANISM THAT SHUTS OFF SHEAR VALVE
- ☐ 2. CONTINUOUS DISPENSER PAN SENSOR + AUDIBLE AND VISUAL ALARMS
- ☐ 3. CONTINUOUS DISPENSER PAN SENSOR WITH AUTO SHUT OFF FOR DISPENSER + AUDIBLE AND VISUAL ALARMS
- ☐ 4. DAILY VISUAL CHECK
- ☐ 5. TRENCH LINER / MONITORING
- ☒ 6. NONE 469

DATE INSTALLED 468: N/A

IX. OWNER/OPERATOR SIGNATURE

I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF OWNER/OPERATOR: Larry Strunk	DATE: 10-19-2000 (470)
NAME OF OWNER/OPERATOR *(print)* (471): LARRY STRUNK	TITLE OF OWNER/OPERATOR (472): CARE OF OWNER

Permit Number *(For local use only)* 473	Permit Approved *(For local use only)* 474	Permit Expiration Date *(For local use only)* 475

HSS-1018

10:30-
11:15

UNDERGROUND STORAGE TANK ABANDONMENT INSPECTION REPORT

FRESNO COUNTY COMMUNITY HEALTH DEPARTMENT-ENVIRONMENTAL HEALTH SYSTEM
Post Office Box 11867, Fresno, California 93775
1221 Fulton Mall--(209)445-3271

Site Information Date 10/19/00

Facility Bill Kermoyan Farm PR# C.T. 14.04

Address 901 S. Armstrong City Fresno Zip 93703

Tank Information Abandonment in place ____ Removal X

Tank#/size: 1. 6528 / 2K (Gas) 2. 6529 / 2K (Diesel) 3. ____ / ____ 4. ____ / ____ 5. ____ / ____ 6. ____ / ____

Inspection Information	Y/N	Inspection Information	Y/N
Tank(s) completely emptied	Y	Groundwater/Product in excavation(circle one)	N/A
Tank(s) cleaned and waste manifested	Y	Approved abandonment in place	N/A
Tank(s) properly purged/LEL below 5% 0% LEL	Y	A & B forms completed and submitted	Y
All piping removed	Y	Samples taken by: BSK	

Soil discoloration and its location(s): No odors noted - sandy soil

Tank condition(describe): No holes observed.

Notes: Tanks are going to commercial tanks rather than Brundis.

Plot Key

X = Sample location

T_x = Tank number

S_y = Sample number

D' = Depth below grade(ft)

Note the depth of sample. eg. : S_y-D'

Analysis/Sample numbers

TPH Gas & BTXE/ + MTBE S_2

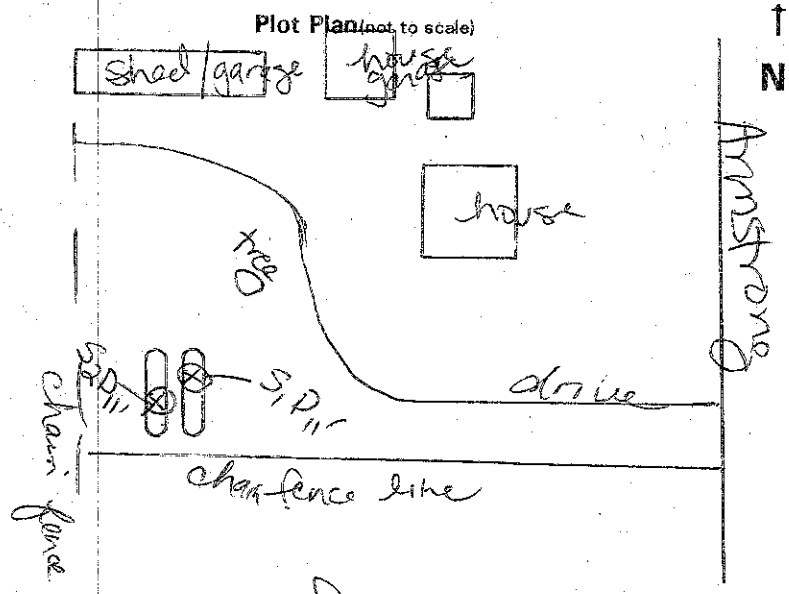
TPH Diesel/ S_1

EPA 418.1/

Other:

Note: TPH by DHS-GC/FID(LUFT), BTXE by 8020

Plot Plan (not to scale)



Rosa Smoot
Analyst Signature

Owner/Representative Signature, Title

CONTRACTOR CERTIFIES PROPER DECONTAMINATION OF TANKS: ____

2277

OCS INC. FRESNO

OIL CONSERVATION SERVICE INC.
CONSERVATION THRU RECYCLING

ENVIRONMENTAL SERVICES
3256 N. MARKS AVE.
FRESNO, CA 93722-4919
(559) 485-5495
FAX (559) 485-5497
ENVIRONMENTAL PROTECTION AGENCY
I.D. NO. CAD 980 673 842

DEPT. OF HEALTH SERVICES
HAZARDOUS WASTE HAULER
REG. NO. 1943

TANK TEST CERTIFICATION

Date: 10/19/100 Job No.: _____ Tank No.: 6529 Tank Size: 2000

Manifest No.: 996883608 Invoice No.: 23883

Prod. Held:
- Unl. Gas ☐
- Lead Gas ☐
- Diesel ☑
- Waste Oil ☐
- Other _____

EPA ID No.: CAC 002 332 609

Generator: Bill Kermayan Phone: _____

Address: 4581 E. Weldon City: Fresno Zip: 93703

Client: Strunk Ranches Phone: 559-233-1101

Address: 3275 N. State City: Sanger Zip: 93657

Test No. 1	Time: 9:00 AM	LEL: 30 %	Initial: AR
Test No. 2	Time: 10:25	LEL: 0 %	Initial: AR
Test No. 3	Time:	LEL: %	Initial:
Test No. 4	Time:	LEL: %	Initial:
Test No. 5	Time:	LEL: %	Initial:

O.C.S. Inc. certifies that at the time that this tank was tested by us it was free of flammable vapors. It may not remain vapor free. Treat this container with extreme caution, it may contain explosive gases.

DO NOT EXPOSE THIS CONTAINER TO FLAMES, SPARKS OR EXCESSIVE HEAT.

DO NOT CUT OR WELD ON THIS TANK.

Generator's Signature: Larry Strunk CAME OF OWNER

Contractor's Signature: Larry Strunk

County of: Fresno

County Inspector's Signature: Lisa Smith

2276

OCS INC.
FRESNO

OIL CONSERVATION SERVICE INC.
CONSERVATION THRU RECYCLING

ENVIRONMENTAL SERVICES
3256 N. MARKS AVE.
FRESNO, CA 93722-4919
(559) 485-5495
FAX (559) 485-5497

ENVIRONMENTAL PROTECTION AGENCY
I.D. NO. CAD 980 673 842

DEPT. OF HEALTH SERVICES
HAZARDOUS WASTE HAULER
REG. NO. 1943

TANK TEST CERTIFICATION

Date: 10/9/00 Job No.: _____ Tank No.: 6528 Tank Size: 2000

Manifest No.: 99688300 8 Invoice No.: 23883

Prod. Held:
- Unl. Gas ☑
- Lead Gas ☐
- Diesel ☐
- Waste Oil ☐
- Other _____

EPA ID No.: _____

Generator: Bill Kerrigan Phone: _____

Address: 4581 E. Wilson City: Fresno Zip: 93703

Client: Strenk Trenching Phone: 559-233-1101

Address: 3275 N. Bethel City: Sanger Zip: 93657

Test No. 1	Time: 8:30 am	LEL: 40 %	Initial: AR
Test No. 2	Time: 10:30	LEL: 0 %	Initial: AR
Test No. 3	Time:	LEL: %	Initial:
Test No. 4	Time:	LEL: %	Initial:
Test No. 5	Time:	LEL: %	Initial:

O.C.S. Inc. certifies that at the time that this tank was tested by us it was free of flammable vapors. It may not remain vapor free. Treat this container with extreme caution, it may contain explosive gases.

DO NOT EXPOSE THIS CONTAINER TO FLAMES, SPARKS OR EXCESSIVE HEAT.

DO NOT CUT OR WELD ON THIS TANK.

Generator's Signature: Larry Strenk CARE OF OWNER

Contractor's Signature: Larry Strenk

County of: Fresno

County Inspector's Signature: Lisa Smoot

Human Services System
Department Of Community Health
ENVIRONMENTAL HEALTH APPLICATION
P O Box 11800, Fresno CA 93775-1800
1221 Fulton Mall -- ☎ 559 445-3357

PLEASE PRINT OR TYPE

Business Name Bill Kermoyan Farms

Inspection Site Address 901 S. Armstrong
Fresno, CA 93727

Date of Business Commencement _____ **Business Telephone** _____

Billing Address Bill Kermoyan
4581 E. Weldon
Fresno, CA 93703

Business Owner Bill Kermoyan

Owner Address same as billing

Telephone 251-7312

The Applicant hereby agrees to abide by all applicable Federal, State, and Fresno County statutes, laws, regulations, and the Fresno County Charter Ordinances and to pay all applicable Fresno County Environmental Health Permit and Inspection Fees, and late penalties, if any, which apply to the Permit which is being applied for here. PENALTIES FOR LATE PAYMENT ARE ASSESSED AT 10% PER MONTH OR FRACTION THEREOF. Notify Environmental Health of any change in the type of business activity, name, billing address, or ownership by calling 445-3357. Failure to notify Environmental Health may result in late penalties, Permit denial or revocation, and business closure. **PERMITS AND FEES ARE NOT TRANSFERABLE.**

☞ _____ _____ _____
Owner / Authorized Representative Title Date

— DO NOT WRITE BELOW THIS LINE —

Record ID#	EE#	PE#	Fee/Activity Description	Billing Code	Fee
	~~0254~~	6302	UST Removal		316.00
		6507	State Oversight Surcharge		10.00
		6502	State UST Surcharge x 2		16.00

Penalty Due
Penalty Calculation: TOTAL AMOUNT DUE 342.00

RETURN TO: L. Smoot Date Left/Mailed (Taken In) 10-17-00 Taken In By: Hyee

☑ New Business ☐ Ownership Change ☐ Business Name Change ☐ Billing Address Change ☐ Other
☐ Close(inactive) ☐ Close(delete) Closure Date _____ ☐ Site Correction/Change ☑ Activity Change

Comments

Business Name ~~Bill Kermoyan Farms~~ Owner ~~Bill Kermoyan~~
Inspection Site ~~901 S. Armstrong~~ CT# 14.04 City Code 16
FA# 0274621 Approved By: Lisa Smoot EE# ~~0254~~ 205 Date 10/19/00
Supervisor Review ✓ Envision updated by Date 12/18/00

Business Office Use
Paid 10/17/00
#15556 #316.00
#15557 #26.00

Envision Clerical Use
A/R #0017652

C:\OFFICE\WPWIN\WPDOCS\FORM1F.WPD 01.07.2000

THURS. 10:30 AM. 10/19/2000

UNDERGROUND STORAGE TANK PERMIT APPLICATION

FRESNO COUNTY DEPARTMENT OF COMMUNITY HEALTH
ENVIRONMENTAL HEALTH SYSTEM
P.O. BOX 11867
FRESNO, CA. 93775 (559) 445-3271

☒ ABANDONMENT/REMOVAL ☐ ABANDONMENT IN PLACE ☐ NEW CONSTRUCTION ☐ REPAIR

FACILITY INFORMATION

Facility Name BILL KERMOYAN FARM Facility Phone (559) 251-7312 Job Phone 978-3512
Address 901 S. ARMSTRONG AVE City FRESNO State CA Zip 93727
Tank Owner BILL KERMOYAN Phone (559) 251-7312
Address 4581 E. WELDON AVE City FRESNO State CA Zip 93703

CONTRACTOR INFORMATION	TANK CLEANER/TRANSPORTER	CONSULTANT INFORMATION
Company STATEWIDE EXCAVATION, INC.	Company OCS, INC.	Company BSK + ASSOCIATES
Address 5408 E. JENSEN AVE.	Address 3256 N. MARKS AVE	Address 567 W. SHAW AVE. SUITE C
City FRESNO, CA. Zip 93725	City FRESNO, CA. Zip 93722	City FRESNO, CA. Zip 93704
Phone (559) 227-8537	Phone (559) 485-5495	Phone (559) 497-2880
Contractor Class A HAZ	Waste Transporter ID No. 1943	Registration Type 490492
License No. 503776	Tank Destination BRUNO'S SALVAGE	License No. N/A
Site Contact Person: JIM WILLIAMS	Rinsate Manifested ✓ Tank Manifested NO	

TANK INFORMATION

PERMIT #	SIZE	PRODUCT	AGE OF TANK	PREVIOUSLY STORED MATERIAL
6528	2000	GASOLINE	15	GASOLINE
6529	2000	DIESEL	15	DIESEL

DESCRIBE WORK TO BE PERFORMED

REMOVE TANKS AND PIPING AS PER F.C.E.H.D. SPECIFICATIONS, INCLUDING BACK-FIL

OFFICIAL USE ONLY 10/17/00 Receipt # 79368

PR#	CT 14.04	APN	Fee $ 342.00	Application Date 10-17-00

NOTE: Permit expires ninety (90) days after the application date. The applicant has received, understands, and will comply with the attached conditions of this permit and any other State and local regulations. ☐ Permit Conditions provided ☐ State Permit Application (forms A, B, C) provided ☒ Grading Permit confirmation ☐ Abandonment in place hand out provided ☐ OSHA Excavation Permit on file

Harry Yee — APPROVED BY
JIM WILLIAMS — APPLICANT NAME (PRINT)
[signature] (MNGR./LICENSEE) — APPLICANT SIGNATURE / TITLE

11/3/98

TO: **COUNTY OF FRESNO**

DEPARTMENT OF HEALTH
UNDERGROUND STORAGE TANK PROGRAM
P.O. Box 11867
FRESNO, CALIFORNIA 93775

GRADING PERMIT STATUS

IN CONJUNCTION WITH THE REMOVAL OF UNDERGROUND PETROLEUM STORAGE TANKS

This form is to provide the County of Fresno with information regarding the grading (or excavation/compaction) permit status relative to the proposed ***removal of underground petroleum storage tanks*** at the following site:

This form must be presented to Fresno County Environmental Health System ***prior to*** obtaining an underground storage tank abandonment permit.

Address: 901 S. ARMSTRONG

City/County:
Nearest Cross Street or Road:

A grading permit was issued on 10/6/00 for this site ☒

A grading permit ***is not required*** by this jurisdiction for excavation and or backfilling in conjunction with the removal of underground storage tanks at this site. ☐

Comments:
00-7942

CITY/COUNTY OF

JOHN SLATER
Printed name of official

Signature of official

498-1375
Phone number

10-6-00
Date

White Copy: Building Dept. File Yellow: County Health Dept. Blue: Applicant 6/91

Hurs. 10:30 AM. 10/19/2000

Vacant Lisa/Steve 1404

Commercial Tank

UNDERGROUND STORAGE TANK PERMIT APPLICATION

FRESNO COUNTY DEPARTMENT OF COMMUNITY HEALTH
ENVIRONMENTAL HEALTH SYSTEM
P.O. BOX 11867
FRESNO, CA. 93775 (559) 445-3271

RECEIVED
MAR 1 9 2001
Department of Community Health
Environmental Health System

☒ ABANDONMENT/REMOVAL ☐ ABANDONMENT IN PLACE ☐ NEW CONSTRUCTION ☐ REPAIR

FACILITY INFORMATION

Facility Name: BILL KERMOYAN FARM Facility Phone: (559) 251-7312 Job Phone: 978-3512
Address: 901 S. ARMSTRONG AVE City: FRESNO State: CA Zip: 93727
Tank Owner: BILL KERMOYAN Phone: (559) 251-7312
Address: 4581 E. WELDON AVE City: FRESNO State: CA Zip: 93703

CONTRACTOR INFORMATION	TANK CLEANER/TRANSPORTER	CONSULTANT INFORMATION
Company: STATEWIDE EXCAVATION, INC.	Company: OCS, INC.	Company: BSK + ASSOCIATES
Address: 5408 E. JENSEN AVE.	Address: 3256 N. MARKS AVE	Address: 567 W. SHAW AVE. SUITE C
City: FRESNO, CA. Zip: 93725	City: FRESNO, CA. Zip: 93722	City: FRESNO, CA. Zip: 93704
Phone: (559) 227-8537	Phone: (559) 485-5495	Phone: (559) 497-2880
Contractor Class: A HAZ	Waste Transporter ID No.: 1943	Registration Type: 490492
License No.: 503776	Tank Destination: ~~BRUNO'S SALVAGE~~ (COMMERCIAL TANK)	License No.: N/A
Site Contact Person: JIM WILLIAMS	Rinsate Manifested ✓ Tank Manifested NO	

TANK INFORMATION

PERMIT #	SIZE	PRODUCT	AGE OF TANK	PREVIOUSLY STORED MATERIAL
6528	2000	GASOLINE	15	GASOLINE
6529	2000	DIESEL	15	DIESEL

DESCRIBE WORK TO BE PERFORMED

REMOVE TANKS AND PIPING AS PER F.C.E.H.D. SPECIFICATIONS, INCLUDING BACK-FIL

OFFICIAL USE ONLY 10/17/00 Receipt # 79368

PR#	CT 14.04	APN	Fee $ 342.00	Application Date 10-17-00

NOTE: Permit expires ninety (90) days after the application date. The applicant has received, understands, and will comply with the attached conditions of this permit and any other State and local regulations. ☐ Permit Conditions provided ☐ State Permit Application (forms A, B, C) provided ☑ Grading Permit confirmation ☐ Abandonment in place hand out provided ☐ OSHA Excavation Permit on file

Harry Yee
APPROVED BY

JIM WILLIAMS
APPLICANT NAME (PRINT)

(MNGR./LICENSEE)
APPLICANT SIGNATURE / TITLE

1/3/98

STATE OF CALIFORNIA

WATER RESOURCES CONTROL BOARD

FORM 'A':

SITE

UNDERGROUND STORAGE TANK PROGRAM
FACILITY/SITE, INFORMATION and/or PERMIT APPLICATION

COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY ONE ITEM				
	☐ 1 NEW PERMIT	☐ 3 RENEWAL PERMIT	☐ 5 CHANGE OF INFORMATION	☒ 7 PERMANENTLY CLOSED SITE
	☐ 2 INTERIM PERMIT	☐ 4 AMENDED PERMIT	☐ 6 TEMPORARY SITE CLOSURE	

I. FACILITY/SITE INFORMATION & ADDRESS — (MUST BE COMPLETED)

FACILITY/SITE NAME: D & J SERVICES	CARE OF ADDRESS INFORMATION: JOE RILEY
ADDRESS: 1108 S. FOWLER AVE	NEAREST CROSS STREET: ✓ Box to indicate ☐ CORPORATION ☒ INDIVIDUAL ☐ PARTNERSHIP ☐ LOCAL-AGENCY ☐ COUNTY-AGENCY ☐ STATE-AGENCY ☐ FEDERAL-AGENCY
CITY NAME: FRESNO	STATE: CA; ZIP CODE: 93725; SITE PHONE #, WITH AREA CODE:
TYPE OF BUSINESS: ☐ 1 GAS STATION ☐ 2 DISTRIBUTOR ☐ 3 FARM ☐ 4 PROCESSOR ☒ 5 OTHER; ✓ Box if INDIAN RESERVATION or TRUST LANDS ☐	EPA ID #: ; # of TANK's AT THIS SITE: 0
EMERGENCY CONTACT PERSON (PRIMARY)	**EMERGENCY CONTACT PERSON (SECONDARY)**
DAYS: NAME (LAST, FIRST) — PHONE # WITH AREA CODE	DAYS: NAME (LAST, FIRST) — PHONE # WITH AREA CODE
NIGHTS: NAME (LAST, FIRST) — PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST) — PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION & ADDRESS — (MUST BE COMPLETED)

NAME: SAME AS I	CARE OF ADDRESS INFORMATION:
MAILING or STREET ADDRESS:	✓ Box to indicate ☐ CORPORATION ☐ INDIVIDUAL ☐ PARTNERSHIP ☐ LOCAL-AGENCY ☐ COUNTY-AGENCY ☐ STATE-AGENCY ☐ FEDERAL-AGENCY
CITY NAME:	STATE: ; ZIP CODE: ; PHONE #, WITH AREA CODE:

III. TANK OWNER INFORMATION & ADDRESS — (MUST BE COMPLETED)

NAME: SAME AS I	CARE OF ADDRESS INFORMATION:
MAILING or STREET ADDRESS:	✓ Box to indicate ☐ CORPORATION ☐ INDIVIDUAL ☐ PARTNERSHIP ☐ LOCAL-AGENCY ☐ COUNTY-AGENCY ☐ STATE-AGENCY ☐ FEDERAL-AGENCY
CITY NAME:	STATE: ; ZIP CODE: ; PHONE #, WITH AREA CODE:

IV. LEGAL NOTIFICATION AND BILLING ADDRESS

CHECK ONE (1) BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR BOTH LEGAL NOTIFICATION AND BILLING: I. ☒ II. ☐ III. ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT.

APPLICANT'S NAME (PRINTED & SIGNATURE)	DATE

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	AGENCY #	FACILITY ID #	# of TANKS at SITE
10				0000

CURRENT LOCAL AGENCY FACILITY ID #: 88028	APPROVED BY NAME: Julian F. Gaw	PHONE # WITH AREA CODE: 415-3271 (DA)
PERMIT NUMBER	PERMIT APPROVAL DATE	PERMIT EXPIRATION DATE

LOCATION CODE	CENSUS TRACT #	SUPERVISOR-DISTRICT CODE	BUSINESS PLAN FILED YES ☐ NO ☐	DATE FILED

CHECK #	PERMIT AMOUNT	SURCHARGE AMOUNT	FEE CODE	RECEIPT #	BY:

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE TANK PERMIT FORM 'B' APPLICATION(S), UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

FORM A (3-2-88)

FILE COPY

STATE OF CALIFORNI WATER RESOURCES CONTR BOARD

FORM 'B':
TANK

UNDERGROUND STORAGE TANK PROGRAM
TANK PERMIT APPLICATION INFORMATION

COMPLETE A SEPARATE FORM WITH THE FOLLOWING INFORMATION FOR EACH TANK.

No. 29691

MARK ONLY ONE ITEM				
	[ ] 1 NEW PERMIT	[ ] 3 RENEWAL PERMIT	[ ] 5 CHANGE OF INFORMATION	[ ] 7 PERMANENTLY CLOSED TANK
	[ ] 2 INTERIM PERMIT	[ ] 4 AMENDED PERMIT	[ ] 6 TEMPORARY TANK CLOSURE	[X] 8 TANK REMOVED

FACILITY/SITE NAME WHERE TANK IS INSTALLED: DRT SERVICES **FARM TANK - YES** [ ] **NO** [X]

I. TANK DESCRIPTION
COMPLETE ALL ITEMS - IF UNKNOWN — SO SPECIFY

A. OWNERS TANK ID # UNKNOWN	B. MANUFACTURED BY: UNKNOWN
C. YEAR INSTALLED 1984	D. TANK CAPACITY IN GALLONS: 4,000

II. TANK CONTENTS
IF (A.1), IS MARKED, COMPLETE ITEM C. IF (A.1), IS NOT MARKED, COMPLETE ITEM D.

A.	B.	C.
[X] 1 MOTOR VEHICLE FUEL [ ] 2 PETROLEUM		[ ] 1 UNLEADED [ ] 2 LEADED [X] 3 DIESEL
[ ] 3 CHEMICAL PRODUCT [ ] 4 OIL	[X] 1 PRODUCT	[ ] 4 GASAHOL [ ] 5 JET FUEL [ ] 6 AVIATION GAS
[ ] 5 HAZARDOUS [ ] 80 EMPTY [ ] 95 UNKNOWN	[ ] 2 WASTE	[ ] 7 METHANOL [ ] 99 OTHER (DESCRIBE IN ITEM D, BELOW)

D. IF NOT MOTOR VEHICLE FUEL, ENTER NAME OF HAZARDOUS SUBSTANCE STORED & C.A.S. # C.A.S. #:

III. TANK CONSTRUCTION
MARK ONE ITEM ONLY IN BOX A, B, C, & D

A. TYPE OF SYSTEM	[ ] 1 DOUBLE WALLED	[ ] 3 SINGLE WALLED WITH EXTERIOR LINER		[X] 95 UNKNOWN
	[ ] 2 SINGLE WALLED	[ ] 4 SECONDARY CONTAINMENT		[ ] 99 OTHER ____
B. TANK MATERIAL	[ ] 1 STEEL/IRON	[ ] 2 STAINLESS STEEL	[ ] 3 FIBERGLASS	[ ] 4 STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC
	[ ] 5 CONCRETE	[ ] 6 POLYVINYL CHLORIDE	[ ] 7 ALUMINUM	[ ] 8 100% METHANOL COMPATIBLE FRP
	[ ] 9 BRONZE	[ ] 10 GALVANIZED STEEL	[X] 95 UNKNOWN	[ ] 99 OTHER ____
C. INTERIOR LINING	[ ] 1 RUBBER LINED	[ ] 2 ALKYD LINING	[ ] 3 EPOXY LINING	[ ] 4 PHENOLIC LINING
	[ ] 5 GLASS LINING	[ ] 6 UNLINED		[X] 95 UNKNOWN
	[ ] IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL?		[ ] YES [ ] NO	[ ] 99 OTHER ____
D. CORROSION PROTECTION	[ ] 1 POLYETHLENE WRAP	[ ] 2 TAR OR ASPHALT	[ ] 3 VINYL WRAP	[ ] 4 FIBERGLASS REINFORCED PLASTIC
	[ ] 5 CATHODIC PROTECTION	[ ] 91 NONE	[X] 95 UNKNOWN	[ ] 99 OTHER ____

IV. PIPING INFORMATION
CIRCLE **A** IF ABOVE GROUND, **U** IF UNDERGROUND, **BOTH IF APPLICABLE**

A. SYSTEM TYPE	A U 1 SUCTION	A U 2 PRESSURE	A U 3 GRAVITY	A U 91 NONE	A U 95 UNKNOWN	A U 99 OTHER
B. CONSTRUCTION	A U 1 SINGLE WALLED	A U 2 DOUBLE WALLED	A U 3 LINED TRENCH	A U 91 NONE	A U 95 UNKNOWN	A U 99 OTHER
C. MATERIAL	A U 1 STEEL/IRON	A U 2 STAINLESS STEEL	A U 3 POLYVINYL CHLORIDE (PVC)	A U 4 FIBERGLASS PIPE	A U 91 NONE	
	A U 5 ALUMINUM	A U 6 CONCRETE	A U 7 STEEL CLAD W/FRP	A U 8 100% METHANOL COMPATIBLE FRP		
	A U 9 GALVANIZED STEEL	A U 95 UNKNOWN	A U 99 OTHER ____			

V. LEAK DETECTION SYSTEM
CIRCLE **P** FOR PRIMARY, OR **S** FOR SECONDARY, **A PRIMARY LEAK DETECTION SYSTEM MUST BE CIRCLED.**

P S 1 VISUAL CHECK	P S 2 INVENTORY RECONCILIATION	P S 3 VADOSE WELLS	P S 4 ELECTRONIC MONITOR	P S 5 GROUND WATER MONITORING WELLS
P S 6 PRECISION TESTING	P S 7 PRESSURE TESTING	P S 91 NONE	P S 95 UNKNOWN	P S 99 OTHER ____

VI. INFORMATION ON TANK PERMANENTLY CLOSED IN PLACE

1. ESTIMATED DATE LAST USED (MO/YR)	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING IN GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? [ ] YES [ ] NO

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT.

APPLICANT'S NAME (PRINTED & SIGNATURE)	DATE

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	AGENCY #	FACILITY ID #	TANK ID #
10				

CURRENT LOCAL AGENCY FACILITY ID # 88028	APPROVED BY NAME Jeffrey T. Comer	PHONE # WITH AREA CODE 415-327-1(205)
PERMIT NUMBER	PERMIT APPROVAL DATE	PERMIT EXPIRATION DATE

CHECK #	PERMIT AMOUNT	SURCHARGE AMT.	FEE CODE	RECEIPT #	BY:

FORM B (6-29-88) **THIS FORM MUST BE ACCOMPANIED BY A FACILITY/SITE APPLICATION, FORM 'A', UNLESS A CURRENT FORM 'A' HAS BEEN FILED**

FILE COPY

STATE OF CALIFORNI WATER RESOURCES CONTRC OARD

FORM 'B':
TANK

UNDERGROUND STORAGE TANK PROGRAM
TANK PERMIT APPLICATION INFORMATION

COMPLETE A SEPARATE FORM WITH THE FOLLOWING INFORMATION FOR EACH TANK.

No. 26660

MARK ONLY ONE ITEM
- [ ] 1 NEW PERMIT
- [ ] 2 INTERIM PERMIT
- [ ] 3 RENEWAL PERMIT
- [ ] 4 AMENDED PERMIT
- [ ] 5 CHANGE OF INFORMATION
- [ ] 6 TEMPORARY TANK CLOSURE
- [ ] 7 PERMANENTLY CLOSED TANK
- [x] 8 TANK REMOVED

FACILITY/SITE NAME WHERE TANK IS INSTALLED: D93 SERVICES **FARM TANK - YES** [ ] **NO** [x]

I. TANK DESCRIPTION **COMPLETE ALL ITEMS - IF UNKNOWN — SO SPECIFY**

A. OWNERS TANK ID # UNKNOWN	B. MANUFACTURED BY: UNKNOWN
C. YEAR INSTALLED 1982	D. TANK CAPACITY IN GALLONS: 675

II. TANK CONTENTS **IF (A.1), IS MARKED, COMPLETE ITEM C. IF (A.1), IS NOT MARKED, COMPLETE ITEM D.**

A.
- [x] 1 MOTOR VEHICLE FUEL
- [ ] 2 PETROLEUM
- [ ] 3 CHEMICAL PRODUCT
- [ ] 4 OIL
- [ ] 5 HAZARDOUS
- [ ] 80 EMPTY
- [ ] 95 UNKNOWN

B.
- [x] 1 PRODUCT
- [ ] 2 WASTE

C.
- [ ] 1 UNLEADED
- [ ] 2 LEADED
- [ ] 3 DIESEL
- [ ] 4 GASAHOL
- [ ] 5 JET FUEL
- [ ] 6 AVIATION GAS
- [ ] 7 METHANOL
- [x] 99 OTHER (DESCRIBE IN ITEM D, BELOW)

D. IF NOT MOTOR VEHICLE FUEL, ENTER NAME OF HAZARDOUS SUBSTANCE STORED & C.A.S. # Gasoline C.A.S. #:

III. TANK CONSTRUCTION **MARK ONE ITEM ONLY IN BOX A, B, C, & D**

A. TYPE OF SYSTEM
- [ ] 1 DOUBLE WALLED
- [ ] 2 SINGLE WALLED
- [ ] 3 SINGLE WALLED WITH EXTERIOR LINER
- [ ] 4 SECONDARY CONTAINMENT
- [x] 95 UNKNOWN
- [ ] 99 OTHER ____

B. TANK MATERIAL
- [ ] 1 STEEL/IRON
- [ ] 5 CONCRETE
- [ ] 9 BRONZE
- [ ] 2 STAINLESS STEEL
- [ ] 6 POLYVINYL CHLORIDE
- [ ] 10 GALVANIZED STEEL
- [ ] 3 FIBERGLASS
- [ ] 7 ALUMINUM
- [x] 95 UNKNOWN
- [ ] 4 STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC
- [ ] 8 100% METHANOL COMPATIBLE FRP
- [ ] 99 OTHER ____

C. INTERIOR LINING
- [ ] 1 RUBBER LINED
- [ ] 5 GLASS LINING
- [ ] IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? [ ] YES [ ] NO
- [ ] 2 ALKYD LINING
- [ ] 6 UNLINED
- [ ] 3 EPOXY LINING
- [ ] 4 PHENOLIC LINING
- [x] 95 UNKNOWN
- [ ] 99 OTHER ____

D. CORROSION PROTECTION
- [ ] 1 POLYETHLENE WRAP
- [ ] 5 CATHODIC PROTECTION
- [ ] 2 TAR OR ASPHALT
- [ ] 91 NONE
- [ ] 3 VINYL WRAP
- [x] 95 UNKNOWN
- [ ] 4 FIBERGLASS REINFORCED PLASTIC
- [ ] 99 OTHER ____

IV. PIPING INFORMATION CIRCLE **A** IF ABOVE GROUND, **U** IF UNDERGROUND, **BOTH IF APPLICABLE**

A. SYSTEM TYPE	A U	1 SUCTION	A U	2 PRESSURE	A U	3 GRAVITY	A U	91 NONE	A U	95 UNKNOWN	A U	99 OTHER
B. CONSTRUCTION	A U	1 SINGLE WALLED	A U	2 DOUBLE WALLED	A U	3 LINED TRENCH	A U	91 NONE	A U	95 UNKNOWN	A U	99 OTHER
C. MATERIAL	A U	1 STEEL/IRON	A U	2 STAINLESS STEEL	A U	3 POLYVINYL CHLORIDE (PVC)	A U	4 FIBERGLASS PIPE	A U	91 NONE		
	A U	5 ALUMINUM	A U	6 CONCRETE	A U	7 STEEL CLAD W/FRP	A U	8 100% METHANOL COMPATIBLE FRP				
	A U	9 GALVANIZED STEEL	A U	95 UNKNOWN	A U	99 OTHER ____						

V. LEAK DETECTION SYSTEM CIRCLE **P** FOR PRIMARY, OR **S** FOR SECONDARY, **A PRIMARY LEAK DETECTION SYSTEM MUST BE CIRCLED.**

P S	1 VISUAL CHECK	P S	2 INVENTORY RECONCILIATION	P S	3 VADOSE WELLS	P S	4 ELECTRONIC MONITOR	P S	5 GROUND WATER MONITORING WELLS
P S	6 PRECISION TESTING	P S	7 PRESSURE TESTING	P S	91 NONE	P S	95 UNKNOWN	P S	99 OTHER ____

VI. INFORMATION ON TANK PERMANENTLY CLOSED IN PLACE

1. ESTIMATED DATE LAST USED (MO/YR)	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING IN GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? [ ] YES [ ] NO

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT.

APPLICANT'S NAME (PRINTED & SIGNATURE)	DATE

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	AGENCY #	FACILITY ID #	TANK ID #
10				

CURRENT LOCAL AGENCY FACILITY ID # 88026	APPROVED BY NAME John F. Cmr	PHONE # WITH AREA CODE 445-3271 (209)
PERMIT NUMBER	PERMIT APPROVAL DATE	PERMIT EXPIRATION DATE

CHECK #	PERMIT AMOUNT	SURCHARGE AMT.	FEE CODE	RECEIPT #	BY:

FORM B (6-29-88) **THIS FORM MUST BE ACCOMPANIED BY A FACILITY/SITE APPLICATION, FORM 'A', UNLESS A CURRENT FORM 'A' HAS BEEN FILED**

FILE COPY

County of
FRESNO

Department of Health
George Blet
Director

February 12, 1988

Mr. Joe Riley
D & J SERVICES
1108 S. Fowler Ave.
Fresno, CA 93725

Subject: Soil Sample
Site: 1108 S. Fowler Ave.
APN:

Mr. Riley,

The Fresno County Health Department has reviewed the report submitted for chemical soil analysis conducted at the above address.

We concur with the results and conclusions of this report based solely on its scope, procedures, and findings submitted by TWINING LABS.

The excavation may now be properly backfilled.

Very truly yours,

Lancelot Leitch

Lancelot Leitch, R.S.
Environmental Health Analyst

LL:emr

1221 Fulton Mall / P. O. Box 11867 / Fresno, California 93775 / Phone (209) 445-3271
Equal Employment Opportunity — Affirmative Action — Handicap Employer

PERM

FRESNO COUNTY HEALTH DEPARTMENT
UNDERGROUND TANK PROGRAM
P. O. BOX 11867
FRESNO, CA 93775

PERMIT TO PERMANENTLY
ABANDON UNDERGROUND STORAGE TANK(S)

TYPE OF ABANDONMENT (Fill out one Application per Facility)

Abandon In Place ____ Abandon/Remove ✓ Removal Date 1-2-88 CT ____ APN ____
Facility Name Joe Riley I.D. # 880210-2
Facility Address 1108 So. Fowler City Fresno
Owner/Operator Joe Riley Telephone ____
Address 1108 So. Fowler City Fresno Zip 93727
Tank Removal Contractor NOVE (Sal) CA License No. —
Address — Zip — Telephone —
Tank Destination 3259 So Elm Hwy 41
Final Tank Disposition Used as above ground tanks
Samples Taken By: ____ Firm: ____
Permit Approved By: O. Rivera Date: 1/19/88

Permit #	Size	Product	Age of Tank	Previously Stored Material
1030	675	Gas	6 years	Gas
1031	4000	Diesel	4 years	Diesel

CONDITIONS OF ABANDONMENT

1. If the tanks are to be REMOVED FROM THE SITE, soil samples shall be obtained under the direction of an approved professional engineer, geologist, authorized representative of a California State approved by this office. Sample numbers, locations and consultant must be approved by this office prior to commencement.
2. 48 Hour advance notice shall be given to Fresno County Environmental Health Officer prior to initiating excavation.
3. All residual liquid, solids, or sludges shall be removed and the tank purged with dry ice at the rate of 15 lbs. per 1,000 gallon capacity prior to excavation.
4. All associated piping shall be removed from the underground soil.
5. This permit shall be onsite during excavation.
6. This permit shall accompany the tank(s) to the final destination, shall be signed and dated by all parties listed below and returned to this office within five (5) days upon final destination.
7. Permittee shall contact the local Fire Department prior to initiating abandonment procedures.
8. If the tanks are to be ABANDONED IN PLACE and BACKFILLED, a written proposal for soil analysis shall be submitted to this office by a qualified soils consultant and the existence of the in place tank and fittings shall be recorded on the property deed using the enclosed form.

OWNER: Joe Riley DATE: 1-19-88
CONTRACTOR: NOVE DATE: 1-19-88
DESTINATION: Dig Soc / Com'l Tank DATE: 1-19-88

8/87vc

The Twining Laboratories, Inc.
Since 1898
Geotechnical and Environmental Consultants • Engineering and Chemical Laboratories

RP

February 8, 1988 TL 488-0044-00

For: D & J Services
1108 S. Fowler Ave.
Fresno, California 93725

Attention: Mr. Joe Riley

Project: 1108 S. FOWLER AVE.
FRESNO, CALIFORNIA

Subject: Underground Storage Tank - Sampling and Analysis

This report presents the analytical results of the soil sample retrieved from the excavation resulting from the removal of an underground fuel storage tank. The product stored in the tank and the capacity of the tank are unknown. Attached to the report is a copy of the chain-of-custody form.

The scope of our testing was authorized by Mr. Joe Riley, owner of D & J Services.

Project Description

The project consists of sampling and analyzing the soils at the former location of the underground storage tank at the above-referenced project site.

Sampling Procedure

The soil samples were obtained by Mr. Randy Stephenson of our firm on January 21, 1988. The samples were retrieved from a depth of approximately 3 feet below the bottom of the former tank location. The locations and depths were specified by Mr. Lance Leitch with the Fresno County Environmental Health Department. The soil samples were retrieved by hand augering to the desired depth and retrieving soil using the hand augering equipment. The soil was then transferred to pre-cleaned glass jars with teflon-lined lids and immediately packed in ice for shipment to the laboratory. The samples were clearly identified and banded with shipping seals. The samples retrieved in the field were brought to our facility in Fresno, California on January 21, 1988.

☑ 2527 Fresno Street • P.O. Box 1472
Fresno, California 93716 • (209) 268-7021

☐ 1405 Granite Lane, Suite 1
Modesto, California 95351 • (209) 523-0994

☐ 9401 West Goshen Avenue
Visalia, California 93291 • (209) 651-2190

☐ 5301 Office Park Drive, Suite 310
Bakersfield, California 93309 •(805) 322-5216

Test Methods

The soil samples retrieved from the project site were analyzed for the following constituents using the listed EPA methods.

Benzene, Toluene, Xylenes	SW-846: Methods 5020, 8020
Total Hydrocarbons	SW-846: Methods 5020, 8015

RESULTS OF SOIL SAMPLE ANALYSIS

Date Sampled: 1-21-88 Date Received: 1-21-88

Sample Number and Depth	Benzene mg/kg	Toluene mg/kg	Xylenes mg/kg	TH-1 mg/kg	TH-2 mg/kg	Date Analyzed
S-1, 9 Feet	NA	NA	NA	NA	ND	1-23-88
S-2, 9 Feet	ND	ND	ND	ND	NA	1-23-88
MDL	0.05	0.05	0.20	0.5	0.5	

MDL = Method Detection Limit.
mg/kg = Milligrams per Kilogram (parts per million).
TH-1 = Total Hydrocarbons (reference standard: gasoline).
TH-2 = Total Hydrocarbons (reference standard: diesel).
ND = None Detected At or Above the MDL.
NA = Not Analyzed.

If you should have any questions regarding the information contained in this report, please do not hesitate to contact our office.

Sincerely,

THE TWINING LABORATORIES

Dale S. Stanton

Dale S. Stanton
Project Engineer
Environmental Engineering Department

DSS/tc

1 c herewith
1 c Fresno County Environmental Health Department
Attn: Mr. Lance Leitch
1 c Parker McCants and Company
Attn: Mr. Gary Kittredge

The Twining Laboratories, Inc.

CHAIN OF CUSTODY RECORD

Project No. D + J Services

Date/Time Sampled 1-21-88 / 14:00

Affiliation of Sampler/Shipper Twining Laboratories, Inc.

Address 2527 Fresno St., Fresno, CA 93716 2268-7021
Number Street City State Zip Telephone

Collector's Name R.K. Stephenson Signature R.K. Stephenson

Transported By R.K. Stephenson Date Shipped 1-21-88

Sample Receiver

Address

Date/Time Received

Comments Results to R.K. Stephenson

Collector's Sample No.	Sample Description	Analysis Requested
002	Soil	TH (Diesel)
003	Soil	BTX, TH (Gasoline)

Chain of Possession:

	Signature	Affiliation	Inclusive Dates
1.	R.K. Stephenson	Twining Laboratories, Inc.	1-21-88
2.	M. L. Wellbank	TL	1-21-88
3.			
4.			

QUALIFICATIONS

JIM VUE, GIT
STAFF GEOLOGIST

EDUCATION

BS, Geology, California State University, Fresno

CERTIFICATION

CA, Geologist-in-Training (GIT), No. 815
OSHA 40 Hour HAZWOPER Training
Title 22 Drinking Water Certified Water Sampler

PROFILE

Mr. Jim Vue has more than five years of environmental engineering experience in California. He has conducted Phase I Environmental Site Assessment (ESA) throughout California and Phase II ESA, and other environmental sampling throughout the Central Valley. His duties include project coordination, sampling, logging, and report preparation. In addition, Mr. Vue is also proficient in geotechnical logging, sampling, and report preparation.

RELEVANT EXPERIENCE

BEDROSIAN TRUCK SERVICE, FRESNO
Staff Geologist | Mr. Vue served as Staff Geologist for the Bedrosian Truck Service Project. The scope of services for this project included the removal of underground storage tanks and impacted soils, collection of subsurface soil samples, and installation, monitoring, and removal of groundwater wells. His duties included project coordination, permitting, groundwater sampling, soil sampling, and report preparation.

MERCED COUNTY REGIONAL WASTE AUTHORITY, MERCED
Staff Geologist | Mr. Vue served as Staff Geologist for the Geotechnical Investigation for the Merced County Regional Waste Authority Project (RWA). The scope of services included geotechnical investigation for the design of an expansion at the Merced County RWA. Mr. Vue's duties consisted of project coordination, geotechnical logging and sampling, as well as report preparation.

VALLEY CHILDREN HOSPIRAL MEDICAL OFFICE, MERCED
Staff Geologist | Mr. Vue served as a Staff Geologist for the Phase I Environmental Site Assessment for the Valley Children Hospital Medical Office project. Mr. Vue's duties consisted of project coordination, records request, interviews, and report preparation.

JOSUE MONTES | PRINCIPAL GEOTECHNICAL ENGINEER

EDUCATION
BS, Civil Engineering, University of Santo Tomas, Philippines, 1983

LICENSE / REGISTRATION
(CA) Licensed Professional Engineer #C52610
(CA) Licensed Geotechnical Engineer #G2904

Mr. Josue Montes has more than 29 years of extensive geotechnical assessment, engineering, construction inspections, and materials testing experience in California with successful leadership roles. His duties include proposal preparation, project management, engineering, and completion of various projects from pre-design to detailed design, materials testing, and construction monitoring. His responsibilties also include business development and project proposal preparation and review, staff mentoring and training, preparation of geotechnical reports, plan details, and geotechnical related specifications. Josue is experienced in managing and performing challenging geotechnical ground investigations, earthwork design and structure foundations, site-specific evaluation of seismic ground motions, and liquefaction and landslide hazard assessments.

RELEVANT PROJECT INVOLVEMENT / EXPERIENCE

AVENUE 7 1/2 BRIDGE, FIREBAUGH

Project Engineer | Mr. Montes served as Project Engineer for the Avenue 7 1/2 Bridge Project. Construction consisted of large diameter deep foundations and of the bridge substructure and superstructure. The bridge consisted of two-span bridge decks, approximately 40 foot wide with pedestrian sidewalks of both sides of the superstructure. His duties included construction inspection and testing of drilling, inspection and monitoring of drilling fluid / slurry, concrete pouring, and post construction testing of concrete poured using gamma-gamma testing.

MAIN STREET BRIDGE, PORTERVILLE

Project Engineer | Mr. Montes served as Project Engineer for the Main Street Bridge Project. The construction consisted of a new 40-foot wide concrete two-span bridge supported on large diameter reinforced concrete piers (CIDH's), on Main Street crossing Tule River. Josue's primary responsibilities included inspections and monitoring of construction of large- diameter CIDH's, its sub-structure (bents and abutments).

CALIFORNIA HIGH SPEED RAIL CP 2-3, LOS ANGELES

Project Manager | Mr. Montes provided Project Management services for the California Speed Rail CP 2-3 Project. The contract includes approximately 65 miles of construction, including embankment, overcrossings / bridges, viaducts, and associated railway / track structures. As the Quality Control laboratory for the project, tasks included materials sampling and testing as required by the project. Sampling of potential borrow sites, prepared embankment subgrade, concrete batching, plate (eV2) testing, nuclear and sand cone testing, lightweight deflectometer tests (LWD), and AASHTO classification of soils. Primary responsibilities include oversight of geotechnical tasks required by the High Speed Rail Contract Package 2-3. Geotechnical tasks included managing laboratory, evaluation of potential borrow sites, haul roads, task coordination, and oversight of field testing (nuke gauge, sand cone, plate test/ eV2, LWD or lightweight deflectometer, grounding test).

WESTSIDE PARKWAY, BAKERSFIELD

Senior Engineer | Mr. Montes served as a Senior Engineer for the Westside Parkway Project. The project included a series of overcrossings and undercrossings along the Westside Parkway alignment located north of the Kern River, west of SR-58. His responsibilities included preparation of laboratory tests on collected soils samples from the field exploration, preparation and review of the foundation engineering report for Caltrans review.

DOLLAR GENERAL STORES, INLAND EMPIRE UTILITIES AGENCY

Geotechnical Engineer-of-Record | Mr. Montes provided geotechnical engineer services for the design and construction of Dollar General Stores in various locations throughout California. The project consisted of single-story masonry and steel commercial buildings on shallow foundations. Different locations required careful evaluation of on-site soils and import soils prior to construction. As the geotechnical-engineer-of-record, his responsibilities included preparation of scope of work for field exploration for geotechnical / foundation investigation in various geographical areas and varying geological deposits. Preparation of laboratory testing of subsurface soils and writing and finalizing of geotechnical investigation reports.

KAWEAH DELTA HOSPITAL, VISALIA

Project Engineer | Mr. Montes served as Project Engineer for the Kaweah Delta Hospital Project. Construction included installation of deep foundations and a rigid grade beam system as support of a multi-story concrete-frame building. His responsibilities included oversight of monitoring and inspections of over 100 reinforced drilled concrete piers at various elevations.

CENTURY 21 OFFICE BUILDING, CALIFORNIA

Project Engineer | Mr. Montes services as Project Engineer for the Century 21 Office Building Project. The project consisted primarily of a high rise building supported on driven pre-stressed square concrete piles. The project included subterranean parking levels. and construction included a Pile Driving Analysis (PDA) program prior to pile production. Josue's duties included oversight of PDA and re-evaluation of pile design. Also monitoring and inspection of production pile driving and evaluation post driving of piles.

PERFORMANCE VENUE, LASED (RAMS STADIUM), LOS ANGELES

Geotechnical Engineer-of-Record | Mr. Montes services as Geotechnical Engineer-of-Record for the Performance Venue project located at the RAMS stadium. The project consisted of construction of a multi-use dome facility adjoining the professional football Los Angeles Rams home playing arena. This project also consisted of a multi-level structure, including a performance / concert, multiple shops, and associated structures, supported mainly of mat foundations. Primary responsibilities included review and evaluation of an existing geotechnical report prepared by others, engineering of foundations based on the available data, and preparation of a foundation engineering report for the planned structure. Josue responded to review comments by multiple layers of peer review, and the permitting agency reviews and comments.

WILLBANKS
ENVIRONMENTAL CONSULTING, INC
8413 N Millbrook Avenue, Suite 110 • Fresno, CA 93720
(559) 797-4181 Office • WECenvironmental.com

September 24, 2024 WEC Project No. 24.340

Mr. Trent Walker
Bonadelle Development Corporation
4644 E. Carmen Ave.
Fresno, CA 93703

Re: Limited Phase II Environmental Site Assessment
Former Simonian Estates
1099, 1139, and 1183 South Armstrong Avenue
Fresno, California

Dear Mr. Walker:

Willbanks Environmental Consulting, Inc. (WEC) is pleased to present the results of a Limited Phase II Environmental Site Assessment (Phase II ESA) conducted for former Simonian Estates property located on the west side of South Armstrong Avenue, where East California Avenue intersects South Armstrong Avenue in Fresno, California. Site Vicinity is illustrated in Figure 1. Bonadelle has indicated it is in the due diligence phase of purchasing the property for a future residential development. As part of the due diligence process, a Phase I Environmental Site Assessment (Phase I) dated October 27, 2023, was prepared by RMA GeoScience (RMA) of Fresno, California, with the objective of identifying potential Recognized Environmental Conditions (RECs) in connection with the Site. The objective of this Phase II ESA was to further investigate the RECs identified in the Phase I. This report includes the scope of work, results of the investigation, and recommendations based on the data collected.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

The Phase I described the Site as being comprised of five parcels identified by Fresno County Recorder's Office Assessor Parcel Numbers (APNs) 316-160-16, 316-160-17, 316-160-43, 316-160-59, and 316-160-61 that together encompass approximately 37.92 acres of land located to the west of South Armstrong Avenue and East California Avenue in Fresno, California. The Phase I indicated the Site was utilized for agricultural purposes from at least 1937 until sometime between 1999 and 2006. Residences occupied the western portion of the Site from at least 1950 until sometime between 2020 and 2023. At the time of RMA's site reconnaissance, the site was vacant, undeveloped land. Figure 2 illustrates the Site layout.

RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)

RECs are defined by the ASTM Standard Practice E1527-21 as: (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.

The following RECs associated with the Site were identified in RMA's Phase I:

- According to the records obtained, an unknown size fuel and a 350-gallon fuel underground storage tank (UST) were listed under the subject property addresses (1139 and 1183 South Armstrong Avenue, respectively). Mr. Greg Simonian, the property owner, stated that the USTs were removed approximately 35 to 40 years ago and provided the approximate locations of the USTs. Mr. Simonian also stated that he does not have any records of soil samples being collected after the removal of the USTs.

Although not identified as an REC, the following Business Environmental Risk (BER) was identified in the Phase I:

- Much of the subject property has been used for agricultural purposes sometime prior to 1937. It is recommended that prior to development, the subject property be tested for agricultural pesticides.

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

Scope of Work

WEC performed a Limited Phase II ESA to address the concerns identified in the Phase I. The scope of the Phase II ESA included the following investigative tasks:

- Underground Storage Tank – WEC reached out to Mr. Greg Simonian, property owner, to learn the exact location of the USTs identified in the Phase I. Once the locations of the USTs were identified, soil gas probes were installed at a depth of 5 feet below ground surface (bgs) utilizing direct push equipment at both locations. Soil gas samples were collected from each probe and analyzed for volatile organic compounds (VOCs) by EPA Method TO-15.

- Historical Agricultural Use – Shallow soil borings (beneath any existing vegetation) were hand augured in twelve locations across the property. Samples were composited by the laboratory according to their location, and analyzed for the presence and concentration of organochlorine, organophosphorus pesticides by EPA Method 8081 and chlorinated herbicides by EPA Method 8141. In addition, samples collected along the north and east property boundaries were analyzed for California Assessment Metals (CAM 17) by EPA Method 6010. Due to the presence of the adjoining rail-spur, samples collected along the northern property boundary were also analyzed for semi-volatile organic compounds (SVOCs) by EPA Method 8270.

FINDINGS OF THE INVESTIGATION

Underground Storage Tank

According to the Phase I, USTs were historically located at 1139 and 1183 South Armstrong Avenue. WEC reached out to Mr. Greg Simonian, property owner, regarding the exact location of the USTs. Mr. Simonian indicated that a UST was never associated with the address of 1139 South Armstrong Avenue, as reported in the Phase I, and that the USTs were installed at 1099 and 1183 South

Armstrong Avenue. Mr. Simonian marked the exact locations of the USTs on aerial photographs of 1099 and 1183 South Armstrong Avenue.

On August 16, 2024, soil gas probes were installed to a depth of 5 feet bgs utilizing direct push equipment (please refer to Figure 2 for locations). At each sampling location, SGPs were installed by driving a screened vapor probe tip and Teflon® lined, ¼-inch polyethylene tubing into the subsurface via hollow drive tubes. Once the probe had been driven to a depth of 5 feet, the drive tubes were detached from the vapor probe/tubing and removed from the hole. Immediately after the removal of the drive tubes, the annulus around the tubing was backfilled with hydrated granular bentonite. An "umbrella" just above the tip prevented the bentonite from entering the bottom of the open hole created by the drive tip and/or plugging the drive-tip screen. The tubing was capped and the SGP installation was allowed to rest prior to sampling.

The soil gas probes were sampled by WEC personnel on August 19, 2024. Soil gas probes were sampled in accordance with the Department of Toxic Substances Control (DTSC) *Advisory – Active Soil Gas Investigations*, July 2015 (Advisory). Prior to sampling, each soil gas probe was screened for VOCs using a handheld photoionization detector (PID). VOCs were not detected by the PID in either of the two probes. Prior to purging and sampling, a shut-in test was conducted to check for leaks in the sampling apparatus at each location. The shut-in test was performed by evacuating the line to a vacuum of 10 inches of water, sealing the entire system and watching the vacuum for approximately 5 minutes. No observable loss of vacuum was detected at either of the sampling locations.

Purging was then completed using an electric pump set at 200 cubic centimeters per minute (cc/min). A default of three purge volumes was purged as recommended by the Advisory. Each soil gas sample was then collected in a 1-Liter passivated stainless steel summa canister. Field sampling logs are included in Exhibit B. Isopropyl alcohol (Isopropanol) was used as a leak detection gas and was placed at the tubing-surface interface before sampling. Once collected, each summa canister was sealed, labeled, and shipped to the analytical laboratory under chain of custody protocol. Soil vapor samples were submitted to, and chemically analyzed by Enthalpy of Orange, California (Enthalpy) for the presence and concentration of VOCs using EPA Method TO-15. Results of analyses are summarized in Table 1 and a copy of the laboratory analytical report is included as Exhibit A.

Based on the results of analyses, concentrations of freon 113, acetone, carbon disulfide, isopropanol, 2-butanone, 4-methyl-2-pentanone, toluene, ethylbenzene, xylenes, and 1,2,4-trimethylbenzene were detected in the soil gas sample collected from 1099 South Armstrong Avenue (SGP-1-5). The soil gas sample collected from 1183 South Armstrong Avenue (SGP-2-5) reported concentrations of acetone, isopropanol, chloroform, carbon tetrachloride, toluene, and tetrachloroethene (PCE).

Although above the laboratory reporting limits, the concentrations detected of each of the compounds were below the 2019 Residential Land Use Environmental Screening Levels (ESLs), published by the San Francisco Regional Water Quality Control Board (RWQCB) with the exception

of PCE. The concentration of PCE detected in SGP-2-5 was reported at 22 ug/m^3. The Residential ESL for PCE is 15 ug/m^3.

Due to the reported concentration of PCE in the sample collected from SGP-2-5, two additional SGP (SGP-3-5 and SGP-4-5) were installed and sampled adjacent to SGP-2, in the southeastern portion of the Site, on September 10, 2024. Sample locations are depicted on Figure 2. The installation, purging, and sampling procedures used during the second sampling event were similar to those used during the August 19, 2024 sampling.

Based on the results of analyses, concentrations of freon 12, acetone, isopropanol, methylene chloride, 2-butanone, chloroform, 4-methyl-2-pentanone, toluene, and tetrachloroethene (PCE), were detected in the sample collected west of SGP-2-5. The sample to the north of SGP-2-5 contained concentrations of freon 12, acetone, isopropanol, 2-butanone, chloroform, 4-methyl-2-pentanone, and tetrachloroethene (PCE).

Although above the laboratory reporting limits, the concentrations detected during the second sampling event were below the ESLs, published by the RWQCB.

Historical Agricultural Use

On August 16, 2024, WEC personnel advanced 12 soil borings across the Site (S-1 through S-12). At each location, a hand auger was used to advance a shallow borehole to a depth of approximately one foot bgs. A relatively undisturbed soil sample was collected from the depth interval of 1 to 1½ feet bgs by driving a clean 2-inch diameter, 6-inch-long stainless-steel tube into the soil using a split spoon sampler and drive hammer assembly. The tube was retrieved, and the ends were immediately covered with Teflon™ film and capped. The samples were appropriately labeled and promptly placed in an ice chest cooled with synthetic ice. The samples were then delivered, under appropriate chain-of-custody (COC) protocol, to Enthalpy.

Along the northern property boundary, one sample (S-2-1) was analyzed as an individual discreet sample due to its proximity to a large stockpile of railroad ties. The remaining two samples (S-1-1 and S-3-1) collected along the northern property boundary were composited into one two-part composite (Comp #1). Samples S-2-1 and Comp#1 were analyzed for chlorinated herbicides, CAM 17 metals and SVOCs by EPA methods 8141, 6010, and 8270.

Six samples (S-4-1 through S-9-1), collected from the central and western portions of the Site, were composited into two, two-part composite samples (Comp #2 and Comp #3) and analyzed for organochlorine and organophosphorus pesticides by EPA Method 8081, and chlorinated herbicides by EPA methods 8141.

Samples collected near each of the former residences (S-10-1, S-11-1, and S-12-1) were composited into one, three-part composite (Comp #4) and analyzed for organochlorine and organophosphorus pesticides by EPA Method 8081, chlorinated herbicides by EPA methods 8141, and CAM 17 Metals by EPA Method 6010.

Samples submitted for CAM 17 metals analyses revealed the presence of arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Although above the laboratory

reporting limits, the concentrations detected were all below the 2019 Residential Land Use Environmental Screening Levels (ESLs), as published by the San Francisco Regional Water Quality Control Board (RWQCB) with the exception of arsenic.

Arsenic was detected in samples S-2-1, Comp #1, and Comp #4 at concentrations ranging from 2.1 to 4.0 milligrams per kilogram (mg/kg). The ESL for arsenic is 0.067 mg/kg. Although above the ESL, the concentrations detected are consistent with background arsenic concentrations typically found in California, specifically Fresno County. Volcanic rocks from the Sierra Nevada contribute to the large portion of the sediment found on the floor of the San Joaquin Valley (SJV). These rocks contain elevated concentrations of arsenic and are a source of background levels of arsenic in SJV soils.

Concentrations of the organochlorine pesticides dichlorodiphenyldichloroethene (DDE) and dichlorodiphenyltrichloroethane (DDT) were detected in the composited samples collected from the western portion of the Site (Comp #2) at 0.031 milligrams per kilogram (mg/kg) and 0.0056 mg/kg, respectively. Composited samples collected from the central portion of the Site (Comp #3) contained DDE at a concentration of 0.022 mg/kg. Composited samples collected from near the former residences in the eastern portion of the Site contained concentrations of dieldrin at 0.0092 mg/kg, DDE at 0.062 mg/kg, DDT at 0.075 mg/kg, and chlordane at 0.074 mg/kg. No other organochlorinated pesticides were detected. Although above the laboratory reporting limits, the concentrations detected were all below their respective residential ESLs.

No detectable concentrations of organophosphorus pesticides, SVOCs or herbicides were detected above the laboratory reporting limits in any of the samples submitted for analyses. A summary of detected analytes and respective residential ESLs are presented in Table 1 and a copy of the laboratory analytical reports are included as Exhibit A.

CONCLUSIONS

This Limited Phase II assessment was conducted to assess the possible presence of impacted soil and/or soil gas resulting from past or current use of the Site. Soil gas samples collected from the former UST locations revealed concentrations of freon 113, acetone, carbon disulfide, chloroform, carbon tetrachloride, PCE, 2-butanone, 4-methyl-2-pentanone, toluene, ethylbenzene, xylenes, and 1,2,4-trimethylbenzene to be present in soil gas. However, with the exception of PCE, the concentrations detected are all below their respective ESL. The concentration of PCE detected in SGP-2-5 was reported at 22 ug/m^3. The Residential ESL for PCE is 15 ug/m^3.

The residential ESL for PCE is extremely conservative and should not be confused with regulatory cleanup standards. The presence of PCE in excess of the ESL does not necessarily indicate that an adverse impact to human health or the environment has occurred, it simply indicates that an adverse risk does exist, and that additional investigation may be warranted.

Soil samples collected from within the upper 18 inches of soil along the northern and eastern property boundary contained concentrations of metals that are consistent with normal background levels in the area of the Site. Soil samples collected from the central, eastern, and western portions of the Site contained low levels of organochlorine pesticides, however, the concentrations detected were all below their respective residential ESLs. No detectable concentrations of

organophosphorus pesticides, SVOCs, or herbicides were detected above the laboratory reporting limits in any of the samples submitted for analysis.

RECOMMENDATIONS

WEC recommends additional soil gas sampling be conducted near the former southeastern UST once over-excavation, site grading, and other earthwork activities have been completed to confirm the low-level detections of PCE do not pose a vapor intrusion threat to future residential dwellings or if mitigation measures, such as sub-slab vapor barriers, should be used during construction.

Although not part of this investigation, WEC personnel noted a large stockpile of railroad ties in the north central portion of the Site. A soil sample collected from this area revealed no detectable concentrations of chemicals associated with wood treatments, however, railroad ties are considered a hazardous waste and require special handling and disposal. Therefore, WEC recommends contacting San Joaquin Valley Railroad and requesting that any railroad ties located on the Site be properly removed.

LIMITATIONS

This report has been prepared for Bonadelle using the standard level of care ordinarily exercised by other consultants practicing in the same discipline and locale at the time the services were performed. WEC's conclusions are based on a limited number of samples and may not represent the condition of the entire Site. No warranties, either express or implied, are provided.

WEC appreciates the opportunity to work with you on this project. Please contact the WEC office at (559) 797-4181 if you have any questions or comments.

Regards,
Willbanks Environmental Consulting, Inc.

Charles Barsamian
Engineering Technician

Noelle Willbanks, P.E.
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
NOELLE A. WILLBANKS
No. C 67593
CIVIL
STATE OF CALIFORNIA

Tables

Table 1 – Results of Analyses of Detected Analytes in Soil and Soil Gas Samples

Figures

Figure 1 – Site Vicinity Map
Figure 2 – Site Map

Attachments

Exhibit A – Laboratory Analytical Report
Exhibit B – Soil Vapor Sampling Field Forms

Table 1
Summary of Results of Detected Analytes in Soil and Soil Gas Samples
Former Simonian Estates
1099, 1139 and 1183 South Armstrong Avenue, Fresno, California

Analyte	S-2-1	Comp #1	Comp #2	Comp #3	Comp #4	ESLs
CAM 17 Metals (EPA Method 6010) Concentrations reported in mg/kg						
Arsenic	2.1	3.1	NA	NA	4.0	0.067
Barium	71	68	NA	NA	65	*15,000*
Chromium	17	18	NA	NA	12	*160*
Cobalt	5.2	5.4	NA	NA	4.4	420
Copper	6.8	8.0	NA	NA	6.3	*3,100*
Lead	3.1	7.2	NA	NA	4.1	82
Nickel	10	11	NA	NA	7.7	15,000
Vanadium	33	36	NA	NA	31	*5,800*
Zinc	18	24	NA	NA	31	*23,000*
Organochlorinated Pesticides (EPA Method 8081A) Concentratons reported in mg/kg						
4,4'-DDT	NA	NA	0.031	ND (<0.0051)	0.075	1.9
4,4'-DDE	NA	NA	0.0056	0.022	0.062	1.8
Dieldrin	NA	NA	ND (<0.0051)	ND (<0.0051)	0.0092	0.037
Chlordane	NA	NA	ND (<0.051)	ND (<0.051)	0.074	0.48
Soil Gas Analysis (EPA Method TO-15) Concentrations reported in ug/m ^{3}						
	V-SGP-1-5	**V-SGP-2-5**	**V-SGP-3-5**	**V-SGP-4-5**	**ESLs**	
Freon 12	ND (<1.5)	ND (<1.5)	1.8	1.7	NE	
Freon 113	2.7	ND (<2.3)	ND (<2.3)	ND (<2.3)	NE	
Acetone	110	15	130	84	*1,100,000*	
Carbon Disulfide	1.2	ND (<0.93)	ND (<0.93)	ND (<0.93)	NE	
Methylene Chloride	ND (<1.0)	ND (<1.0)	5.3	ND (<1.0)	34	
Chloroform	ND (<1.5)	1.5	5.2	5.4	NE	
Carbon Tetrachloride	ND (<1.9)	2.4	ND (<1.9)	1.9	16	
2-Butanone	15	ND (<4.4)	26	16	NE	
4-Methyl-2-Pentanone	5.8	ND (<1.2)	2.3	1.3	NE	
Toluene	5.2	24	1.3	ND (<1.1)	*10,000*	
Tetrachloroethene	ND (<1.5)	22	2.9	2.5	15	
Ethylbenzene	1.4	ND (<1.3)	ND (<1.3)	ND (<1.3)	37	
1,2,4-Trimethylbenzene	4.9	ND (<1.5)	ND (<1.5)	ND (<1.5)	NE	
Xylenes	7.2	ND (<1.3)	ND (<1.3)	ND (<1.3)	*3,500*	
Leak Detection Compound Concentrations reported in ug/m ^{3}						
Isopropanol (IPA)	11	6.1	11	8.1	NE	

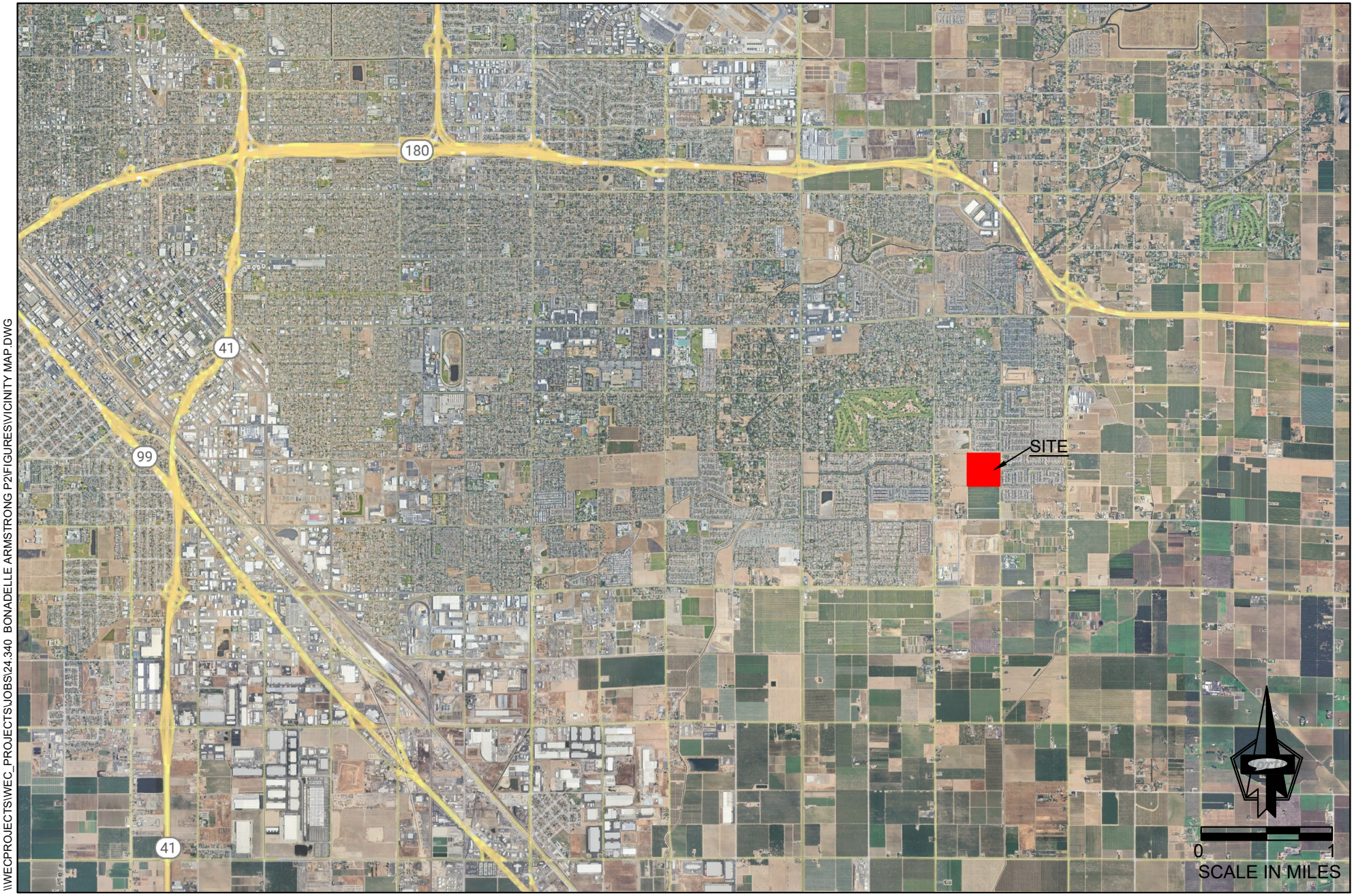
No Analytes were detected for SVOCs, OPPs, herbicides

< = Less than the specified laboratory reporting limit

ESLs = Environmental Screening Levels, San Francisco Bay Regional Water Quality Control Board, (2019, Rev. 2) for Residential Cancer Risk and *Non-Cancer Risk where Cancer Risk is Not Established*), Table S-1.

NE = Not Established

NA = Not analyzed for this constituent



\\WECPROJECTS\WEC_PROJECTS\JOBS\24.340 BONADELLE ARMSTRONG P2\FIGURES\VICINITY MAP.DWG

WILLBANKS
ENVIRONMENTAL CONSULTING, INC

VICINITY MAP

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
BONADELLE DEVELOPMENT CORPORATION
1099 S ARMSTRONG, FRESNO, CALIFORNIA

24.340 HD 9/5/2024 2:40 PM

FIGURE 1

\\WECPROJECTS\WEC_PROJECTS\JOBS\24.340 BONADELLE ARMSTRONG P2\FIGURES\SITE MAP.DWG

WILLBANKS
ENVIRONMENTAL CONSULTING, INC

LEGEND

- SOIL GAS SAMPLE LOCATIONS
- SOIL SAMPLE LOCATIONS
- SITE BOUNDARY

SITE MAP

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
BONADELLE DEVELOPMENT CORPORATION
1099 S ARMSTRONG, FRESNO, CALIFORNIA

24.340 HD 9/5/2024 2:36 PM

FIGURE 2

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number	:	514393
Report Level	:	II
Report Date	:	09/04/2024

Analytical Report *prepared for:*

Charles Barsamian
Willbanks Environmental Consulting
8413 N. Millbrook Ave, Ste 110
Fresno, CA 93720

Project: BONADELLE ARMSTRONG - 23.340

Authorized for release by:

Richard Villafania, Project Manager
richard.villafania@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

ENTHALPY ANALYTICAL

Sample Summary

Charles Barsamian Willbanks Environmental Consulting 8413 N. Millbrook Ave, Ste 110 Fresno, CA 93720	Lab Job #:	514393
	Project No:	BONADELLE ARMSTRONG
	Location:	23.340
	Date Received:	08/20/24

Sample ID	Lab ID	Collected	Matrix
S-1-1	514393-001	08/16/24 10:25	Soil
S-2-1	514393-002	08/16/24 10:39	Soil
S-3-1	514393-003	08/16/24 10:55	Soil
S-4-1	514393-004	08/16/24 11:14	Soil
S-5-1	514393-005	08/16/24 11:30	Soil
S-6-1	514393-006	08/16/24 11:43	Soil
S-7-1	514393-007	08/16/24 12:02	Soil
S-8-1	514393-008	08/16/24 12:22	Soil
S-9-1	514393-009	08/16/24 12:30	Soil
S-10-1	514393-010	08/16/24 12:53	Soil
S-11-1	514393-011	08/16/24 13:04	Soil
S-12-1	514393-012	08/16/24 13:13	Soil
COMP#1 (S-1, S-3)	514393-013	08/20/24 00:00	Soil
COMP#2 (S-4,S-5,S-6)	514393-014	08/20/24 00:00	Soil
COMP#3 (S-7,S-8,S-9)	514393-015	08/20/24 00:00	Soil
COMP#4 (S-10,S-11,S-12)	514393-016	08/20/24 00:00	Soil

Case Narrative

Willbanks Environmental Consulting 8413 N. Millbrook Ave, Ste 110 Fresno, CA 93720 Charles Barsamian	Lab Job Number: 514393 Project No: BONADELLE ARMSTRONG Location: 23.340 Date Received: 08/20/24

This data package contains sample and QC results for three three-point soil composites, one soil sample, and one two-point soil composite, requested for the above referenced project on 08/20/24. The samples were received cold and intact.

Semivolatile Organics by GC/MS (EPA 8270C):
No analytical problems were encountered.

Pesticides (EPA 8081A):
No analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

- High responses were observed for beryllium and thallium in the ICV analyzed 08/26/24 15:01; affected data was qualified with "b".
- High responses were observed for beryllium and thallium in the CCV analyzed 08/26/24 16:11; affected data was qualified with "b".
- Low recoveries were observed for antimony in the MS/MSD for batch 348662; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High recoveries were observed for barium, copper, and lead; the LCS was within limits. High RPD was observed for barium and lead.
- No other analytical problems were encountered.

Organophosphorus Pesticides (EPA 8141A):
McCampbell Analytical, Inc. in Pittsburg, CA performed the analysis (see sublab report section for certifications). Please see the McCampbell Analytical, Inc. case narrative.

8151A Chlorinated Herbicides (EPA 8151A):
McCampbell Analytical, Inc. in Pittsburg, CA performed the analysis (NELAP certified). Please see the McCampbell Analytical, Inc. case narrative.

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: S14393

Page: 1 of 2

Turn Around Time (rush by advanced notice only)

Standard:	X	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Matrix: A = Air S = Soil/Solid
W = Water DW = Drinking Wate SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3
4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp:
FR02 CF+0.2
25.8 c 26.0
KC PGL
(lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Willbanks Environmental Consulting	Name:	Bonadelle Armstrong
Report To:	Charles Barsamian	Number:	24.340
Email:	charles@wecenvironmental.com	P.O. #:	24.340
Address:	8413 N Millbrook Avenue, Suite 110	Address:	1099 South Armstorng Avenue
	Fresno, CA 93720		Fresno, CA
Phone:	559-797-4181	Global ID:	N/A
Fax:		Sampled By:	Charles Barsamian/Hannah DeWall

Analysis Request

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Organochlorinated Pesticides (8081B)	Organophosphorus Pesticides (614)	Chlorinated Herbicides (8151A)	CAM 17 (6010)	SVOCs (8270)	Test Instructions / Comments
1	S-1-1	08/16/24	10:25 AM	S	2"x6" S.S. tube	N/A			X	X	X	
2	S-2-1	08/16/24	10:39 AM	S	2"x6" S.S. tube	N/A			X	X	X	comp #1 (S-1, S-2, S-3)
3	S-3-1	08/16/24	10:55 AM	S	2"x6" S.S. tube	N/A			X	X	X	
4	S-4-1	08/16/24	11:14 AM	S	2"x6" S.S. tube	N/A	X	X	X			
5	S-5-1	08/16/24	11:30 AM	S	2"x6" S.S. tube	N/A	X	X	X			comp #2 (S-4, S-5, S-6)
6	S-6-1	08/16/24	11:43 AM	S	2"x6" S.S. tube	N/A	X	X	X			
7	S-7-1	08/16/24	12:02 PM	S	2"x6" S.S. tube	N/A	X	X	X			
8	S-8-1	08/16/24	12:22 PM	S	2"x6" S.S. tube	N/A	X	X	X			comp #3 (S-7, S-8, S-9)
9	S-9-1	08/16/24	12:30 PM	S	2"x6" S.S. tube	N/A	X	X	X			
10	S-10-1	08/16/24	12:53 PM	S	2"x6" S.S. tube	N/A	X	X	X	X		comp #4 (S-10, S-11, S-12)

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Charles Barsamian	WEC / Eng. Tech	8/16/24 4:00 pm
1 Received By:	[signature]	G Kim	EA	11:20 ~~8/19/24~~
2 Relinquished By:				8/20/24
2 Received By:				
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 514393

Page: 2 of 2

Turn Around Time (rush by advanced notice only)					
Standard:	X	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange
931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

Matrix: A = Air S = Soil/Solid
W = Water DW = Drinking Wate SD = Sediment
PP = Pure Product SEA = Sea Water
SW = Swab T = Tissue WP = Wipe O = Other

Preservatives:
1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3
4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp:
(lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Willbanks Environmental Consulting	Name:	Bonadelle Armstrong
Report To:	Charles Barsamian	Number:	24.340
Email:	charles@wecenvironmental.com	P.O. #:	24.340
Address:	8413 N Millbrook Avenue, Suite 110	Address:	1099 South Armstorng Avenue
	Fresno, CA 93720		Fresno, CA
Phone:	559-797-4181	Global ID:	N/A
Fax:		Sampled By:	Charles Barsamian/Hannah DeWall

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Organochlorinated Pesticides (8081B)	Organophosphorus Pesticides (614)	Chlorinated Herbicides (8151A)	CAM 17 (6010)	SVOCs (8270)						Test Instructions / Comments
1	S-11-1	08/16/24	1:04 PM	S	2"x6" S.S. tube	N/A	X	X	X	X							Comp #4 (S-10, S-11, S-12)
2	S-12-1	08/16/24	1:13 PM	S	2"x6" S.S. tube	N/A	X	X	X	X							
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		CHARLES BARSAMIAN	WEC / ENL. TECH	
1 Received By:		G Klim		11:20 8/19/24
2 Relinquished By:				8/20/24
2 Received By:				
3 Relinquished By:				
3 Received By:				

SAMPLE RECEIPT CHECKLIST

Section 1: General Info

Date Received: 8/20/24 WO# 514393 Client: Willbanks Environmental Consulting

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☑ No

Custody seals intact on arrival? ☑ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 8/20/24 By (initials) 8/20/24 Type of ice used : ☐ Wet ☑ Blue/Gel ☐ None

■ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: IR02 CF: +0.2

Cooler Temp (°C) #1: 25.8 / 26.0 #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ■ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ■ **No air samples submitted (skip 3c)**

☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	x		
2) Is the sampler's name present on the CoC?	x		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	x		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)	x		
5) Were all of, and only, the correct samples received?	x		
6) Are sample labels present, legible, and in agreement with the CoC?		x	
7) Does the container count match the CoC?	x		
8) Was sufficient sample volume / mass received for the analyses requested?	x		
9) Were samples received in proper containers for the analyses requested?	x		
10) Were samples received with > 1/2 holding time remaining?	x		
11) Are samples properly preserved as indicated by CoC / labels?	x		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			x
13) Are VOA vials free from headspace/bubbles > 6mm?			x

Section 5: Explanations / Comments ☐ **PM notified**

4.6: Sample 012: The label was distroyed in transit, but we were able to match by process of elimination.

Date Logged 8/20/24 **By (print)** KHH **(sign)** [signature] for KHH

Date Labeled 8/20/24 **By (print)** GCK **(sign)** [signature]

ENTHALPY ANALYTICAL

Analysis Results for 514393

Charles Barsamian
Willbanks Environmental Consulting
8413 N. Millbrook Ave, Ste 110
Fresno, CA 93720

Lab Job #: 514393
Project No: BONADELLE ARMSTRONG
Location: 23.340
Date Received: 08/20/24

Sample ID: S-2-1 **Lab ID: 514393-002** **Collected: 08/16/24 10:39**
Matrix: Soil

514393-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.95	348662	08/26/24	08/26/24	CAP
Arsenic	**2.1**		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Barium	**71**		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Beryllium	ND		mg/Kg	0.48	0.95	348662	08/26/24	08/26/24	CAP
Cadmium	ND		mg/Kg	0.48	0.95	348662	08/26/24	08/26/24	CAP
Chromium	**17**		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Cobalt	**5.2**		mg/Kg	0.48	0.95	348662	08/26/24	08/26/24	CAP
Copper	**6.8**		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Lead	**3.1**		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Molybdenum	ND		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Nickel	**10**		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Selenium	ND		mg/Kg	2.9	0.95	348662	08/26/24	08/26/24	CAP
Silver	ND		mg/Kg	0.48	0.95	348662	08/26/24	08/26/24	CAP
Thallium	ND		mg/Kg	2.9	0.95	348662	08/26/24	08/26/24	CAP
Vanadium	**33**		mg/Kg	0.95	0.95	348662	08/26/24	08/26/24	CAP
Zinc	**18**		mg/Kg	4.8	0.95	348662	08/26/24	08/26/24	CAP
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	348395	08/22/24	08/22/24	MLL
Method: EPA 8270C Prep Method: EPA 3546									
Carbazole	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1-Methylnaphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Pyridine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
N-Nitrosodimethylamine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Phenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Aniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
bis(2-Chloroethyl)ether	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
2-Chlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,3-Dichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,4-Dichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzyl alcohol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,2-Dichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Methylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
bis(2-Chloroisopropyl) ether	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
3-,4-Methylphenol	ND		mg/Kg	0.40	1	348491	08/23/24	08/25/24	ZFA
N-Nitroso-di-n-propylamine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachloroethane	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Nitrobenzene	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Isophorone	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Nitrophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514393

514393-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,4-Dimethylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzoic acid	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
bis(2-Chloroethoxy)methane	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4-Dichlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,2,4-Trichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Naphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Chloroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachlorobutadiene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Chloro-3-methylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Methylnaphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachlorocyclopentadiene	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
2,4,6-Trichlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4,5-Trichlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Chloronaphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Nitroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Dimethylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Acenaphthylene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,6-Dinitrotoluene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
3-Nitroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Acenaphthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4-Dinitrophenol	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
4-Nitrophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Dibenzofuran	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4-Dinitrotoluene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Diethylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Fluorene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Chlorophenyl-phenylether	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Nitroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4,6-Dinitro-2-methylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
N-Nitrosodiphenylamine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,2-diphenylhydrazine (as azobenzene)	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Bromophenyl-phenylether	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Pentachlorophenol	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Phenanthrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Anthracene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Di-n-butylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Fluoranthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzidine	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Pyrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Butylbenzylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
3,3'-Dichlorobenzidine	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Benzo(a)anthracene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Chrysene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
bis(2-Ethylhexyl)phthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Di-n-octylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzo(b)fluoranthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzo(k)fluoranthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzo(a)pyrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Indeno(1,2,3-cd)pyrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Dibenz(a,h)anthracene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514393

514393-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Benzo(g,h,i)perylene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Surrogates				**Limits**					
2-Fluorophenol	65%		%REC	29-120	1	348491	08/23/24	08/25/24	ZFA
Phenol-d6	74%		%REC	30-120	1	348491	08/23/24	08/25/24	ZFA
2,4,6-Tribromophenol	61%		%REC	32-120	1	348491	08/23/24	08/25/24	ZFA
Nitrobenzene-d5	85%		%REC	33-120	1	348491	08/23/24	08/25/24	ZFA
2-Fluorobiphenyl	90%		%REC	39-120	1	348491	08/23/24	08/25/24	ZFA
Terphenyl-d14	77%		%REC	44-125	1	348491	08/23/24	08/25/24	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514393

Sample ID: COMP#1 (S-1, S-3)	Lab ID: 514393-013	Collected: 08/20/24
	Matrix: Soil	

514393-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	0.99	348662	08/26/24	08/26/24	CAP
Arsenic	**3.1**		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Barium	**68**		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Beryllium	ND		mg/Kg	0.50	0.99	348662	08/26/24	08/26/24	CAP
Cadmium	ND		mg/Kg	0.50	0.99	348662	08/26/24	08/26/24	CAP
Chromium	**18**		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Cobalt	**5.4**		mg/Kg	0.50	0.99	348662	08/26/24	08/26/24	CAP
Copper	**8.0**		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Lead	**7.2**		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Molybdenum	ND		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Nickel	**11**		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Selenium	ND		mg/Kg	3.0	0.99	348662	08/26/24	08/26/24	CAP
Silver	ND		mg/Kg	0.50	0.99	348662	08/26/24	08/26/24	CAP
Thallium	ND		mg/Kg	3.0	0.99	348662	08/26/24	08/26/24	CAP
Vanadium	**36**		mg/Kg	0.99	0.99	348662	08/26/24	08/26/24	CAP
Zinc	**24**		mg/Kg	5.0	0.99	348662	08/26/24	08/26/24	CAP
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.15	1.1	348395	08/22/24	08/22/24	MLL
Method: EPA 8270C Prep Method: EPA 3546									
Carbazole	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1-Methylnaphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Pyridine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
N-Nitrosodimethylamine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Phenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Aniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
bis(2-Chloroethyl)ether	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
2-Chlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,3-Dichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,4-Dichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzyl alcohol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,2-Dichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Methylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
bis(2-Chloroisopropyl) ether	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
3-,4-Methylphenol	ND		mg/Kg	0.40	1	348491	08/23/24	08/25/24	ZFA
N-Nitroso-di-n-propylamine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachloroethane	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Nitrobenzene	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Isophorone	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Nitrophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4-Dimethylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzoic acid	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
bis(2-Chloroethoxy)methane	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4-Dichlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA

Results for any subcontracted analyses are not included in this section.

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Analysis Results for 514393

514393-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
1,2,4-Trichlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Naphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Chloroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachlorobutadiene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Chloro-3-methylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Methylnaphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachlorocyclopentadiene	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
2,4,6-Trichlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4,5-Trichlorophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Chloronaphthalene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2-Nitroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Dimethylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Acenaphthylene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,6-Dinitrotoluene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
3-Nitroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Acenaphthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4-Dinitrophenol	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
4-Nitrophenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Dibenzofuran	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
2,4-Dinitrotoluene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Diethylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Fluorene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Chlorophenyl-phenylether	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Nitroaniline	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4,6-Dinitro-2-methylphenol	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
N-Nitrosodiphenylamine	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
1,2-diphenylhydrazine (as azobenzene)	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
4-Bromophenyl-phenylether	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Hexachlorobenzene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Pentachlorophenol	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Phenanthrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Anthracene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Di-n-butylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Fluoranthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzidine	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Pyrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Butylbenzylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
3,3'-Dichlorobenzidine	ND		mg/Kg	1.2	1	348491	08/23/24	08/25/24	ZFA
Benzo(a)anthracene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Chrysene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
bis(2-Ethylhexyl)phthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Di-n-octylphthalate	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzo(b)fluoranthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzo(k)fluoranthene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzo(a)pyrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Indeno(1,2,3-cd)pyrene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Dibenz(a,h)anthracene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Benzo(g,h,i)perylene	ND		mg/Kg	0.25	1	348491	08/23/24	08/25/24	ZFA
Surrogates				**Limits**					
2-Fluorophenol	74%		%REC	29-120	1	348491	08/23/24	08/25/24	ZFA
Phenol-d6	80%		%REC	30-120	1	348491	08/23/24	08/25/24	ZFA
2,4,6-Tribromophenol	76%		%REC	32-120	1	348491	08/23/24	08/25/24	ZFA

Results for any subcontracted analyses are not included in this section.

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Analysis Results for 514393

514393-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Nitrobenzene-d5	89%		%REC	33-120	1	348491	08/23/24	08/25/24	ZFA
2-Fluorobiphenyl	93%		%REC	39-120	1	348491	08/23/24	08/25/24	ZFA
Terphenyl-d14	85%		%REC	44-125	1	348491	08/23/24	08/25/24	ZFA

Sample ID: COMP#2 (S-4,S-5,S-6) **Lab ID: 514393-014** **Collected: 08/20/24**
Matrix: Soil

514393-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8081A Prep Method: EPA 3546									
alpha-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
beta-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
gamma-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
delta-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Heptachlor	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Aldrin	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Heptachlor epoxide	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endosulfan I	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Dieldrin	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
4,4'-DDE	**0.031**	#	mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endrin	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endosulfan II	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endosulfan sulfate	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
4,4'-DDD	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endrin aldehyde	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endrin ketone	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
4,4'-DDT	**0.0056**	#	mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Methoxychlor	ND		mg/Kg	0.010	1	348641	08/26/24	08/27/24	MES
Toxaphene	ND		mg/Kg	0.10	1	348641	08/26/24	08/27/24	MES
Chlordane (Technical)	ND		mg/Kg	0.051	1	348641	08/26/24	08/27/24	MES
Surrogates				**Limits**					
TCMX	77%		%REC	23-120	1	348641	08/26/24	08/27/24	MES
Decachlorobiphenyl	67%		%REC	24-120	1	348641	08/26/24	08/27/24	MES

Results for any subcontracted analyses are not included in this section.

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Analysis Results for 514393

Sample ID: COMP#3 (S-7,S-8,S-9)	Lab ID: 514393-015	Collected: 08/20/24
	Matrix: Soil	

514393-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8081A Prep Method: EPA 3546									
alpha-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
beta-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
gamma-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
delta-BHC	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Heptachlor	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Aldrin	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Heptachlor epoxide	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endosulfan I	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Dieldrin	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
4,4'-DDE	**0.022**	#	mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endrin	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endosulfan II	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endosulfan sulfate	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
4,4'-DDD	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endrin aldehyde	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Endrin ketone	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
4,4'-DDT	ND		mg/Kg	0.0051	1	348641	08/26/24	08/27/24	MES
Methoxychlor	ND		mg/Kg	0.010	1	348641	08/26/24	08/27/24	MES
Toxaphene	ND		mg/Kg	0.10	1	348641	08/26/24	08/27/24	MES
Chlordane (Technical)	ND		mg/Kg	0.051	1	348641	08/26/24	08/27/24	MES
Surrogates				**Limits**					
TCMX	71%		%REC	23-120	1	348641	08/26/24	08/27/24	MES
Decachlorobiphenyl	61%		%REC	24-120	1	348641	08/26/24	08/27/24	MES

Results for any subcontracted analyses are not included in this section.

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Analysis Results for 514393

Sample ID:	Lab ID: 514393-016	Collected: 08/20/24
COMP#4 (S-10,S-11,S-12)	Matrix: Soil	

514393-016 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	1	348662	08/26/24	08/26/24	CAP
Arsenic	**4.0**		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Barium	**65**		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Beryllium	ND		mg/Kg	0.50	1	348662	08/26/24	08/26/24	CAP
Cadmium	ND		mg/Kg	0.50	1	348662	08/26/24	08/26/24	CAP
Chromium	**12**		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Cobalt	**4.4**		mg/Kg	0.50	1	348662	08/26/24	08/26/24	CAP
Copper	**6.3**		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Lead	**4.1**		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Molybdenum	ND		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Nickel	**7.7**		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Selenium	ND		mg/Kg	3.0	1	348662	08/26/24	08/26/24	CAP
Silver	ND		mg/Kg	0.50	1	348662	08/26/24	08/26/24	CAP
Thallium	ND		mg/Kg	3.0	1	348662	08/26/24	08/26/24	CAP
Vanadium	**31**		mg/Kg	1.0	1	348662	08/26/24	08/26/24	CAP
Zinc	**31**		mg/Kg	5.0	1	348662	08/26/24	08/26/24	CAP
Method: EPA 7471A Prep Method: METHOD									
Mercury	ND		mg/Kg	0.16	1.1	348395	08/22/24	08/22/24	MLL
Method: EPA 8081A Prep Method: EPA 3546									
alpha-BHC	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
beta-BHC	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
gamma-BHC	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
delta-BHC	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Heptachlor	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Aldrin	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Heptachlor epoxide	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Endosulfan I	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Dieldrin	**0.0092**	#	mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
4,4'-DDE	**0.062**	#	mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Endrin	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Endosulfan II	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Endosulfan sulfate	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
4,4'-DDD	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Endrin aldehyde	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Endrin ketone	ND		mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
4,4'-DDT	**0.075**	#	mg/Kg	0.0050	1	348641	08/26/24	08/27/24	MES
Methoxychlor	ND		mg/Kg	0.010	1	348641	08/26/24	08/27/24	MES
Toxaphene	ND		mg/Kg	0.10	1	348641	08/26/24	08/27/24	MES
Chlordane (Technical)	**0.074**		mg/Kg	0.050	1	348641	08/26/24	08/27/24	MES
Surrogates				**Limits**					
TCMX	72%		%REC	23-120	1	348641	08/26/24	08/27/24	MES
Decachlorobiphenyl	65%		%REC	24-120	1	348641	08/26/24	08/27/24	MES

Results for any subcontracted analyses are not included in this section.

Analysis Results for 514393

#	CCV drift outside limits; average CCV drift within limits per method requirements
ND	Not Detected

Results for any subcontracted analyses are not included in this section.

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Batch QC

Type:	Blank	Lab ID:	QC1181235	Batch:	348662
Matrix:	Soil	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1181235 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Antimony	ND		mg/Kg	3.0	08/26/24	08/26/24
Arsenic	ND		mg/Kg	1.0	08/26/24	08/26/24
Barium	ND		mg/Kg	1.0	08/26/24	08/26/24
Beryllium	ND		mg/Kg	0.50	08/26/24	08/26/24
Cadmium	ND		mg/Kg	0.50	08/26/24	08/26/24
Chromium	ND		mg/Kg	1.0	08/26/24	08/26/24
Cobalt	ND		mg/Kg	0.50	08/26/24	08/26/24
Copper	ND		mg/Kg	1.0	08/26/24	08/26/24
Lead	ND		mg/Kg	1.0	08/26/24	08/26/24
Molybdenum	ND		mg/Kg	1.0	08/26/24	08/26/24
Nickel	ND		mg/Kg	1.0	08/26/24	08/26/24
Selenium	ND		mg/Kg	3.0	08/26/24	08/26/24
Silver	ND		mg/Kg	0.50	08/26/24	08/26/24
Thallium	ND		mg/Kg	3.0	08/26/24	08/26/24
Vanadium	ND		mg/Kg	1.0	08/26/24	08/26/24
Zinc	ND		mg/Kg	5.0	08/26/24	08/26/24

Type:	Lab Control Sample	Lab ID:	QC1181236	Batch:	348662
Matrix:	Soil	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1181236 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	93.72	100.0	mg/Kg	94%		80-120
Arsenic	102.2	100.0	mg/Kg	102%		80-120
Barium	107.2	100.0	mg/Kg	107%		80-120
Beryllium	117.2	100.0	mg/Kg	117%	b	80-120
Cadmium	105.9	100.0	mg/Kg	106%		80-120
Chromium	102.7	100.0	mg/Kg	103%		80-120
Cobalt	110.1	100.0	mg/Kg	110%		80-120
Copper	103.3	100.0	mg/Kg	103%		80-120
Lead	106.7	100.0	mg/Kg	107%		80-120
Molybdenum	103.4	100.0	mg/Kg	103%		80-120
Nickel	105.5	100.0	mg/Kg	106%		80-120
Selenium	97.48	100.0	mg/Kg	97%		80-120
Silver	49.58	50.00	mg/Kg	99%		80-120
Thallium	114.3	100.0	mg/Kg	114%	b	80-120
Vanadium	103.4	100.0	mg/Kg	103%		80-120
Zinc	97.22	100.0	mg/Kg	97%		80-120

ENTHALPY ANALYTICAL

Batch QC

Type:	Matrix Spike	Lab ID:	QC1181237	Batch:	348662
Matrix (Source ID):	Soil (514470-025)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1181237 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	35.15	ND	95.24	mg/Kg	37%	*	75-125	0.95
Arsenic	128.3	28.59	95.24	mg/Kg	105%		75-125	0.95
Barium	318.0	128.5	95.24	mg/Kg	199%	*	75-125	0.95
Beryllium	114.2	0.4071	95.24	mg/Kg	119%	b	75-125	0.95
Cadmium	100.5	0.2293	95.24	mg/Kg	105%		75-125	0.95
Chromium	140.8	38.87	95.24	mg/Kg	107%		75-125	0.95
Cobalt	115.7	11.60	95.24	mg/Kg	109%		75-125	0.95
Copper	159.6	39.16	95.24	mg/Kg	126%	*	75-125	0.95
Lead	171.2	44.55	95.24	mg/Kg	133%	*	75-125	0.95
Molybdenum	96.41	ND	95.24	mg/Kg	101%		75-125	0.95
Nickel	138.9	33.64	95.24	mg/Kg	110%		75-125	0.95
Selenium	93.90	0.9640	95.24	mg/Kg	98%		75-125	0.95
Silver	49.28	ND	47.62	mg/Kg	103%		75-125	0.95
Thallium	109.0	ND	95.24	mg/Kg	114%	b	75-125	0.95
Vanadium	162.5	57.92	95.24	mg/Kg	110%		75-125	0.95
Zinc	171.5	63.91	95.24	mg/Kg	113%		75-125	0.95

Type:	Matrix Spike Duplicate	Lab ID:	QC1181238	Batch:	348662
Matrix (Source ID):	Soil (514470-025)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1181238 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Antimony	38.81	ND	98.04	mg/Kg	40%	*	75-125	7	41	0.98
Arsenic	137.8	28.59	98.04	mg/Kg	111%		75-125	5	35	0.98
Barium	252.8	128.5	98.04	mg/Kg	127%	*	75-125	24*	20	0.98
Beryllium	117.4	0.4071	98.04	mg/Kg	119%	b	75-125	0	20	0.98
Cadmium	103.5	0.2293	98.04	mg/Kg	105%		75-125	0	20	0.98
Chromium	142.9	38.87	98.04	mg/Kg	106%		75-125	1	20	0.98
Cobalt	118.6	11.60	98.04	mg/Kg	109%		75-125	0	20	0.98
Copper	168.5	39.16	98.04	mg/Kg	132%	*	75-125	3	20	0.98
Lead	282.9	44.55	98.04	mg/Kg	243%	*	75-125	47*	20	0.98
Molybdenum	99.25	ND	98.04	mg/Kg	101%		75-125	0	20	0.98
Nickel	142.5	33.64	98.04	mg/Kg	111%		75-125	0	20	0.98
Selenium	96.97	0.9640	98.04	mg/Kg	98%		75-125	0	20	0.98
Silver	50.74	ND	49.02	mg/Kg	104%		75-125	0	20	0.98
Thallium	111.9	ND	98.04	mg/Kg	114%	b	75-125	0	20	0.98
Vanadium	164.6	57.92	98.04	mg/Kg	109%		75-125	1	20	0.98
Zinc	176.7	63.91	98.04	mg/Kg	115%		75-125	1	20	0.98

ENTHALPY ANALYTICAL

Batch QC

Type:	Post Digest Spike	Lab ID:	QC1181239	Batch:	348662
Matrix (Source ID):	Soil (514470-025)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1181239 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	99.13	ND	100.0	mg/Kg	99%		75-125	1
Arsenic	128.6	28.59	100.0	mg/Kg	100%		75-125	1
Barium	228.2	128.5	100.0	mg/Kg	100%		75-125	1
Beryllium	115.1	0.4071	100.0	mg/Kg	115%	b	75-125	1
Cadmium	101.6	0.2293	100.0	mg/Kg	101%		75-125	1
Chromium	137.3	38.87	100.0	mg/Kg	98%		75-125	1
Cobalt	116.3	11.60	100.0	mg/Kg	105%		75-125	1
Copper	146.1	39.16	100.0	mg/Kg	107%		75-125	1
Lead	146.3	44.55	100.0	mg/Kg	102%		75-125	1
Molybdenum	104.3	ND	100.0	mg/Kg	104%		75-125	1
Nickel	134.8	33.64	100.0	mg/Kg	101%		75-125	1
Selenium	98.05	0.9640	100.0	mg/Kg	97%		75-125	1
Silver	49.87	ND	50.00	mg/Kg	100%		75-125	1
Thallium	111.6	ND	100.0	mg/Kg	112%	b	75-125	1
Vanadium	158.5	57.92	100.0	mg/Kg	101%		75-125	1
Zinc	154.3	63.91	100.0	mg/Kg	90%		75-125	1

Type:	Blank	Lab ID:	QC1180320	Batch:	348395
Matrix:	Miscell.	Method:	EPA 7471A	Prep Method:	METHOD

QC1180320 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	08/22/24	08/22/24

Type:	Lab Control Sample	Lab ID:	QC1180321	Batch:	348395
Matrix:	Miscell.	Method:	EPA 7471A	Prep Method:	METHOD

QC1180321 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8682	0.8333	mg/Kg	104%		80-120

Type:	Matrix Spike	Lab ID:	QC1180322	Batch:	348395
Matrix (Source ID):	Soil (514397-001)	Method:	EPA 7471A	Prep Method:	METHOD

QC1180322 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	1.130	0.1012	0.9615	mg/Kg	107%		75-125	1.2

Type:	Matrix Spike Duplicate	Lab ID:	QC1180323	Batch:	348395
Matrix (Source ID):	Soil (514397-001)	Method:	EPA 7471A	Prep Method:	METHOD

QC1180323 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	0.9674	0.1012	0.8475	mg/Kg	102%		75-125	4	20	1

ENTHALPY ANALYTICAL

Batch QC

Type:	**Blank**	**Lab ID:**	**QC1181172**	**Batch:**	**348641**
Matrix:	**Soil**	**Method:**	**EPA 8081A**	**Prep Method:**	**EPA 3546**

QC1181172 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
alpha-BHC	ND		mg/Kg	0.0049	08/26/24	08/27/24
beta-BHC	ND		mg/Kg	0.0049	08/26/24	08/27/24
gamma-BHC	ND		mg/Kg	0.0049	08/26/24	08/27/24
delta-BHC	ND		mg/Kg	0.0049	08/26/24	08/27/24
Heptachlor	ND		mg/Kg	0.0049	08/26/24	08/27/24
Aldrin	ND		mg/Kg	0.0049	08/26/24	08/27/24
Heptachlor epoxide	ND		mg/Kg	0.0049	08/26/24	08/27/24
Endosulfan I	ND		mg/Kg	0.0049	08/26/24	08/27/24
Dieldrin	ND		mg/Kg	0.0049	08/26/24	08/27/24
4,4'-DDE	ND		mg/Kg	0.0049	08/26/24	08/27/24
Endrin	ND		mg/Kg	0.0049	08/26/24	08/27/24
Endosulfan II	ND		mg/Kg	0.0049	08/26/24	08/27/24
Endosulfan sulfate	ND		mg/Kg	0.0049	08/26/24	08/27/24
4,4'-DDD	ND		mg/Kg	0.0049	08/26/24	08/27/24
Endrin aldehyde	ND		mg/Kg	0.0049	08/26/24	08/27/24
Endrin ketone	ND		mg/Kg	0.0049	08/26/24	08/27/24
4,4'-DDT	ND		mg/Kg	0.0049	08/26/24	08/27/24
Methoxychlor	ND		mg/Kg	0.0098	08/26/24	08/27/24
Toxaphene	ND		mg/Kg	0.098	08/26/24	08/27/24
Chlordane (Technical)	ND		mg/Kg	0.049	08/26/24	08/27/24
Surrogates				**Limits**		
TCMX	90%		%REC	23-120	08/26/24	08/27/24
Decachlorobiphenyl	74%		%REC	24-120	08/26/24	08/27/24

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1181173**	**Batch:**	**348641**
Matrix:	**Soil**	**Method:**	**EPA 8081A**	**Prep Method:**	**EPA 3546**

QC1181173 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
alpha-BHC	0.04353	0.04902	mg/Kg	89%		22-129
beta-BHC	0.04794	0.04902	mg/Kg	98%		28-125
gamma-BHC	0.04368	0.04902	mg/Kg	89%		22-128
delta-BHC	0.04590	0.04902	mg/Kg	94%		24-131
Heptachlor	0.04242	0.04902	mg/Kg	87%		18-124
Aldrin	0.03527	0.04902	mg/Kg	72%		23-120
Heptachlor epoxide	0.04072	0.04902	mg/Kg	83%		26-120
Endosulfan I	0.04129	0.04902	mg/Kg	84%	#	25-126
Dieldrin	0.05182	0.04902	mg/Kg	106%	#	23-124
4,4'-DDE	0.04470	0.04902	mg/Kg	91%	#	28-121
Endrin	0.04562	0.04902	mg/Kg	93%		25-127
Endosulfan II	0.04219	0.04902	mg/Kg	86%	#	29-121
Endosulfan sulfate	0.03315	0.04902	mg/Kg	68%	#	30-121
4,4'-DDD	0.04174	0.04902	mg/Kg	85%	#	26-120
Endrin aldehyde	0.02978	0.04902	mg/Kg	61%		10-120
Endrin ketone	0.04518	0.04902	mg/Kg	92%	#	28-125
4,4'-DDT	0.04223	0.04902	mg/Kg	86%	#	22-125
Methoxychlor	0.04342	0.04902	mg/Kg	89%	#	28-130
Surrogates						
TCMX	0.04439	0.04902	mg/Kg	91%		23-120
Decachlorobiphenyl	0.04374	0.04902	mg/Kg	89%		24-120

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1180646	Batch: 348491
Matrix: Soil	Method: EPA 8270C	Prep Method: EPA 3546

QC1180646 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Carbazole	ND		mg/Kg	0.25	08/23/24	08/24/24
1-Methylnaphthalene	ND		mg/Kg	0.25	08/23/24	08/24/24
Pyridine	ND		mg/Kg	0.25	08/23/24	08/24/24
N-Nitrosodimethylamine	ND		mg/Kg	0.25	08/23/24	08/24/24
Phenol	ND		mg/Kg	0.25	08/23/24	08/24/24
Aniline	ND		mg/Kg	0.25	08/23/24	08/24/24
bis(2-Chloroethyl)ether	ND		mg/Kg	1.2	08/23/24	08/24/24
2-Chlorophenol	ND		mg/Kg	0.25	08/23/24	08/24/24
1,3-Dichlorobenzene	ND		mg/Kg	0.25	08/23/24	08/24/24
1,4-Dichlorobenzene	ND		mg/Kg	0.25	08/23/24	08/24/24
Benzyl alcohol	ND		mg/Kg	0.25	08/23/24	08/24/24
1,2-Dichlorobenzene	ND		mg/Kg	0.25	08/23/24	08/24/24
2-Methylphenol	ND		mg/Kg	0.25	08/23/24	08/24/24
bis(2-Chloroisopropyl) ether	ND		mg/Kg	0.25	08/23/24	08/24/24
3-,4-Methylphenol	ND		mg/Kg	0.40	08/23/24	08/24/24
N-Nitroso-di-n-propylamine	ND		mg/Kg	0.25	08/23/24	08/24/24
Hexachloroethane	ND		mg/Kg	0.25	08/23/24	08/24/24
Nitrobenzene	ND		mg/Kg	1.2	08/23/24	08/24/24
Isophorone	ND		mg/Kg	0.25	08/23/24	08/24/24
2-Nitrophenol	ND		mg/Kg	0.25	08/23/24	08/24/24
2,4-Dimethylphenol	ND		mg/Kg	0.25	08/23/24	08/24/24
Benzoic acid	ND		mg/Kg	1.2	08/23/24	08/24/24
bis(2-Chloroethoxy)methane	ND		mg/Kg	0.25	08/23/24	08/24/24
2,4-Dichlorophenol	ND		mg/Kg	0.25	08/23/24	08/24/24
1,2,4-Trichlorobenzene	ND		mg/Kg	0.25	08/23/24	08/24/24
Naphthalene	ND		mg/Kg	0.25	08/23/24	08/24/24
4-Chloroaniline	ND		mg/Kg	0.25	08/23/24	08/24/24
Hexachlorobutadiene	ND		mg/Kg	0.25	08/23/24	08/24/24
4-Chloro-3-methylphenol	ND		mg/Kg	0.25	08/23/24	08/24/24
2-Methylnaphthalene	ND		mg/Kg	0.25	08/23/24	08/24/24
Hexachlorocyclopentadiene	ND		mg/Kg	1.2	08/23/24	08/24/24
2,4,6-Trichlorophenol	ND		mg/Kg	0.25	08/23/24	08/24/24
2,4,5-Trichlorophenol	ND		mg/Kg	0.25	08/23/24	08/24/24
2-Chloronaphthalene	ND		mg/Kg	0.25	08/23/24	08/24/24
2-Nitroaniline	ND		mg/Kg	0.25	08/23/24	08/24/24
Dimethylphthalate	ND		mg/Kg	0.25	08/23/24	08/24/24
Acenaphthylene	ND		mg/Kg	0.25	08/23/24	08/24/24
2,6-Dinitrotoluene	ND		mg/Kg	0.25	08/23/24	08/24/24
3-Nitroaniline	ND		mg/Kg	0.25	08/23/24	08/24/24
Acenaphthene	ND		mg/Kg	0.25	08/23/24	08/24/24
2,4-Dinitrophenol	ND		mg/Kg	1.2	08/23/24	08/24/24
4-Nitrophenol	ND		mg/Kg	0.25	08/23/24	08/24/24
Dibenzofuran	ND		mg/Kg	0.25	08/23/24	08/24/24
2,4-Dinitrotoluene	ND		mg/Kg	0.25	08/23/24	08/24/24
Diethylphthalate	ND		mg/Kg	0.25	08/23/24	08/24/24
Fluorene	ND		mg/Kg	0.25	08/23/24	08/24/24
4-Chlorophenyl-phenylether	ND		mg/Kg	0.25	08/23/24	08/24/24

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Batch QC

QC1180646 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
4-Nitroaniline	ND		mg/Kg	0.25	08/23/24	08/24/24
4,6-Dinitro-2-methylphenol	ND		mg/Kg	0.25	08/23/24	08/24/24
N-Nitrosodiphenylamine	ND		mg/Kg	0.25	08/23/24	08/24/24
1,2-diphenylhydrazine (as azobenzene)	ND		mg/Kg	0.25	08/23/24	08/24/24
4-Bromophenyl-phenylether	ND		mg/Kg	0.25	08/23/24	08/24/24
Hexachlorobenzene	ND		mg/Kg	0.25	08/23/24	08/24/24
Pentachlorophenol	ND		mg/Kg	1.2	08/23/24	08/24/24
Phenanthrene	ND		mg/Kg	0.25	08/23/24	08/24/24
Anthracene	ND		mg/Kg	0.25	08/23/24	08/24/24
Di-n-butylphthalate	ND		mg/Kg	0.25	08/23/24	08/24/24
Fluoranthene	ND		mg/Kg	0.25	08/23/24	08/24/24
Benzidine	ND		mg/Kg	1.2	08/23/24	08/24/24
Pyrene	ND		mg/Kg	0.25	08/23/24	08/24/24
Butylbenzylphthalate	ND		mg/Kg	0.25	08/23/24	08/24/24
3,3'-Dichlorobenzidine	ND		mg/Kg	1.2	08/23/24	08/24/24
Benzo(a)anthracene	ND		mg/Kg	0.25	08/23/24	08/24/24
Chrysene	ND		mg/Kg	0.25	08/23/24	08/24/24
bis(2-Ethylhexyl)phthalate	ND		mg/Kg	0.25	08/23/24	08/24/24
Di-n-octylphthalate	ND		mg/Kg	0.25	08/23/24	08/24/24
Benzo(b)fluoranthene	ND		mg/Kg	0.25	08/23/24	08/24/24
Benzo(k)fluoranthene	ND		mg/Kg	0.25	08/23/24	08/24/24
Benzo(a)pyrene	ND		mg/Kg	0.25	08/23/24	08/24/24
Indeno(1,2,3-cd)pyrene	ND		mg/Kg	0.25	08/23/24	08/24/24
Dibenz(a,h)anthracene	ND		mg/Kg	0.25	08/23/24	08/24/24
Benzo(g,h,i)perylene	ND		mg/Kg	0.25	08/23/24	08/24/24
Surrogates				**Limits**		
2-Fluorophenol	72%		%REC	29-120	08/23/24	08/24/24
Phenol-d6	72%		%REC	30-120	08/23/24	08/24/24
2,4,6-Tribromophenol	68%		%REC	32-120	08/23/24	08/24/24
Nitrobenzene-d5	75%		%REC	33-120	08/23/24	08/24/24
2-Fluorobiphenyl	77%		%REC	39-120	08/23/24	08/24/24
Terphenyl-d14	77%		%REC	44-125	08/23/24	08/24/24

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1180647**	**Batch:**	**348491**
Matrix:	**Soil**	**Method:**	**EPA 8270C**	**Prep Method:**	**EPA 3546**

QC1180647 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Phenol	3.101	3.750	mg/Kg	83%		42-120
2-Chlorophenol	2.991	3.750	mg/Kg	80%		41-120
1,4-Dichlorobenzene	3.021	3.750	mg/Kg	81%		36-120
3-,4-Methylphenol	3.166	3.750	mg/Kg	84%		42-120
N-Nitroso-di-n-propylamine	3.237	3.750	mg/Kg	86%		43-121
2,4-Dimethylphenol	3.147	3.750	mg/Kg	84%		25-120
1,2,4-Trichlorobenzene	2.844	3.750	mg/Kg	76%		38-120
4-Chloro-3-methylphenol	3.261	3.750	mg/Kg	87%		40-125
2,4,5-Trichlorophenol	3.059	3.750	mg/Kg	82%		40-124
Acenaphthene	2.871	3.750	mg/Kg	77%		35-126
4-Nitrophenol	2.511	3.750	mg/Kg	67%		24-128
2,4-Dinitrotoluene	2.775	3.750	mg/Kg	74%		40-131
Pentachlorophenol	1.974	3.750	mg/Kg	53%		35-120
Pyrene	2.900	3.750	mg/Kg	77%		37-135
Chrysene	2.680	3.750	mg/Kg	71%		38-132
Benzo(b)fluoranthene	2.867	3.750	mg/Kg	76%		38-135
Surrogates						
2-Fluorophenol	1.617	2.000	mg/Kg	81%		29-120
Phenol-d6	1.669	2.000	mg/Kg	83%		30-120
2,4,6-Tribromophenol	1.302	2.000	mg/Kg	65%		32-120
Nitrobenzene-d5	1.763	2.000	mg/Kg	88%		33-120
2-Fluorobiphenyl	1.696	2.000	mg/Kg	85%		39-120
Terphenyl-d14	1.556	2.000	mg/Kg	78%		44-125

ENTHALPY ANALYTICAL

Batch QC

Type:	**Matrix Spike**	**Lab ID:**	**QC1180648**	**Batch:**	**348491**
Matrix (Source ID):	**Soil (514364-010)**	**Method:**	**EPA 8270C**	**Prep Method:**	**EPA 3546**

QC1180648 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Phenol	2.950	ND	3.731	mg/Kg	79%		37-120	10
2-Chlorophenol	2.538	ND	3.731	mg/Kg	68%		33-120	10
1,4-Dichlorobenzene	2.240	ND	3.731	mg/Kg	60%		32-120	10
3-,4-Methylphenol	2.765	ND	3.731	mg/Kg	74%		37-120	10
N-Nitroso-di-n-propylamine	2.675	ND	3.731	mg/Kg	72%		32-120	10
2,4-Dimethylphenol	2.398	ND	3.731	mg/Kg	64%		32-120	10
1,2,4-Trichlorobenzene	2.458	ND	3.731	mg/Kg	66%		33-120	10
4-Chloro-3-methylphenol	3.252	ND	3.731	mg/Kg	87%		41-121	10
2,4,5-Trichlorophenol	3.147	ND	3.731	mg/Kg	84%		40-120	10
Acenaphthene	3.131	ND	3.731	mg/Kg	84%		37-120	10
4-Nitrophenol	2.307	ND	3.731	mg/Kg	62%		20-141	10
2,4-Dinitrotoluene	2.835	ND	3.731	mg/Kg	76%		33-128	10
Pentachlorophenol	4.172	ND	3.731	mg/Kg		DO	28-132	10
Pyrene	3.347	ND	3.731	mg/Kg	90%		39-135	10
Chrysene	3.220	ND	3.731	mg/Kg	86%		37-135	10
Benzo(b)fluoranthene	3.205	ND	3.731	mg/Kg	86%		34-139	10
Surrogates								
2-Fluorophenol	1.376		1.990	mg/Kg	69%		29-120	10
Phenol-d6	1.401		1.990	mg/Kg	70%		30-120	10
2,4,6-Tribromophenol	1.849		1.990	mg/Kg	93%		32-120	10
Nitrobenzene-d5	1.246		1.990	mg/Kg	63%		33-120	10
2-Fluorobiphenyl	1.542		1.990	mg/Kg	78%		39-120	10
Terphenyl-d14	1.804		1.990	mg/Kg	91%		44-125	10

ENTHALPY ANALYTICAL

Batch QC

Type:	**Matrix Spike Duplicate**	**Lab ID:**	**QC1180649**	**Batch:**	**348491**
Matrix (Source ID):	**Soil (514364-010)**	**Method:**	**EPA 8270C**	**Prep Method:**	**EPA 3546**

QC1180649 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Phenol	3.180	ND	3.731	mg/Kg	85%		37-120	7	49	10
2-Chlorophenol	2.603	ND	3.731	mg/Kg	70%		33-120	3	52	10
1,4-Dichlorobenzene	2.472	ND	3.731	mg/Kg	66%		32-120	10	50	10
3-,4-Methylphenol	2.815	ND	3.731	mg/Kg	75%		37-120	2	54	10
N-Nitroso-di-n-propylamine	2.970	ND	3.731	mg/Kg	80%		32-120	10	50	10
2,4-Dimethylphenol	2.559	ND	3.731	mg/Kg	69%		32-120	6	50	10
1,2,4-Trichlorobenzene	2.672	ND	3.731	mg/Kg	72%		33-120	8	50	10
4-Chloro-3-methylphenol	3.106	ND	3.731	mg/Kg	83%		41-121	5	43	10
2,4,5-Trichlorophenol	3.338	ND	3.731	mg/Kg	89%		40-120	6	47	10
Acenaphthene	2.948	ND	3.731	mg/Kg	79%		37-120	6	48	10
4-Nitrophenol	2.747	ND	3.731	mg/Kg	74%		20-141	17	30	10
2,4-Dinitrotoluene	3.011	ND	3.731	mg/Kg	81%		33-128	6	50	10
Pentachlorophenol	3.959	ND	3.731	mg/Kg		DO	28-132		30	10
Pyrene	3.105	ND	3.731	mg/Kg	83%		39-135	8	41	10
Chrysene	3.197	ND	3.731	mg/Kg	86%		37-135	1	46	10
Benzo(b)fluoranthene	3.112	ND	3.731	mg/Kg	83%		34-139	3	47	10
Surrogates										
2-Fluorophenol	1.279		1.990	mg/Kg	64%		29-120			10
Phenol-d6	1.617		1.990	mg/Kg	81%		30-120			10
2,4,6-Tribromophenol	1.322		1.990	mg/Kg	66%		32-120			10
Nitrobenzene-d5	1.503		1.990	mg/Kg	76%		33-120			10
2-Fluorobiphenyl	1.473		1.990	mg/Kg	74%		39-120			10
Terphenyl-d14	1.660		1.990	mg/Kg	83%		44-125			10

#	CCV drift outside limits; average CCV drift within limits per method requirements
*	Value is outside QC limits
DO	Diluted Out
ND	Not Detected
b	See narrative

Laboratory Job Number 514393

Subcontracted Products

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"When Quality Counts"

Analytical Report

WorkOrder: 2408J32

Report Created for: Enthalpy Analytical

931 West Barkley Avenue
Orange, CA 92868

Project Contact: Richard Villafania
Project P.O.: 058321
Project: EO-514393

Project Location:
Project Received: 08/23/2024

Analytical Report reviewed & approved for release on 09/03/2024 by:

Angela Rydelius
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Enthalpy Analytical **WorkOrder:** 2408J32
Project: EO-514393

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CCV	Continuing Calibration Verification.
CCV REC (%)	% recovery of Continuing Calibration Verification.
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LCS2	Second LCS for the batch. Spike level is lower than that for the first LCS; applicable to method 1633.
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit [1]
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit [2]
RPD	Relative Percent Difference
RRT	Relative Retention Time
RSD	Relative Standard Deviation
SNR	Surrogate is diluted out of the calibration range
SPK Val	Spike Value

[1] MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016. Values are based upon our default extraction volume/amount and are subject to change.

[2] RL is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.) Values are based upon our default extraction volume/amount and are subject to change.

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Glossary of Terms & Qualifier Definitions

Client: Enthalpy Analytical **WorkOrder:** 2408J32
Project: EO-514393

SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TNTC	"Too Numerous to Count;" greater than 250 colonies observed on the plate.
TZA	TimeZone Net Adjustment for sample collected outside of MAI's Coordinated Universal Time (UTC). (Adjustment for Daylight Saving is not accounted.)
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

a3	Sample diluted due to high organic content interfering with quantitative/or qualitative analysis.

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria.
F3	The surrogate standard recovery and/or RPD is outside of acceptance limits.
F7	The LCS/LCSD recovery is above the upper control limit. The target analyte(s) were Not Detected (ND); therefore, the data is reportable.

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW3550B
Date Prepared:	08/28/2024	**Analytical Method:**	SW8270E
Project:	EO-514393	**Unit:**	mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#2 (S-4, S-5, S-6)	2408J32-003A	Soil	08/20/2024	GC53 08282418.D	300712

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	08/28/2024 16:47
Atrazine	ND	0.10	1	08/28/2024 16:47
Azinphos methyl (Guthion)	ND	0.10	1	08/28/2024 16:47
Bolstar (Sulprofos)	ND	0.10	1	08/28/2024 16:47
Chlorpyrifos	ND	0.10	1	08/28/2024 16:47
Coumaphos	ND	0.10	1	08/28/2024 16:47
Demeton	ND	0.10	1	08/28/2024 16:47
Diazinon	ND	0.10	1	08/28/2024 16:47
Dichlorvos (DDVP)	ND	0.10	1	08/28/2024 16:47
Dimethoate	ND	0.10	1	08/28/2024 16:47
Disulfoton (Di-Syston)	ND	0.10	1	08/28/2024 16:47
EPN	ND	0.10	1	08/28/2024 16:47
EPTC	ND	0.10	1	08/28/2024 16:47
Ethion	ND	0.10	1	08/28/2024 16:47
Ethoprop	ND	0.10	1	08/28/2024 16:47
Ethyl parathion	ND	0.10	1	08/28/2024 16:47
Fensulfothion	ND	0.10	1	08/28/2024 16:47
Fenthion	ND	0.10	1	08/28/2024 16:47
Fonofos	ND	0.10	1	08/28/2024 16:47
Malathion	ND	0.10	1	08/28/2024 16:47
Mevinphos (Phosdrin)	ND	0.10	1	08/28/2024 16:47
Molinate	ND	0.10	1	08/28/2024 16:47
Methyl parathion	ND	0.10	1	08/28/2024 16:47
Phorate (Thimet)	ND	0.10	1	08/28/2024 16:47
Prometon	ND	0.10	1	08/28/2024 16:47
Ronnel	ND	0.10	1	08/28/2024 16:47
Simazine	ND	0.10	1	08/28/2024 16:47
Stirofos (Tetrachlorvinphos)	ND	0.10	1	08/28/2024 16:47
Terbacil	ND	0.10	1	08/28/2024 16:47
Terbufos (Terbuphos)	ND	0.10	1	08/28/2024 16:47
Thiobencarb	ND	0.10	1	08/28/2024 16:47
Tokuthion (Prothiofos)	ND	0.10	1	08/28/2024 16:47
Trichloronate (Agritox)	ND	0.10	1	08/28/2024 16:47

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW3550B
Date Prepared:	08/28/2024	**Analytical Method:**	SW8270E
Project:	EO-514393	**Unit:**	mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#2 (S-4, S-5, S-6)	2408J32-003A	Soil	08/20/2024	GC53 08282418.D	300712

Analytes	Result	RL	DF	Date Analyzed

Surrogates	REC (%)	Limits	
1-Bromo-2-Nitrobenzene	86	60-140	08/28/2024 16:47
Triphenyl phosphate	60	60-140	08/28/2024 16:47

Analyst(s): JS

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW3550B
Date Prepared:	08/28/2024	**Analytical Method:**	SW8270E
Project:	EO-514393	**Unit:**	mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#3 (S-7, S-8, S-9)	2408J32-004A	Soil	08/20/2024	GC53 08282419.D	300712

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	08/28/2024 17:14
Atrazine	ND	0.10	1	08/28/2024 17:14
Azinphos methyl (Guthion)	ND	0.10	1	08/28/2024 17:14
Bolstar (Sulprofos)	ND	0.10	1	08/28/2024 17:14
Chlorpyrifos	ND	0.10	1	08/28/2024 17:14
Coumaphos	ND	0.10	1	08/28/2024 17:14
Demeton	ND	0.10	1	08/28/2024 17:14
Diazinon	ND	0.10	1	08/28/2024 17:14
Dichlorvos (DDVP)	ND	0.10	1	08/28/2024 17:14
Dimethoate	ND	0.10	1	08/28/2024 17:14
Disulfoton (Di-Syston)	ND	0.10	1	08/28/2024 17:14
EPN	ND	0.10	1	08/28/2024 17:14
EPTC	ND	0.10	1	08/28/2024 17:14
Ethion	ND	0.10	1	08/28/2024 17:14
Ethoprop	ND	0.10	1	08/28/2024 17:14
Ethyl parathion	ND	0.10	1	08/28/2024 17:14
Fensulfothion	ND	0.10	1	08/28/2024 17:14
Fenthion	ND	0.10	1	08/28/2024 17:14
Fonofos	ND	0.10	1	08/28/2024 17:14
Malathion	ND	0.10	1	08/28/2024 17:14
Mevinphos (Phosdrin)	ND	0.10	1	08/28/2024 17:14
Molinate	ND	0.10	1	08/28/2024 17:14
Methyl parathion	ND	0.10	1	08/28/2024 17:14
Phorate (Thimet)	ND	0.10	1	08/28/2024 17:14
Prometon	ND	0.10	1	08/28/2024 17:14
Ronnel	ND	0.10	1	08/28/2024 17:14
Simazine	ND	0.10	1	08/28/2024 17:14
Stirofos (Tetrachlorvinphos)	ND	0.10	1	08/28/2024 17:14
Terbacil	ND	0.10	1	08/28/2024 17:14
Terbufos (Terbuphos)	ND	0.10	1	08/28/2024 17:14
Thiobencarb	ND	0.10	1	08/28/2024 17:14
Tokuthion (Prothiofos)	ND	0.10	1	08/28/2024 17:14
Trichloronate (Agritox)	ND	0.10	1	08/28/2024 17:14

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW3550B
Date Prepared:	08/28/2024	**Analytical Method:**	SW8270E
Project:	EO-514393	**Unit:**	mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#3 (S-7, S-8, S-9)	2408J32-004A	Soil	08/20/2024	GC53 08282419.D	300712

Analytes	Result	RL	DF	Date Analyzed

Surrogates	REC (%)	Limits	
1-Bromo-2-Nitrobenzene	87	60-140	08/28/2024 17:14
Triphenyl phosphate	65	60-140	08/28/2024 17:14

Analyst(s): JS

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW3550B
Date Prepared:	08/28/2024	**Analytical Method:**	SW8270E
Project:	EO-514393	**Unit:**	mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#4 (S-10, S-11, S-12)	2408J32-005A	Soil	08/20/2024	GC53 08282420.D	300712

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	08/28/2024 17:42
Atrazine	ND	0.10	1	08/28/2024 17:42
Azinphos methyl (Guthion)	ND	0.10	1	08/28/2024 17:42
Bolstar (Sulprofos)	ND	0.10	1	08/28/2024 17:42
Chlorpyrifos	ND	0.10	1	08/28/2024 17:42
Coumaphos	ND	0.10	1	08/28/2024 17:42
Demeton	ND	0.10	1	08/28/2024 17:42
Diazinon	ND	0.10	1	08/28/2024 17:42
Dichlorvos (DDVP)	ND	0.10	1	08/28/2024 17:42
Dimethoate	ND	0.10	1	08/28/2024 17:42
Disulfoton (Di-Syston)	ND	0.10	1	08/28/2024 17:42
EPN	ND	0.10	1	08/28/2024 17:42
EPTC	ND	0.10	1	08/28/2024 17:42
Ethion	ND	0.10	1	08/28/2024 17:42
Ethoprop	ND	0.10	1	08/28/2024 17:42
Ethyl parathion	ND	0.10	1	08/28/2024 17:42
Fensulfothion	ND	0.10	1	08/28/2024 17:42
Fenthion	ND	0.10	1	08/28/2024 17:42
Fonofos	ND	0.10	1	08/28/2024 17:42
Malathion	ND	0.10	1	08/28/2024 17:42
Mevinphos (Phosdrin)	ND	0.10	1	08/28/2024 17:42
Molinate	ND	0.10	1	08/28/2024 17:42
Methyl parathion	ND	0.10	1	08/28/2024 17:42
Phorate (Thimet)	ND	0.10	1	08/28/2024 17:42
Prometon	ND	0.10	1	08/28/2024 17:42
Ronnel	ND	0.10	1	08/28/2024 17:42
Simazine	ND	0.10	1	08/28/2024 17:42
Stirofos (Tetrachlorvinphos)	ND	0.10	1	08/28/2024 17:42
Terbacil	ND	0.10	1	08/28/2024 17:42
Terbufos (Terbuphos)	ND	0.10	1	08/28/2024 17:42
Thiobencarb	ND	0.10	1	08/28/2024 17:42
Tokuthion (Prothiofos)	ND	0.10	1	08/28/2024 17:42
Trichloronate (Agritox)	ND	0.10	1	08/28/2024 17:42

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW3550B
Date Prepared:	08/28/2024	**Analytical Method:**	SW8270E
Project:	EO-514393	**Unit:**	mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#4 (S-10, S-11, S-12)	2408J32-005A	Soil	08/20/2024	GC53 08282420.D	300712

Analytes	Result	RL	DF	Date Analyzed

Surrogates	REC (%)	Limits	
1-Bromo-2-Nitrobenzene	85	60-140	08/28/2024 17:42
Triphenyl phosphate	64	60-140	08/28/2024 17:42

Analyst(s): JS

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW8151A
Date Prepared:	08/28/2024	**Analytical Method:**	SW8151A
Project:	EO-514393	**Unit:**	mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S-2-1	**2408J32-001A**	**Soil**	**08/16/2024 10:39**	**GC15A 08292491.D**	**300711**

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.10	10	08/31/2024 00:29
Bentazon	ND	0.10	10	08/31/2024 00:29
Chloramben	ND	0.10	10	08/31/2024 00:29
Clopyralid	ND	0.10	10	08/31/2024 00:29
2,4-D (Dichlorophenoxyacetic acid)	ND	0.10	10	08/31/2024 00:29
2,4-DB	ND	0.10	10	08/31/2024 00:29
Dalapon	ND	0.10	10	08/31/2024 00:29
DCPA (mono & diacid)	ND	0.10	10	08/31/2024 00:29
Dicamba	ND	0.10	10	08/31/2024 00:29
3,5-Dichlorobenzoic Acid	ND	0.10	10	08/31/2024 00:29
Dichloroprop	ND	0.10	10	08/31/2024 00:29
Dinoseb (DNBP)	ND	0.10	10	08/31/2024 00:29
5-Hydroxydicamba	ND	0.10	10	08/31/2024 00:29
MCPA	ND	10	10	08/31/2024 00:29
MCPP	ND	10	10	08/31/2024 00:29
4-Nitrophenol	ND	0.10	10	08/31/2024 00:29
Pentachlorophenol (PCP)	ND	0.10	10	08/31/2024 00:29
Picloram	ND	0.10	10	08/31/2024 00:29
Quinclorac	ND	0.10	10	08/31/2024 00:29
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.10	10	08/31/2024 00:29
2,4,5-TP (Silvex)	ND	0.10	10	08/31/2024 00:29

Surrogates	REC (%)	Limits	
DCAA	94	63-121	08/31/2024 00:29

Analyst(s): DP

Analytical Comments: a3

(Cont.)

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW8151A
Date Prepared:	08/28/2024	**Analytical Method:**	SW8151A
Project:	EO-514393	**Unit:**	mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#1 (S-1, S-3)	2408J32-002A	Soil	08/20/2024	GC15A 08292492.D	300711

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.10	10	08/31/2024 00:54
Bentazon	ND	0.10	10	08/31/2024 00:54
Chloramben	ND	0.10	10	08/31/2024 00:54
Clopyralid	ND	0.10	10	08/31/2024 00:54
2,4-D (Dichlorophenoxyacetic acid)	ND	0.10	10	08/31/2024 00:54
2,4-DB	ND	0.10	10	08/31/2024 00:54
Dalapon	ND	0.10	10	08/31/2024 00:54
DCPA (mono & diacid)	ND	0.10	10	08/31/2024 00:54
Dicamba	ND	0.10	10	08/31/2024 00:54
3,5-Dichlorobenzoic Acid	ND	0.10	10	08/31/2024 00:54
Dichloroprop	ND	0.10	10	08/31/2024 00:54
Dinoseb (DNBP)	ND	0.10	10	08/31/2024 00:54
5-Hydroxydicamba	ND	0.10	10	08/31/2024 00:54
MCPA	ND	10	10	08/31/2024 00:54
MCPP	ND	10	10	08/31/2024 00:54
4-Nitrophenol	ND	0.10	10	08/31/2024 00:54
Pentachlorophenol (PCP)	ND	0.10	10	08/31/2024 00:54
Picloram	ND	0.10	10	08/31/2024 00:54
Quinclorac	ND	0.10	10	08/31/2024 00:54
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.10	10	08/31/2024 00:54
2,4,5-TP (Silvex)	ND	0.10	10	08/31/2024 00:54

Surrogates	REC (%)	Limits	
DCAA	102	63-121	08/31/2024 00:54

Analyst(s): DP

Analytical Comments: a3

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW8151A
Date Prepared:	08/28/2024	**Analytical Method:**	SW8151A
Project:	EO-514393	**Unit:**	mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#2 (S-4, S-5, S-6)	2408J32-003A	Soil	08/20/2024	GC15A 08292493.D	300711

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.10	10	08/31/2024 01:18
Bentazon	ND	0.10	10	08/31/2024 01:18
Chloramben	ND	0.10	10	08/31/2024 01:18
Clopyralid	ND	0.10	10	08/31/2024 01:18
2,4-D (Dichlorophenoxyacetic acid)	ND	0.10	10	08/31/2024 01:18
2,4-DB	ND	0.10	10	08/31/2024 01:18
Dalapon	ND	0.10	10	08/31/2024 01:18
DCPA (mono & diacid)	ND	0.10	10	08/31/2024 01:18
Dicamba	ND	0.10	10	08/31/2024 01:18
3,5-Dichlorobenzoic Acid	ND	0.10	10	08/31/2024 01:18
Dichloroprop	ND	0.10	10	08/31/2024 01:18
Dinoseb (DNBP)	ND	0.10	10	08/31/2024 01:18
5-Hydroxydicamba	ND	0.10	10	08/31/2024 01:18
MCPA	ND	10	10	08/31/2024 01:18
MCPP	ND	10	10	08/31/2024 01:18
4-Nitrophenol	ND	0.10	10	08/31/2024 01:18
Pentachlorophenol (PCP)	ND	0.10	10	08/31/2024 01:18
Picloram	ND	0.10	10	08/31/2024 01:18
Quinclorac	ND	0.10	10	08/31/2024 01:18
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.10	10	08/31/2024 01:18
2,4,5-TP (Silvex)	ND	0.10	10	08/31/2024 01:18

Surrogates	REC (%)	Limits	
DCAA	109	63-121	08/31/2024 01:18

Analyst(s): DP

Analytical Comments: a3

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CA ELAP 1644 • NELAP 4033ORELAP

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW8151A
Date Prepared:	08/28/2024	**Analytical Method:**	SW8151A
Project:	EO-514393	**Unit:**	mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#3 (S-7, S-8, S-9)	2408J32-004A	Soil	08/20/2024	GC15A 08292494.D	300711

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.10	10	08/31/2024 01:43
Bentazon	ND	0.10	10	08/31/2024 01:43
Chloramben	ND	0.10	10	08/31/2024 01:43
Clopyralid	ND	0.10	10	08/31/2024 01:43
2,4-D (Dichlorophenoxyacetic acid)	ND	0.10	10	08/31/2024 01:43
2,4-DB	ND	0.10	10	08/31/2024 01:43
Dalapon	ND	0.10	10	08/31/2024 01:43
DCPA (mono & diacid)	ND	0.10	10	08/31/2024 01:43
Dicamba	ND	0.10	10	08/31/2024 01:43
3,5-Dichlorobenzoic Acid	ND	0.10	10	08/31/2024 01:43
Dichloroprop	ND	0.10	10	08/31/2024 01:43
Dinoseb (DNBP)	ND	0.10	10	08/31/2024 01:43
5-Hydroxydicamba	ND	0.10	10	08/31/2024 01:43
MCPA	ND	10	10	08/31/2024 01:43
MCPP	ND	10	10	08/31/2024 01:43
4-Nitrophenol	ND	0.10	10	08/31/2024 01:43
Pentachlorophenol (PCP)	ND	0.10	10	08/31/2024 01:43
Picloram	ND	0.10	10	08/31/2024 01:43
Quinclorac	ND	0.10	10	08/31/2024 01:43
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.10	10	08/31/2024 01:43
2,4,5-TP (Silvex)	ND	0.10	10	08/31/2024 01:43

Surrogates	REC (%)	Limits	
DCAA	100	63-121	08/31/2024 01:43

Analyst(s): DP

Analytical Comments: a3

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Analytical Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Received:	08/23/2024 9:41	**Extraction Method:**	SW8151A
Date Prepared:	08/28/2024	**Analytical Method:**	SW8151A
Project:	EO-514393	**Unit:**	mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP#4 (S-10, S-11, S-12)	2408J32-005A	Soil	08/20/2024	GC15A 08292497.D	300711

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.10	10	08/31/2024 02:58
Bentazon	ND	0.10	10	08/31/2024 02:58
Chloramben	ND	0.10	10	08/31/2024 02:58
Clopyralid	ND	0.10	10	08/31/2024 02:58
2,4-D (Dichlorophenoxyacetic acid)	ND	0.10	10	08/31/2024 02:58
2,4-DB	ND	0.10	10	08/31/2024 02:58
Dalapon	ND	0.10	10	08/31/2024 02:58
DCPA (mono & diacid)	ND	0.10	10	08/31/2024 02:58
Dicamba	ND	0.10	10	08/31/2024 02:58
3,5-Dichlorobenzoic Acid	ND	0.10	10	08/31/2024 02:58
Dichloroprop	ND	0.10	10	08/31/2024 02:58
Dinoseb (DNBP)	ND	0.10	10	08/31/2024 02:58
5-Hydroxydicamba	ND	0.10	10	08/31/2024 02:58
MCPA	ND	10	10	08/31/2024 02:58
MCPP	ND	10	10	08/31/2024 02:58
4-Nitrophenol	ND	0.10	10	08/31/2024 02:58
Pentachlorophenol (PCP)	ND	0.10	10	08/31/2024 02:58
Picloram	ND	0.10	10	08/31/2024 02:58
Quinclorac	ND	0.10	10	08/31/2024 02:58
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.10	10	08/31/2024 02:58
2,4,5-TP (Silvex)	ND	0.10	10	08/31/2024 02:58

Surrogates	REC (%)	Limits	
DCAA	112	63-121	08/31/2024 02:58

Analyst(s): DP

Analytical Comments: a3

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Quality Control Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Prepared:	08/28/2024	**BatchID:**	300712
Date Analyzed:	08/28/2024	**Extraction Method:**	SW3550B
Instrument:	GC53	**Analytical Method:**	SW8270E
Matrix:	Soil	**Unit:**	mg/kg
Project:	EO-514393	**Sample ID:**	MB/LCS/LCSD-300712 2408J32-005AMS/MSD

QC Summary Report for SW8270E (ON/P Pesticides)

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Alachlor	ND	0.049	0.10	-	-	-
Atrazine	ND	0.069	0.10	-	-	-
Azinphos methyl (Guthion)	ND	0.066	0.10	-	-	-
Bolstar (Sulprofos)	ND	0.040	0.10	-	-	-
Chlorpyrifos	ND	0.051	0.10	-	-	-
Coumaphos	ND	0.062	0.10	-	-	-
Demeton	ND	0.051	0.10	-	-	-
Diazinon	ND	0.053	0.10	-	-	-
Dichlorvos (DDVP)	ND	0.022	0.10	-	-	-
Dimethoate	ND	0.046	0.10	-	-	-
Disulfoton (Di-Syston)	ND	0.039	0.10	-	-	-
EPN	ND	0.059	0.10	-	-	-
EPTC	ND	0.042	0.10	-	-	-
Ethion	ND	0.064	0.10	-	-	-
Ethoprop	ND	0.046	0.10	-	-	-
Ethyl parathion	ND	0.040	0.10	-	-	-
Fensulfothion	ND	0.027	0.10	-	-	-
Fenthion	ND	0.055	0.10	-	-	-
Fonofos	ND	0.056	0.10	-	-	-
Malathion	ND	0.040	0.10	-	-	-
Mevinphos (Phosdrin)	ND	0.054	0.10	-	-	-
Molinate	ND	0.039	0.10	-	-	-
Methyl parathion	ND	0.031	0.10	-	-	-
Phorate (Thimet)	ND	0.035	0.10	-	-	-
Prometon	ND	0.029	0.10	-	-	-
Ronnel	ND	0.047	0.10	-	-	-
Simazine	ND	0.057	0.10	-	-	-
Stirofos (Tetrachlorvinphos)	ND	0.053	0.10	-	-	-
Terbacil	ND	0.040	0.10	-	-	-
Terbufos (Terbuphos)	ND	0.031	0.10	-	-	-
Thiobencarb	ND	0.070	0.10	-	-	-
Tokuthion (Prothiofos)	ND	0.054	0.10	-	-	-
Trichloronate (Agritox)	ND	0.048	0.10	-	-	-
Surrogate Recovery						
1-Bromo-2-Nitrobenzene	0.18			0.2	91	60-140
Triphenyl phosphate	0.12			0.2	61	60-140

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Quality Control Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Prepared:	08/28/2024	**BatchID:**	300712
Date Analyzed:	08/28/2024	**Extraction Method:**	SW3550B
Instrument:	GC53	**Analytical Method:**	SW8270E
Matrix:	Soil	**Unit:**	mg/kg
Project:	EO-514393	**Sample ID:**	MB/LCS/LCSD-300712 2408J32-005AMS/MSD

QC Summary Report for SW8270E (ON/P Pesticides)

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Alachlor	0.54	0.51	0.60	90	85	50-160	5.39	20
Atrazine	0.52	0.49	0.60	87	82	50-160	5.52	20
Azinphos methyl (Guthion)	0.44	0.42	0.60	74	71	60-140	4.40	20
Bolstar (Sulprofos)	0.48	0.46	0.60	81	77	60-140	4.91	20
Chlorpyrifos	0.54	0.50	0.60	90	84	60-140	6.41	20
Coumaphos	0.49	0.46	0.60	81	76	60-140	6.32	20
Demeton	0.48	0.47	0.60	80	78	60-140	2.87	20
Diazinon	0.52	0.49	0.60	87	82	60-140	5.84	20
Dichlorvos (DDVP)	0.48	0.48	0.60	81	80	60-140	0.925	20
Dimethoate	0.47	0.45	0.60	78	75	60-140	4.25	20
Disulfoton (Di-Syston)	0.52	0.49	0.60	86	81	50-160	5.31	20
EPN	0.56	0.55	0.60	94	91	60-140	3.11	20
EPTC	0.53	0.51	0.60	88	85	60-140	4.23	20
Ethion	0.48	0.46	0.60	80	76	60-140	4.96	20
Ethoprop	0.49	0.48	0.60	82	80	60-140	3.33	20
Ethyl parathion	0.54	0.52	0.60	90	86	60-140	3.65	20
Fensulfothion	0.47	0.45	0.60	78	75	60-140	4.13	20
Fenthion	0.51	0.48	0.60	86	81	50-160	6.18	20
Fonofos	0.53	0.51	0.60	89	84	60-140	5.14	20
Malathion	0.49	0.46	0.60	82	77	60-140	6.02	20
Mevinphos (Phosdrin)	0.47	0.46	0.60	78	77	60-140	0.880	20
Molinate	0.53	0.51	0.60	89	86	60-140	3.70	20
Methyl parathion	0.52	0.50	0.60	86	83	50-160	3.70	20
Phorate (Thimet)	0.48	0.45	0.60	79	75	60-140	5.99	20
Prometon	0.52	0.50	0.60	87	83	60-140	4.14	20
Ronnel	0.54	0.52	0.60	90	86	60-140	4.88	20
Simazine	0.51	0.49	0.60	84	81	60-140	4.17	20
Stirofos (Tetrachlorvinphos)	0.47	0.44	0.60	78	73	60-140	6.06	20
Terbacil	0.51	0.49	0.60	84	82	60-140	2.68	20
Terbufos (Terbuphos)	0.49	0.46	0.60	82	77	60-140	6.29	20
Thiobencarb	0.54	0.49	0.60	90	81	60-140	10.2	20
Tokuthion (Prothiofos)	0.49	0.47	0.60	82	79	60-140	3.84	20
Trichloronate (Agritox)	0.56	0.53	0.60	94	89	60-140	5.90	20
Surrogate Recovery								
1-Bromo-2-Nitrobenzene	0.16	0.16	0.20	82	82	60-140	0.705	20
Triphenyl phosphate	0.17	0.17	0.20	86	83	60-140	3.76	20

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Quality Control Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Prepared:	08/28/2024	**BatchID:**	300712
Date Analyzed:	08/28/2024	**Extraction Method:**	SW3550B
Instrument:	GC53	**Analytical Method:**	SW8270E
Matrix:	Soil	**Unit:**	mg/kg
Project:	EO-514393	**Sample ID:**	MB/LCS/LCSD-300712 2408J32-005AMS/MSD

QC Summary Report for SW8270E (ON/P Pesticides)

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Alachlor	1	0.55	0.59	0.60	ND	91	98	60-140	7.06	20
Atrazine	1	0.50	0.52	0.60	ND	84	86	60-140	2.88	20
Azinphos methyl (Guthion)	1	0.54	0.55	0.60	ND	90	91	60-140	1.11	20
Bolstar (Sulprofos)	1	0.57	0.59	0.60	ND	95	99	60-140	3.90	20
Chlorpyrifos	1	0.54	0.56	0.60	ND	91	93	60-140	2.52	20
Coumaphos	1	0.59	0.63	0.60	ND	98	105	60-140	6.80	20
Demeton	1	0.48	0.52	0.60	ND	80	87	60-140	8.43	20
Diazinon	1	0.51	0.54	0.60	ND	85	90	60-140	4.84	20
Dichlorvos (DDVP)	1	0.53	0.57	0.60	ND	88	95	60-140	7.47	20
Dimethoate	1	0.48	0.51	0.60	ND	79	85	60-140	6.95	20
Disulfoton (Di-Syston)	1	0.52	0.55	0.60	ND	86	92	60-140	5.82	20
EPN	1	0.51	0.51	0.60	ND	85	85	60-140	0.0101	20
EPTC	1	0.52	0.55	0.60	ND	87	92	60-140	5.23	20
Ethion	1	0.55	0.57	0.60	ND	91	95	60-140	3.94	20
Ethoprop	1	0.52	0.58	0.60	ND	87	97	60-140	10.9	20
Ethyl parathion	1	0.52	0.53	0.60	ND	87	89	60-140	2.00	20
Fensulfothion	1	0.51	0.48	0.60	ND	84	81	60-140	4.64	20
Fenthion	1	0.51	0.52	0.60	ND	85	87	60-140	2.93	20
Fonofos	1	0.51	0.53	0.60	ND	85	89	60-140	4.06	20
Malathion	1	0.53	0.55	0.60	ND	89	91	60-140	2.63	20
Mevinphos (Phosdrin)	1	0.47	0.52	0.60	ND	79	87	60-140	9.36	20
Molinate	1	0.54	0.58	0.60	ND	90	96	60-140	6.34	20
Methyl parathion	1	0.49	0.52	0.60	ND	82	87	60-140	5.94	20
Phorate (Thimet)	1	0.50	0.55	0.60	ND	84	91	60-140	8.18	20
Prometon	1	0.53	0.57	0.60	ND	88	96	60-140	7.91	20
Ronnel	1	0.53	0.56	0.60	ND	88	94	60-140	6.54	20
Simazine	1	0.49	0.51	0.60	ND	82	85	60-140	2.97	20
Stirofos (Tetrachlorvinphos)	1	0.51	0.53	0.60	ND	86	89	60-140	3.43	20
Terbacil	1	0.52	0.57	0.60	ND	87	95	60-140	9.70	20
Terbufos (Terbuphos)	1	0.52	0.56	0.60	ND	87	93	60-140	6.28	20
Thiobencarb	1	0.55	0.55	0.60	ND	91	91	60-140	0.363	20
Tokuthion (Prothiofos)	1	0.60	0.61	0.60	ND	100	101	60-140	1.06	20
Trichloronate (Agritox)	1	0.55	0.57	0.60	ND	91	95	60-140	4.73	20
Surrogate Recovery										
1-Bromo-2-Nitrobenzene	1	0.16	0.17	0.20		78	84	60-140	6.84	20
Triphenyl phosphate	1	0.20	0.21	0.20		98	105	60-140	7.03	20

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Quality Control Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Prepared:	08/28/2024	**BatchID:**	300711
Date Analyzed:	08/30/2024 - 08/31/2024	**Extraction Method:**	SW8151A
Instrument:	GC15A	**Analytical Method:**	SW8151A
Matrix:	Soil	**Unit:**	mg/kg
Project:	EO-514393	**Sample ID:**	MB/LCS/LCSD-300711 2408J32-004AMS/MSD

QC Summary Report for SW8151A

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acifluorfen	ND	0.0053	0.010	-	-	-
Bentazon	ND	0.0033	0.010	-	-	-
Chloramben	ND	0.0041	0.010	-	-	-
2,4-D (Dichlorophenoxyacetic acid)	ND	0.0029	0.010	-	-	-
2,4-DB	ND	0.0061	0.010	-	-	-
Dalapon	ND	0.0061	0.010	-	-	-
DCPA (mono & diacid)	ND	0.0032	0.010	-	-	-
Dicamba	ND	0.0033	0.010	-	-	-
3,5-Dichlorobenzoic Acid	ND	0.0032	0.010	-	-	-
Dichloroprop	ND	0.0030	0.010	-	-	-
Dinoseb (DNBP)	ND	0.0032	0.010	-	-	-
MCPA	ND	0.38	1.0	-	-	-
MCPP	ND	0.36	1.0	-	-	-
4-Nitrophenol	ND	0.0074	0.010	-	-	-
Pentachlorophenol (PCP)	ND	0.0047	0.010	-	-	-
Picloram	ND	0.0050	0.010	-	-	-
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.0051	0.010	-	-	-
2,4,5-TP (Silvex)	ND	0.0028	0.010	-	-	-
Surrogate Recovery						
DCAA	0.10			0.1	103	77-116

(Cont.)

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Quality Control Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Prepared:	08/28/2024	**BatchID:**	300711
Date Analyzed:	08/30/2024 - 08/31/2024	**Extraction Method:**	SW8151A
Instrument:	GC15A	**Analytical Method:**	SW8151A
Matrix:	Soil	**Unit:**	mg/kg
Project:	EO-514393	**Sample ID:**	MB/LCS/LCSD-300711 2408J32-004AMS/MSD

QC Summary Report for SW8151A

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acifluorfen	0.091	0.090	0.10	91	90	31-145	0.784	30
Bentazon	0.099	0.099	0.10	99	99	60-140	0.454	30
Chloramben	0.11	0.11	0.10	110	112	60-140	1.47	30
2,4-D (Dichlorophenoxyacetic acid)	0.096	0.098	0.10	96	98	72-121	1.72	30
2,4-DB	0.099	0.099	0.10	99	99	69-134	0.333	30
Dalapon	0.090	0.098	0.10	90	98	73-117	8.08	30
DCPA (mono & diacid)	0.098	0.097	0.10	98	97	60-140	1.17	30
Dicamba	0.097	0.099	0.10	97	99	71-121	1.98	30
3,5-Dichlorobenzoic Acid	0.096	0.098	0.10	96	98	60-140	2.55	30
Dichloroprop	0.096	0.097	0.10	96	97	60-140	1.59	30
Dinoseb (DNBP)	0.094	0.096	0.10	94	96	60-140	1.20	30
MCPA	8.9	8.9	10	89	89	60-140	0.655	30
MCPP	9.1	9.4	10	91	94	60-140	3.15	30
4-Nitrophenol	0.24	0.24	0.10	244,F7	237,F7	60-140	2.81	30
Pentachlorophenol (PCP)	0.098	0.10	0.10	98	100	68-135	1.74	30
Picloram	0.095	0.094	0.10	95	94	60-140	0.993	30
2,4,5-T (Trichlorophenoxy acetic acid)	0.099	0.10	0.10	99	100	60-140	0.695	30
2,4,5-TP (Silvex)	0.098	0.099	0.10	98	99	70-130	1.36	30
Surrogate Recovery								
DCAA	0.095	0.097	0.10	95	97	77-116	1.62	30

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acifluorfen	10	0.12	0.098	0.10	ND<0.10	120	98	60-140	20.3	30
Bentazon	10	0.11	0.089	0.10	ND<0.10	108	89	60-140	19.8	30
Chloramben	10	0.099	0.087	0.10	ND<0.10	99	87	60-140	13.0	30
2,4-D (Dichlorophenoxyacetic acid)	10	0.11	0.082	0.10	ND<0.10	105	82	56-156	24.7	30
2,4-DB	10	0.097	0.085	0.10	ND<0.10	97	85	45-164	13.0	30
Dalapon	10	0.10	0.081	0.10	ND<0.10	104	81	54-142	24.1	30
DCPA (mono & diacid)	10	0.098	0.080	0.10	ND<0.10	98	80	60-140	20.0	30
Dicamba	10	0.092	0.077	0.10	ND<0.10	92	77	65-131	16.7	30
3,5-Dichlorobenzoic Acid	10	0.11	0.085	0.10	ND<0.10	105	85	60-140	21.1	30
Dichloroprop	10	0.10	0.078	0.10	ND<0.10	102	78	60-140	26.6	30
Dinoseb (DNBP)	10	0.099	0.078	0.10	ND<0.10	99	78	60-140	23.5	30
MCPA	10	12	10	10	ND<10	120	102	60-140	16.9	30
MCPP	10	10	8.5	10	ND<10	101	85	60-140	17.2	30

(Cont.)

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Quality Control Report

Client:	Enthalpy Analytical	**WorkOrder:**	2408J32
Date Prepared:	08/28/2024	**BatchID:**	300711
Date Analyzed:	08/30/2024 - 08/31/2024	**Extraction Method:**	SW8151A
Instrument:	GC15A	**Analytical Method:**	SW8151A
Matrix:	Soil	**Unit:**	mg/kg
Project:	EO-514393	**Sample ID:**	MB/LCS/LCSD-300711 2408J32-004AMS/MSD

QC Summary Report for SW8151A

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
4-Nitrophenol	10	0.20	0.15	0.10	ND<0.10	197,F1	147,F1	60-140	28.8	30
Pentachlorophenol (PCP)	10	0.089	0.071	0.10	ND<0.10	89	71	60-140	22.3	30
Picloram	10	0.10	0.081	0.10	ND<0.10	102	81	60-140	22.4	30
2,4,5-T (Trichlorophenoxy acetic acid)	10	0.10	0.078	0.10	ND<0.10	104	78	60-140	28.7	30
2,4,5-TP (Silvex)	10	0.11	0.089	0.10	ND<0.10	112	89	61-131	22.4	30
Surrogate Recovery										
DCAA	10	0.10	0.080	0.10		104	80	63-121	25.8,F3	20

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2408J32 **ClientCode: ENO** **QuoteID: 242515**

☐ WaterTrax ☐ CLIP ☐ EDF ☐ EQuIS ☐ Dry-Weight ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag
☐ Detection Summary ☑ Excel [A1_Standard _QC]

Report to:
Richard Villafania
Enthalpy Analytical
931 West Barkley Avenue
Orange, CA 92868
(714) 771-6900 FAX:

Email: Richard.villafania@enthalpy.com; incoming
cc/3rd Party:
PO: 058321
Project: EO-514393

Bill to:
Accounts Payable/Enthalpy SoCal
Montrose Environmental Group
PO Box 842165
Boston, MA 02284-2165
003EL_ap@montrose-env.com

Requested TAT: 5 days;

Date Received: **08/23/2024**
Date Logged: **08/26/2024**

Lab ID	ClientSampID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
					Requested Tests (See legend below)											
2408J32-001	S-2-1	Soil	8/16/2024 10:39	☐		A	A									
2408J32-002	COMP#1 (S-1, S-3)	Soil	8/20/2024 00:00	☐		A	A									
2408J32-003	COMP#2 (S-4, S-5, S-6)	Soil	8/20/2024 00:00	☐	A	A	A									
2408J32-004	COMP#3 (S-7, S-8, S-9)	Soil	8/20/2024 00:00	☐	A	A	A									
2408J32-005	COMP#4 (S-10, S-11, S-12)	Soil	8/20/2024 00:00	☐	A	A	A									

Test Legend:

1	8141_S	2	8151_S	3	PRDisposal Fee	4	
5		6		7		8	
9		10		11		12	

Project Manager: Yen Cao

Prepared by: Adrianna Cardoza

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ENTHALPY ANALYTICAL
Client Contact: Richard Villafania
Contact's Email: Richard.villafania@enthalpy.com; incomingreports@enthalpy.com

Project: EO-514393
Comments

Work Order: 2408J32
QC Level: LEVEL 2
Date Logged: 8/26/2024

☐ WaterTrax ☐ CLIP ☐ EDF ☑ Excel ■ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag

LabID	ClientSampID	Matrix	Test Name	Cont./ Comp.	Bottle & Preservative	U**	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	S-2-1	Soil	SW8151A (Chlorinated Herbicides)	1	2OZ GJ, Unpres	☐	☐	☐	8/16/2024 10:39	5 days	8/30/2024		☐	☐
002A	COMP#1 (S-1, S-3)	Soil	SW8151A (Chlorinated Herbicides)	1	2OZ GJ, Unpres	☐	☐	☐	8/20/2024	5 days	8/30/2024		☐	☐
003A	COMP#2 (S-4, S-5, S-6)	Soil	SW8151A (Chlorinated Herbicides)	1	4OZ GJ, Unpres	☐	☐	☐	8/20/2024	5 days	8/30/2024		☐	☐
			SW8270E (ON/P Pesticides - EPA 8141 target list)			☐	☐	☐		5 days	8/30/2024		☐	☐
004A	COMP#3 (S-7, S-8, S-9)	Soil	SW8151A (Chlorinated Herbicides)	1	4OZ GJ, Unpres	☐	☐	☐	8/20/2024	5 days	8/30/2024		☐	☐
			SW8270E (ON/P Pesticides - EPA 8141 target list)			☐	☐	☐		5 days	8/30/2024		☐	☐
005A	COMP#4 (S-10, S-11, S-12)	Soil	SW8151A (Chlorinated Herbicides)	1	4OZ GJ, Unpres	☐	☐	☐	8/20/2024	5 days	8/30/2024		☐	☐
			SW8270E (ON/P Pesticides - EPA 8141 target list)			☐	☐	☐		5 days	8/30/2024		☐	☐

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- ISM prep requires 5 to 10 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 6 to 11 days from sample submission). Due date listed on WO summary will not accurately reflect the time needed for sample preparation.

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.**

Cont./Comp. = Containers /Composites

2408J32

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange
Orange, CA 92868
(714) 771-6900 / Fax: (510) 486-0532

Subcontract Laboratory:
McCampbell Analytical, Inc.
1534 Willow Pass Rd.
Pittsburg, CA 94565
ATTN: Quote ID: 242515
PO #: PO-058321

Enthalpy Order: EO-514393
PM: Richard Villafania
Email: richard.villafania@enthalpy.com
CC: incomingreports@enthalpy.com
Phone: (714) 771-6900

Results Due: Standard TAT
Report Level: II
Report To: RL
EDDs: Standard Excel EDD

Notes:

Sample ID	Collected	Lab ID	# Cont.	Matrix	Analysis Requested	Comment
S-2-1	16-AUG-2024 10:39	514393-002	1	Soil	EPA 8151A Chlorinated Herbicides	
COMP#1 (S-1, S-3)	20-AUG-2024 00:00	514393-013	1	Soil	EPA 8151A Chlorinated Herbicides	
COMP#2 (S-4,S-5,S-6)	20-AUG-2024 00:00	514393-014	1	Soil	Organophosphorus Pesticides	
				Soil	EPA 8151A Chlorinated Herbicides	
COMP#3 (S-7,S-8,S-9)	20-AUG-2024 00:00	514393-015	1	Soil	Organophosphorus Pesticides	
				Soil	EPA 8151A Chlorinated Herbicides	
COMP#4 (S-10,S-11,S-12)	20-AUG-2024 00:00	514393-016	1	Soil	Organophosphorus Pesticides	
				Soil	EPA 8151A Chlorinated Herbicides	

Notes:	Relinquished By:	Received By:
BAG 12	A. Quitugua JEBERT QUITUGUA	
	Date: 8/22/24 1500	Date: 8-23-24 9:41
	Date:	Date:
	Date:	Date:

0.4wt.
IR41

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Sample Receipt Checklist

Client Name:	Enthalpy Analytical	Date and Time Received:	8/23/2024 09:41
Project:	EO-514393	Date Logged:	8/26/2024
		Received by:	Adrianna Cardoza
WorkOrder №:	2408J32 Matrix: Soil	Logged by:	Adrianna Cardoza
Carrier:	Golden State Overnight		

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Sample IDs noted by Client on COC?	Yes ☑	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐	
Sampler's name noted on COC?	Yes ☑	No ☐	
COC agrees with Quote?	Yes ☑	No ☐	NA ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	NA ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	NA ☐
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	NA ☐
Samples Received on Ice?	Yes ☑	No ☐	
(Ice Type: WET ICE)			
Sample/Temp Blank temperature	Temp: 0.4°C		NA ☐
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2)?	Yes ☐	No ☐	NA ☑

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes ☐	No ☐	NA ☑

Comments:

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number	:	514427
Report Level	:	II
Report Date	:	08/29/2024

Analytical Report *prepared for:*

Charles Barsamian
Willbanks Environmental Consulting
8413 N. Millbrook Ave, Ste 110
Fresno, CA 93720

Project: BONADELLE ARMSTRONG - 23.340

Authorized for release by:

Richard Villafania, Project Manager
richard.villafania@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

ENTHALPY ANALYTICAL

Sample Summary

Charles Barsamian Willbanks Environmental Consulting 8413 N. Millbrook Ave, Ste 110 Fresno, CA 93720	Lab Job #: Project No: Location: Date Received:	514427 BONADELLE ARMSTRONG 23.340 08/20/24

Sample ID	Lab ID	Collected	Matrix
V-SGP-1-5	514427-001	08/19/24 14:01	Air
V-SGP-2-5	514427-002	08/19/24 15:02	Air

Case Narrative

Willbanks Environmental Consulting 8413 N. Millbrook Ave, Ste 110 Fresno, CA 93720 Charles Barsamian	Lab Job Number:	514427
	Project No:	BONADELLE ARMSTRONG
	Location:	23.340
	Date Received:	08/20/24

This data package contains sample and QC results for two air samples, requested for the above referenced project on 08/20/24. The samples were received intact.

Volatile Organics in Air by MS (EPA TO-15):

No analytical problems were encountered.

ENTHALPY ANALYTICAL

Air Chain of Custody Record

Lab No: 514427

Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard:	x	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Special Instructions: Level II QA/QC

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Willbanks Environmental Consulting, Inc.	Name:	Bonadelle Armstrong
Report To:	Charles Barsamian	Number:	23.340
Email:	Charles@wecenvironmental.com	P.O. #:	
Address:	8413 N. Millbrook Ave. #110, Fresno, CA	Address:	South Armstrong Avenue, Fresno, CA
Phone:	(559)797-4181	Global ID:	
Fax:		Sampled By:	Charles Barsamian

	Sample ID	Type (I) Indoor (A) Ambient (SV) Soil Vapor (S) Source	Equipment Information: Canister ID	Size (1L, 3L, 6L, 15L)	Flow Controller ID	Sampling Information: Sample Start Date	Sample Start Time	Vacuum Start ("Hg)	Sample End Date	Sample End Time	Vacuum End ("Hg)	Analysis Requested: TO-15
1	V-SGP-1-5	SV	C10702	1 L	A10617	8/19/2024	1:52 PM	-28	8/19/2024	2:01 PM	-2	X
2	V-SGP-2-5	SV	C10794	1 L	A10356	8/19/2024	2:53 PM	-29	8/19/2024	3:02 PM	-1	X
3												
4												
5												
6												
7												
8												
9												
10												

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Charles Barsamian	Willbanks Env. Con.	8/19/2024 16:45
1 Received By:		O Kim	Zo	8/20/24 1230
2 Relinquished By:				
2 Received By:				
3 Relinquished By:				
3 Received By:				

SAMPLE RECEIPT CHECKLIST

ENTHALPY ANALYTICAL

Section 1: General Info

Date Received: 8/20/24 WO# 514427 Client: Willbanks Env. Con.

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☒ No

Custody seals intact on arrival? ☒ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened _____ By (initials)_____ Type of ice used : ☐ Wet ☐ Blue/Gel ☐ None

☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☒ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): _____/_____ Thermometer/IR Gun:_____CF:_____

Cooler Temp (°C) #1:____/____ #2:____/____ #3:____/____ #4:____/____ #5:____/____ #6:____/____

Section 3b: Microbiology Samples ☒ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ☐ **No air samples submitted (skip 3c)**

☒ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	✓		
2) Is the sampler's name present on the CoC?	✓		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	✓		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples) 8/20/24	✓		✓
5) Were all of, and only, the correct samples received?	✓		
6) Are sample labels present, legible, and in agreement with the CoC?	✓		
7) Does the container count match the CoC?	✓		
8) Was sufficient sample volume / mass received for the analyses requested?	✓		
9) Were samples received in proper containers for the analyses requested?	✓		
10) Were samples received with > 1/2 holding time remaining?	✓		
11) Are samples properly preserved as indicated by CoC / labels?	✓		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			✓
13) Are VOA vials free from headspace/bubbles > 6mm?			✓

Section 5: Explanations / Comments ☐ **PM notified**

Date Logged 8/20/24 **By (print)** TLK **(sign)** [illegible] for TLK

Date Labeled 8/20/24 **By (print)** _____ **(sign)** _____

View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialogue box that appears. Note: If your browser does not support this function, select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a scheduled Pickup
   - Your driver will pickup your shipment(s) as usual.

   Customers without a scheduled Pickup
   - Schedule a Pickup on ups.com to have a UPS driver pickup all of your packages.
   - Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. To find the location nearest you, please visit the 'Locations' Quick link at ups.com.

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NOELLE WILLBANKS
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WILLBANKS ENVIRONMENTAL CONSUL
8413 N MILLBROOK AVE
FRESNO CA 93720

7 LBS 1 OF 1
DWT: 18,10,10

SHIP TO:
RICHARD VILLAFANIA
ENTHALPY ANALYTICAL
SAMPLE RECEIVING
931 WEST BARKLEY AVENUE
ORANGE CA 92868

CA 9279-01

UPS GROUND
TRACKING #: 1Z 3T8 47T 03 9762 9673

BILLING: P/P

XOL 24.08.02 NV45 34.0A 08/2024*

ENTHALPY ANALYTICAL

Analysis Results for 514427

Charles Barsamian
Willbanks Environmental Consulting
8413 N. Millbrook Ave, Ste 110
Fresno, CA 93720

Lab Job #: 514427
Project No: BONADELLE ARMSTRONG
Location: 23.340
Date Received: 08/20/24

Sample ID: V-SGP-1-5 **Lab ID: 514427-001** **Collected: 08/19/24 14:01**
Matrix: Air

514427-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA TO-15 Prep Method: METHOD									
1,1-Difluoroethane	ND		ppbv	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1-Difluoroethane	ND		ug/m3	4.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Freon 12	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Freon 12	ND		ug/m3	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Freon 114	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Freon 114	ND		ug/m3	2.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chloromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chloromethane	ND		ug/m3	0.62	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Vinyl Chloride	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Vinyl Chloride	ND		ug/m3	0.77	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Bromomethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Bromomethane	ND		ug/m3	1.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chloroethane	ND		ug/m3	0.79	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Trichlorofluoromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Trichlorofluoromethane	ND		ug/m3	1.7	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1-Dichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1-Dichloroethene	ND		ug/m3	1.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Freon 113	**0.35**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Freon 113	**2.7**		ug/m3	2.3	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Acetone	**46**		ppbv	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Acetone	**110**		ug/m3	3.6	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Carbon Disulfide	**0.37**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Carbon Disulfide	**1.2**		ug/m3	0.93	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Isopropanol (IPA)	**4.4**		ppbv	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Isopropanol (IPA)	**11**		ug/m3	3.7	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Methylene Chloride	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Methylene Chloride	ND		ug/m3	1.0	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
trans-1,2-Dichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
trans-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
MTBE	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
MTBE	ND		ug/m3	1.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
n-Hexane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
n-Hexane	ND		ug/m3	1.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1-Dichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1-Dichloroethane	ND		ug/m3	1.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Vinyl Acetate	ND		ppbv	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Vinyl Acetate	ND		ug/m3	5.3	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
cis-1,2-Dichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
cis-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
2-Butanone	**5.0**		ppbv	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514427

514427-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2-Butanone	**15**		ug/m3	4.4	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chloroform	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chloroform	ND		ug/m3	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,1-Trichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,1-Trichloroethane	ND		ug/m3	1.6	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Carbon Tetrachloride	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Carbon Tetrachloride	ND		ug/m3	1.9	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Benzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Benzene	ND		ug/m3	0.96	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dichloroethane	ND		ug/m3	1.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Trichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Trichloroethene	ND		ug/m3	1.6	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dichloropropane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dichloropropane	ND		ug/m3	1.4	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Bromodichloromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Bromodichloromethane	ND		ug/m3	2.0	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
cis-1,3-Dichloropropene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
cis-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
4-Methyl-2-Pentanone	**1.4**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
4-Methyl-2-Pentanone	**5.8**		ug/m3	1.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Toluene	**1.4**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Toluene	**5.2**		ug/m3	1.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
trans-1,3-Dichloropropene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
trans-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,2-Trichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,2-Trichloroethane	ND		ug/m3	1.6	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Tetrachloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Tetrachloroethene	ND		ug/m3	2.0	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
2-Hexanone	ND		ppbv	0.75	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
2-Hexanone	ND		ug/m3	3.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Dibromochloromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Dibromochloromethane	ND		ug/m3	2.6	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dibromoethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dibromoethane	ND		ug/m3	2.3	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Chlorobenzene	ND		ug/m3	1.4	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Ethylbenzene	**0.32**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Ethylbenzene	**1.4**		ug/m3	1.3	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
m,p-Xylenes	**1.1**		ppbv	0.60	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
m,p-Xylenes	**4.7**		ug/m3	2.6	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
o-Xylene	**0.57**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
o-Xylene	**2.5**		ug/m3	1.3	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Styrene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Styrene	ND		ug/m3	1.3	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Bromoform	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Bromoform	ND		ug/m3	3.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,2,2-Tetrachloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,2,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,1,2-Tetrachloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,1,1,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
4-Ethyltoluene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514427

514427-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4-Ethyltoluene	ND		ug/m3	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,3,5-Trimethylbenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,3,5-Trimethylbenzene	ND		ug/m3	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2,4-Trimethylbenzene	**1.0**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2,4-Trimethylbenzene	**4.9**		ug/m3	1.5	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,3-Dichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,3-Dichlorobenzene	ND		ug/m3	1.8	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,4-Dichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,4-Dichlorobenzene	ND		ug/m3	1.8	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Benzyl chloride	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Benzyl chloride	ND		ug/m3	1.6	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2-Dichlorobenzene	ND		ug/m3	1.8	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2,4-Trichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
1,2,4-Trichlorobenzene	ND		ug/m3	2.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Hexachlorobutadiene	ND		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Hexachlorobutadiene	ND		ug/m3	3.2	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Xylene (total)	**1.7**		ppbv	0.30	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Xylene (total)	**7.2**		ug/m3	1.3	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD
Surrogates				**Limits**					
Bromofluorobenzene	101%		%REC	60-140	1.5	348267	08/21/24 20:11	08/21/24 20:11	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514427

Sample ID: V-SGP-2-5	Lab ID: 514427-002	Collected: 08/19/24 15:02
	Matrix: Air	

514427-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA TO-15 Prep Method: METHOD									
1,1-Difluoroethane	ND		ppbv	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1-Difluoroethane	ND		ug/m3	4.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Freon 12	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Freon 12	ND		ug/m3	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Freon 114	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Freon 114	ND		ug/m3	2.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chloromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chloromethane	ND		ug/m3	0.62	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Vinyl Chloride	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Vinyl Chloride	ND		ug/m3	0.77	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Bromomethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Bromomethane	ND		ug/m3	1.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chloroethane	ND		ug/m3	0.79	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Trichlorofluoromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Trichlorofluoromethane	ND		ug/m3	1.7	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1-Dichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1-Dichloroethene	ND		ug/m3	1.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Freon 113	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Freon 113	ND		ug/m3	2.3	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Acetone	**6.4**		ppbv	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Acetone	**15**		ug/m3	3.6	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Carbon Disulfide	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Carbon Disulfide	ND		ug/m3	0.93	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Isopropanol (IPA)	**2.5**		ppbv	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Isopropanol (IPA)	**6.1**		ug/m3	3.7	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Methylene Chloride	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Methylene Chloride	ND		ug/m3	1.0	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
trans-1,2-Dichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
trans-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
MTBE	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
MTBE	ND		ug/m3	1.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
n-Hexane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
n-Hexane	ND		ug/m3	1.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1-Dichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1-Dichloroethane	ND		ug/m3	1.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Vinyl Acetate	ND		ppbv	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Vinyl Acetate	ND		ug/m3	5.3	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
cis-1,2-Dichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
cis-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
2-Butanone	ND		ppbv	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
2-Butanone	ND		ug/m3	4.4	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chloroform	**0.30**		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chloroform	**1.5**		ug/m3	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1,1-Trichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514427

514427-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
1,1,1-Trichloroethane	ND		ug/m3	1.6	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Carbon Tetrachloride	**0.38**		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Carbon Tetrachloride	**2.4**		ug/m3	1.9	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Benzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Benzene	ND		ug/m3	0.96	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dichloroethane	ND		ug/m3	1.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Trichloroethene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Trichloroethene	ND		ug/m3	1.6	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dichloropropane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dichloropropane	ND		ug/m3	1.4	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Bromodichloromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Bromodichloromethane	ND		ug/m3	2.0	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
cis-1,3-Dichloropropene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
cis-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
4-Methyl-2-Pentanone	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
4-Methyl-2-Pentanone	ND		ug/m3	1.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Toluene	**6.3**		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Toluene	**24**		ug/m3	1.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
trans-1,3-Dichloropropene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
trans-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1,2-Trichloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1,2-Trichloroethane	ND		ug/m3	1.6	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Tetrachloroethene	**3.2**		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Tetrachloroethene	**22**		ug/m3	2.0	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
2-Hexanone	ND		ppbv	0.75	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
2-Hexanone	ND		ug/m3	3.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Dibromochloromethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Dibromochloromethane	ND		ug/m3	2.6	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dibromoethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dibromoethane	ND		ug/m3	2.3	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Chlorobenzene	ND		ug/m3	1.4	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Ethylbenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Ethylbenzene	ND		ug/m3	1.3	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
m,p-Xylenes	ND		ppbv	0.60	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
m,p-Xylenes	ND		ug/m3	2.6	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
o-Xylene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
o-Xylene	ND		ug/m3	1.3	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Styrene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Styrene	ND		ug/m3	1.3	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Bromoform	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Bromoform	ND		ug/m3	3.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1,2,2-Tetrachloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1,2,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1,1,2-Tetrachloroethane	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,1,1,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
4-Ethyltoluene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
4-Ethyltoluene	ND		ug/m3	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,3,5-Trimethylbenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,3,5-Trimethylbenzene	ND		ug/m3	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2,4-Trimethylbenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 514427

514427-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
1,2,4-Trimethylbenzene	ND		ug/m3	1.5	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,3-Dichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,3-Dichlorobenzene	ND		ug/m3	1.8	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,4-Dichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,4-Dichlorobenzene	ND		ug/m3	1.8	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Benzyl chloride	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Benzyl chloride	ND		ug/m3	1.6	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2-Dichlorobenzene	ND		ug/m3	1.8	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2,4-Trichlorobenzene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
1,2,4-Trichlorobenzene	ND		ug/m3	2.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Hexachlorobutadiene	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Hexachlorobutadiene	ND		ug/m3	3.2	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Xylene (total)	ND		ppbv	0.30	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Xylene (total)	ND		ug/m3	1.3	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD
Surrogates				**Limits**					
Bromofluorobenzene	101%		%REC	60-140	1.5	348267	08/21/24 20:43	08/21/24 20:43	OHD

ND Not Detected

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1179887**	**Batch:**	**348267**
Matrix:	**Air**	**Method:**	**EPA TO-15**	**Prep Method:**	**METHOD**

QC1179887 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Difluoroethane	10.51	10.00	ppbv	105%		70-130
Freon 12	8.714	10.00	ppbv	87%		70-130
Freon 114	8.651	10.00	ppbv	87%		70-130
Chloromethane	9.055	10.00	ppbv	91%		70-130
Vinyl Chloride	8.966	10.00	ppbv	90%		70-130
Bromomethane	8.847	10.00	ppbv	88%		70-130
Chloroethane	9.089	10.00	ppbv	91%		70-130
Trichlorofluoromethane	8.444	10.00	ppbv	84%		70-130
1,1-Dichloroethene	8.721	10.00	ppbv	87%		70-130
Freon 113	8.752	10.00	ppbv	88%		70-130
Acetone	8.856	10.00	ppbv	89%		70-130
Carbon Disulfide	9.106	10.00	ppbv	91%		70-130
Isopropanol (IPA)	8.565	10.00	ppbv	86%		70-130
Methylene Chloride	8.602	10.00	ppbv	86%		70-130
trans-1,2-Dichloroethene	8.717	10.00	ppbv	87%		70-130
MTBE	8.196	10.00	ppbv	82%		70-130
n-Hexane	10.34	10.00	ppbv	103%		70-130
1,1-Dichloroethane	8.747	10.00	ppbv	87%		70-130
Vinyl Acetate	8.116	10.00	ppbv	81%		70-130
cis-1,2-Dichloroethene	10.39	10.00	ppbv	104%		70-130
2-Butanone	9.541	10.00	ppbv	95%		70-130
Chloroform	10.26	10.00	ppbv	103%		70-130
1,1,1-Trichloroethane	10.44	10.00	ppbv	104%		70-130
Carbon Tetrachloride	10.76	10.00	ppbv	108%		70-130
Benzene	10.11	10.00	ppbv	101%		70-130
1,2-Dichloroethane	10.46	10.00	ppbv	105%		70-130
Trichloroethene	9.969	10.00	ppbv	100%		70-130
1,2-Dichloropropane	10.87	10.00	ppbv	109%		70-130
Bromodichloromethane	10.80	10.00	ppbv	108%		70-130
cis-1,3-Dichloropropene	10.72	10.00	ppbv	107%		70-130
4-Methyl-2-Pentanone	11.11	10.00	ppbv	111%		70-130
Toluene	10.22	10.00	ppbv	102%		70-130
trans-1,3-Dichloropropene	10.65	10.00	ppbv	107%		70-130
1,1,2-Trichloroethane	10.40	10.00	ppbv	104%		70-130
Tetrachloroethene	10.01	10.00	ppbv	100%		70-130
2-Hexanone	10.88	10.00	ppbv	109%		70-130
Dibromochloromethane	10.84	10.00	ppbv	108%		70-130
1,2-Dibromoethane	10.36	10.00	ppbv	104%		70-130
Chlorobenzene	10.29	10.00	ppbv	103%		70-130
Ethylbenzene	10.65	10.00	ppbv	106%		70-130
m,p-Xylenes	21.72	20.00	ppbv	109%		70-130
o-Xylene	10.60	10.00	ppbv	106%		70-130
Styrene	10.57	10.00	ppbv	106%		70-130
Bromoform	11.38	10.00	ppbv	114%		70-130
1,1,2,2-Tetrachloroethane	10.90	10.00	ppbv	109%		70-130
1,1,1,2-Tetrachloroethane	10.72	10.00	ppbv	107%		70-130
4-Ethyltoluene	10.89	10.00	ppbv	109%		70-130

ENTHALPY ANALYTICAL

Batch QC

QC1179887 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,3,5-Trimethylbenzene	10.87	10.00	ppbv	109%		70-130
1,2,4-Trimethylbenzene	10.77	10.00	ppbv	108%		70-130
1,3-Dichlorobenzene	10.56	10.00	ppbv	106%		70-130
1,4-Dichlorobenzene	10.18	10.00	ppbv	102%		70-130
Benzyl chloride	11.80	10.00	ppbv	118%		70-130
1,2-Dichlorobenzene	10.46	10.00	ppbv	105%		70-130
1,2,4-Trichlorobenzene	10.58	10.00	ppbv	106%		70-130
Hexachlorobutadiene	10.61	10.00	ppbv	106%		70-130
Surrogates						
Bromofluorobenzene	10.31	10.00	ppbv	103%		60-140

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample Duplicate**	**Lab ID:**	**QC1179888**	**Batch:**	**348267**
Matrix:	**Air**	**Method:**	**EPA TO-15**	**Prep Method:**	**METHOD**

QC1179888 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Difluoroethane	10.89	10.00	ppbv	109%		70-130	4	25
Freon 12	8.712	10.00	ppbv	87%		70-130	0	25
Freon 114	8.726	10.00	ppbv	87%		70-130	1	25
Chloromethane	9.056	10.00	ppbv	91%		70-130	0	25
Vinyl Chloride	8.894	10.00	ppbv	89%		70-130	1	25
Bromomethane	8.825	10.00	ppbv	88%		70-130	0	25
Chloroethane	8.932	10.00	ppbv	89%		70-130	2	25
Trichlorofluoromethane	8.577	10.00	ppbv	86%		70-130	2	25
1,1-Dichloroethene	8.793	10.00	ppbv	88%		70-130	1	25
Freon 113	8.805	10.00	ppbv	88%		70-130	1	25
Acetone	8.896	10.00	ppbv	89%		70-130	0	25
Carbon Disulfide	9.173	10.00	ppbv	92%		70-130	1	25
Isopropanol (IPA)	8.598	10.00	ppbv	86%		70-130	0	25
Methylene Chloride	8.719	10.00	ppbv	87%		70-130	1	25
trans-1,2-Dichloroethene	8.678	10.00	ppbv	87%		70-130	0	25
MTBE	8.244	10.00	ppbv	82%		70-130	1	25
n-Hexane	10.50	10.00	ppbv	105%		70-130	2	25
1,1-Dichloroethane	8.751	10.00	ppbv	88%		70-130	0	25
Vinyl Acetate	8.367	10.00	ppbv	84%		70-130	3	25
cis-1,2-Dichloroethene	10.65	10.00	ppbv	107%		70-130	2	25
2-Butanone	9.661	10.00	ppbv	97%		70-130	1	25
Chloroform	10.38	10.00	ppbv	104%		70-130	1	25
1,1,1-Trichloroethane	10.69	10.00	ppbv	107%		70-130	2	25
Carbon Tetrachloride	11.03	10.00	ppbv	110%		70-130	2	25
Benzene	10.27	10.00	ppbv	103%		70-130	2	25
1,2-Dichloroethane	10.51	10.00	ppbv	105%		70-130	0	25
Trichloroethene	10.25	10.00	ppbv	102%		70-130	3	25
1,2-Dichloropropane	11.19	10.00	ppbv	112%		70-130	3	25
Bromodichloromethane	11.04	10.00	ppbv	110%		70-130	2	25
cis-1,3-Dichloropropene	10.95	10.00	ppbv	110%		70-130	2	25
4-Methyl-2-Pentanone	11.32	10.00	ppbv	113%		70-130	2	25
Toluene	10.36	10.00	ppbv	104%		70-130	1	25
trans-1,3-Dichloropropene	11.08	10.00	ppbv	111%		70-130	4	25
1,1,2-Trichloroethane	10.63	10.00	ppbv	106%		70-130	2	25
Tetrachloroethene	10.19	10.00	ppbv	102%		70-130	2	25
2-Hexanone	11.29	10.00	ppbv	113%		70-130	4	25
Dibromochloromethane	11.05	10.00	ppbv	111%		70-130	2	25
1,2-Dibromoethane	10.60	10.00	ppbv	106%		70-130	2	25
Chlorobenzene	10.53	10.00	ppbv	105%		70-130	2	25
Ethylbenzene	10.79	10.00	ppbv	108%		70-130	1	25
m,p-Xylenes	21.90	20.00	ppbv	110%		70-130	1	25
o-Xylene	10.77	10.00	ppbv	108%		70-130	2	25
Styrene	10.79	10.00	ppbv	108%		70-130	2	25
Bromoform	11.80	10.00	ppbv	118%		70-130	4	25
1,1,2,2-Tetrachloroethane	11.12	10.00	ppbv	111%		70-130	2	25
1,1,1,2-Tetrachloroethane	11.00	10.00	ppbv	110%		70-130	3	25

ENTHALPY ANALYTICAL

Batch QC

QC1179888 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
4-Ethyltoluene	11.00	10.00	ppbv	110%		70-130	1	25
1,3,5-Trimethylbenzene	10.94	10.00	ppbv	109%		70-130	1	25
1,2,4-Trimethylbenzene	11.08	10.00	ppbv	111%		70-130	3	25
1,3-Dichlorobenzene	10.47	10.00	ppbv	105%		70-130	1	25
1,4-Dichlorobenzene	10.69	10.00	ppbv	107%		70-130	5	25
Benzyl chloride	12.56	10.00	ppbv	126%		70-130	6	25
1,2-Dichlorobenzene	10.57	10.00	ppbv	106%		70-130	1	25
1,2,4-Trichlorobenzene	10.90	10.00	ppbv	109%		70-130	3	25
Hexachlorobutadiene	10.90	10.00	ppbv	109%		70-130	3	25
Surrogates								
Bromofluorobenzene	10.35	10.00	ppbv	104%		60-140		

ENTHALPY ANALYTICAL

Batch QC

Type:	**Blank**	**Lab ID:**	**QC1179889**	**Batch:**	**348267**
Matrix:	**Air**	**Method:**	**EPA TO-15**	**Prep Method:**	**METHOD**

QC1179889 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1,1-Difluoroethane	ND		ppbv	1.0	08/21/24 09:15	08/21/24 09:15
Freon 12	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Freon 114	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Chloromethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Vinyl Chloride	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Bromomethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Chloroethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Trichlorofluoromethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,1-Dichloroethene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Freon 113	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Acetone	ND		ppbv	1.0	08/21/24 09:15	08/21/24 09:15
Carbon Disulfide	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Isopropanol (IPA)	ND		ppbv	1.0	08/21/24 09:15	08/21/24 09:15
Methylene Chloride	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
trans-1,2-Dichloroethene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
MTBE	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
n-Hexane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,1-Dichloroethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Vinyl Acetate	ND		ppbv	1.0	08/21/24 09:15	08/21/24 09:15
cis-1,2-Dichloroethene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
2-Butanone	ND		ppbv	1.0	08/21/24 09:15	08/21/24 09:15
Chloroform	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,1,1-Trichloroethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Carbon Tetrachloride	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Benzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,2-Dichloroethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Trichloroethene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,2-Dichloropropane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Bromodichloromethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
cis-1,3-Dichloropropene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
4-Methyl-2-Pentanone	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Toluene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
trans-1,3-Dichloropropene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,1,2-Trichloroethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Tetrachloroethene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
2-Hexanone	ND		ppbv	0.50	08/21/24 09:15	08/21/24 09:15
Dibromochloromethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,2-Dibromoethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Chlorobenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Ethylbenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
m,p-Xylenes	ND		ppbv	0.40	08/21/24 09:15	08/21/24 09:15
o-Xylene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Styrene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Bromoform	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,1,2,2-Tetrachloroethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,1,1,2-Tetrachloroethane	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
4-Ethyltoluene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15

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Batch QC

QC1179889 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1,3,5-Trimethylbenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,2,4-Trimethylbenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,3-Dichlorobenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,4-Dichlorobenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Benzyl chloride	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,2-Dichlorobenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
1,2,4-Trichlorobenzene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Hexachlorobutadiene	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Xylene (total)	ND		ppbv	0.20	08/21/24 09:15	08/21/24 09:15
Surrogates				**Limits**		
Bromofluorobenzene	102%		%REC	60-140	08/21/24 09:15	08/21/24 09:15

ND Not Detected

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number	:	515957
Report Level	:	II
Report Date	:	09/13/2024

Analytical Report *prepared for:*

Charles Barsamian
Willbanks Environmental Consulting
8413 N. Millbrook Ave, Ste 110
Fresno, CA 93720

Project: BONADELLE ARMSTRONG - 23.340

Authorized for release by:

Richard Villafania, Project Manager
richard.villafania@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

ENTHALPY ANALYTICAL

Sample Summary

Charles Barsamian Willbanks Environmental Consulting 8413 N. Millbrook Ave, Ste 110 Fresno, CA 93720	Lab Job #: Project No: Location: Date Received:	515957 BONADELLE ARMSTRONG 23.340 09/12/24

Sample ID	Lab ID	Collected	Matrix
V-SGP-3-5	515957-001	09/10/24 17:08	Air
V-SGP-4-5	515957-002	09/10/24 17:19	Air

Case Narrative

Willbanks Environmental Consulting 8413 N. Millbrook Ave, Ste 110 Fresno, CA 93720 Charles Barsamian	Lab Job Number:	515957
	Project No:	BONADELLE ARMSTRONG
	Location:	23.340
	Date Received:	09/12/24

This data package contains sample and QC results for two air samples, requested for the above referenced project on 09/12/24. The samples were received intact.

Volatile Organics in Air by MS (EPA TO-15):

- High ICAL percent RSD (relative standard deviation) was observed for benzyl chloride in the calibration analyzed 09/05/24 10:50; affected data was qualified with "b".
- High recovery was observed for benzyl chloride in the BSD for batch 349958; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.
- No other analytical problems were encountered.

931 W. Barkley Ave., Orange, CA 92868
Phone: (714) 771-6900 Fax: (714) 538-1209

ENTHALPY ANALYTICAL

Air Chain of Custody Record

Lab Job No. 515957

CUSTOMER INFORMATION		PROJECT INFORMATION		PO Number:
Company:	WILLBANKS ENVIRONMENTAL CONSULTING, INC.	Name:	BONADELLE ARMSTRONG	
Report To:	CHARLES BARSAMIAN	Number:	24.340	Lab Quote Number:
Email:	charles@wecenvironmental.com	Address:	1183 S. ARMSTRONG AVE, FRESNO, CA	
Address:	8413 N. MILLBROOK AVE, FRESNO, CA 93720			
		Global ID:		
Phone:	559-797-4181	Fax:		Sampled By: CHARLES BARSAMIAN

Special Instructions:

Analysis Request: TO-15

Required Turnaround Time:
- Standard ☐
- 5 Day ☐
- 3 Day ☐
- 2 Day ☐
- 1 Day ☒
- Custom TAT: ____

	Sample ID	Air Type (I) Indoor (A) Ambient (SV) Soil Vapor	Equipment Information: Canister ID	Canister Size (6L or 1L)	Flow Controller ID	Start Sampling Information: Date	Time	Canister Pressure (in. Hg)	Stop Sampling Information: Date	Time	Canister Pressure (in. Hg)	TO-15					Comments
1	V-SGP-3-5	SV	C10441	1L	A10293	9-10-24	4:59 pm	-29	9-10-24	5:08 pm	-2	X					
2	V-SGP-4-5	SV	C10336	1L	A10436	9-10-24	5:10 pm	-30	9-10-24	5:19 pm	-2	X					
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE / TIME
RELINQUISHED BY:		CHARLES CASEY BARSAMIAN	WEC / ENG. TECH	9-11-24 / 12:00 pm
RECEIVED BY:		Daniel Swafford	Enthalpy	11:13
RELINQUISHED BY:				
RECEIVED BY:				
RELINQUISHED BY:				
RECEIVED BY:				

SAMPLE RECEIPT CHECKLIST

ENTHALPY

Section 1: General Info

Date Received: 9/12/24 WO# 515957 Client: Willbanks

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☑ No

Custody seals intact on arrival? ☐ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 9/12/24 By (initials) DS Type of ice used : ☐ Wet ☐ Blue/Gel ☐ None

☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☑ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: _____ CF: _____

Cooler Temp (°C) #1: ____/____ #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ☑ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples AS 9/12/24 ☑ **No air samples submitted (skip 3c)**

☑ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other _____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	✓		
2) Is the sampler's name present on the CoC?	✓		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	✓		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)			✓
5) Were all of, and only, the correct samples received?	✓		
6) Are sample labels present, legible, and in agreement with the CoC?	✓		
7) Does the container count match the CoC?	✓		
8) Was sufficient sample volume / mass received for the analyses requested?	✓		
9) Were samples received in proper containers for the analyses requested?	✓		
10) Were samples received with > 1/2 holding time remaining?	✓		
11) Are samples properly preserved as indicated by CoC / labels?			✓
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			✓
13) Are VOA vials free from headspace/bubbles > 6mm?			✓

Section 5: Explanations / Comments ☐ **PM notified**

Date Logged 9/12/24 **By (print)** [illegible] **(sign)** [illegible]

Date Labeled 9/12/24 **By (print)** EA-Orange **(sign)** _____

View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialogue box that appears. Note: If your browser does not support this function, select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a scheduled Pickup
   - Your driver will pickup your shipment(s) as usual.

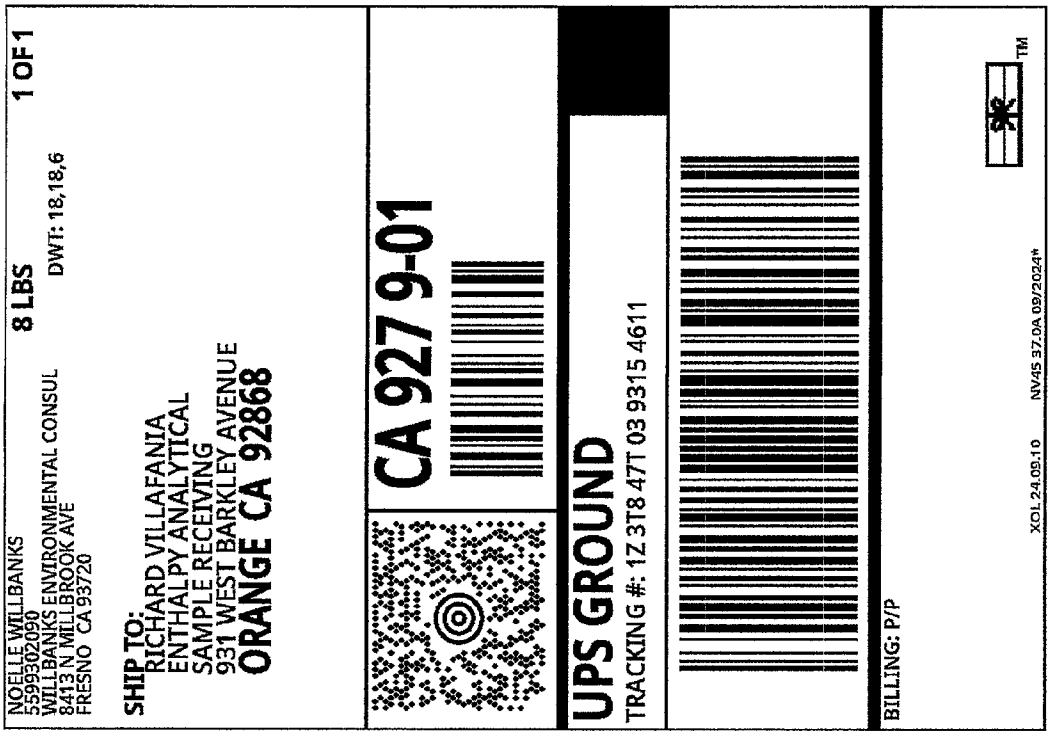
   Customers without a scheduled Pickup
   - Schedule a Pickup on ups.com to have a UPS driver pickup all of your packages.
   - Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. To find the location nearest you, please visit the 'Locations' Quick link at ups.com.

UPS Access Point™
THE UPS STORE
7726 N 1ST ST
FRESNO CA 93720-0989

UPS Access Point™
POSTAL EXPRESS AND GIFT
1099 E CHAMPLAIN DR
FRESNO CA 93720-5030

UPS Access Point™
CVS STORE # 9391
1113 E CHAMPLAIN DR
FRESNO CA 93720-4223

FOLD HERE



ENTHALPY ANALYTICAL

Analysis Results for 515957

Charles Barsamian
Willbanks Environmental Consulting
8413 N. Millbrook Ave, Ste 110
Fresno, CA 93720

Lab Job #: 515957
Project No: BONADELLE ARMSTRONG
Location: 23.340
Date Received: 09/12/24

Sample ID: V-SGP-3-5 **Lab ID: 515957-001** **Collected: 09/10/24 17:08**
Matrix: Air

515957-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA TO-15									
Prep Method: METHOD									
1,1-Difluoroethane	ND		ppbv	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1-Difluoroethane	ND		ug/m3	4.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Freon 12	**0.37**		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Freon 12	**1.8**		ug/m3	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Freon 114	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Freon 114	ND		ug/m3	2.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chloromethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chloromethane	ND		ug/m3	0.62	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Vinyl Chloride	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Vinyl Chloride	ND		ug/m3	0.77	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Bromomethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Bromomethane	ND		ug/m3	1.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chloroethane	ND		ug/m3	0.79	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Trichlorofluoromethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Trichlorofluoromethane	ND		ug/m3	1.7	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1-Dichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1-Dichloroethene	ND		ug/m3	1.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Freon 113	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Freon 113	ND		ug/m3	2.3	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Acetone	**54**		ppbv	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Acetone	**130**		ug/m3	3.6	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Carbon Disulfide	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Carbon Disulfide	ND		ug/m3	0.93	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Isopropanol (IPA)	**4.5**		ppbv	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Isopropanol (IPA)	**11**		ug/m3	3.7	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Methylene Chloride	**1.5**		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Methylene Chloride	**5.3**		ug/m3	1.0	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
trans-1,2-Dichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
trans-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
MTBE	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
MTBE	ND		ug/m3	1.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
n-Hexane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
n-Hexane	ND		ug/m3	1.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1-Dichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1-Dichloroethane	ND		ug/m3	1.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Vinyl Acetate	ND		ppbv	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Vinyl Acetate	ND		ug/m3	5.3	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
cis-1,2-Dichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
cis-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
2-Butanone	**8.8**		ppbv	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 515957

515957-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2-Butanone	**26**		ug/m3	4.4	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chloroform	**1.1**		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chloroform	**5.2**		ug/m3	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,1-Trichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,1-Trichloroethane	ND		ug/m3	1.6	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Carbon Tetrachloride	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Carbon Tetrachloride	ND		ug/m3	1.9	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Benzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Benzene	ND		ug/m3	0.96	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dichloroethane	ND		ug/m3	1.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Trichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Trichloroethene	ND		ug/m3	1.6	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dichloropropane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dichloropropane	ND		ug/m3	1.4	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Bromodichloromethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Bromodichloromethane	ND		ug/m3	2.0	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
cis-1,3-Dichloropropene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
cis-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
4-Methyl-2-Pentanone	**0.57**		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
4-Methyl-2-Pentanone	**2.3**		ug/m3	1.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Toluene	**0.34**		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Toluene	**1.3**		ug/m3	1.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
trans-1,3-Dichloropropene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
trans-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,2-Trichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,2-Trichloroethane	ND		ug/m3	1.6	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Tetrachloroethene	**0.43**		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Tetrachloroethene	**2.9**		ug/m3	2.0	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
2-Hexanone	ND		ppbv	0.75	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
2-Hexanone	ND		ug/m3	3.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Dibromochloromethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Dibromochloromethane	ND		ug/m3	2.6	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dibromoethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dibromoethane	ND		ug/m3	2.3	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Chlorobenzene	ND		ug/m3	1.4	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Ethylbenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Ethylbenzene	ND		ug/m3	1.3	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
m,p-Xylenes	ND		ppbv	0.60	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
m,p-Xylenes	ND		ug/m3	2.6	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
o-Xylene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
o-Xylene	ND		ug/m3	1.3	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Styrene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Styrene	ND		ug/m3	1.3	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Bromoform	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Bromoform	ND		ug/m3	3.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,2,2-Tetrachloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,2,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,1,2-Tetrachloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,1,1,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
4-Ethyltoluene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 515957

515957-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
4-Ethyltoluene	ND		ug/m3	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,3,5-Trimethylbenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,3,5-Trimethylbenzene	ND		ug/m3	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2,4-Trimethylbenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2,4-Trimethylbenzene	ND		ug/m3	1.5	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,3-Dichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,3-Dichlorobenzene	ND		ug/m3	1.8	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,4-Dichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,4-Dichlorobenzene	ND		ug/m3	1.8	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Benzyl chloride	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Benzyl chloride	ND		ug/m3	1.6	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2-Dichlorobenzene	ND		ug/m3	1.8	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2,4-Trichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
1,2,4-Trichlorobenzene	ND		ug/m3	2.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Hexachlorobutadiene	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Hexachlorobutadiene	ND		ug/m3	3.2	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Xylene (total)	ND		ppbv	0.30	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Xylene (total)	ND		ug/m3	1.3	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD
Surrogates				**Limits**					
Bromofluorobenzene	104%		%REC	60-140	1.5	349958	09/13/24 00:26	09/13/24 00:26	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 515957

Sample ID: V-SGP-4-5	Lab ID: 515957-002	Collected: 09/10/24 17:19
	Matrix: Air	

515957-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA TO-15 Prep Method: METHOD									
1,1-Difluoroethane	ND		ppbv	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1-Difluoroethane	ND		ug/m3	4.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Freon 12	**0.35**		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Freon 12	**1.7**		ug/m3	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Freon 114	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Freon 114	ND		ug/m3	2.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chloromethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chloromethane	ND		ug/m3	0.62	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Vinyl Chloride	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Vinyl Chloride	ND		ug/m3	0.77	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Bromomethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Bromomethane	ND		ug/m3	1.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chloroethane	ND		ug/m3	0.79	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Trichlorofluoromethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Trichlorofluoromethane	ND		ug/m3	1.7	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1-Dichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1-Dichloroethene	ND		ug/m3	1.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Freon 113	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Freon 113	ND		ug/m3	2.3	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Acetone	**35**		ppbv	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Acetone	**84**		ug/m3	3.6	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Carbon Disulfide	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Carbon Disulfide	ND		ug/m3	0.93	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Isopropanol (IPA)	**3.3**		ppbv	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Isopropanol (IPA)	**8.1**		ug/m3	3.7	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Methylene Chloride	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Methylene Chloride	ND		ug/m3	1.0	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
trans-1,2-Dichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
trans-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
MTBE	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
MTBE	ND		ug/m3	1.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
n-Hexane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
n-Hexane	ND		ug/m3	1.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1-Dichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1-Dichloroethane	ND		ug/m3	1.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Vinyl Acetate	ND		ppbv	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Vinyl Acetate	ND		ug/m3	5.3	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
cis-1,2-Dichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
cis-1,2-Dichloroethene	ND		ug/m3	1.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
2-Butanone	**5.5**		ppbv	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
2-Butanone	**16**		ug/m3	4.4	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chloroform	**1.1**		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chloroform	**5.4**		ug/m3	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1,1-Trichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 515957

515957-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
1,1,1-Trichloroethane	ND		ug/m3	1.6	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Carbon Tetrachloride	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Carbon Tetrachloride	ND		ug/m3	1.9	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Benzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Benzene	ND		ug/m3	0.96	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dichloroethane	ND		ug/m3	1.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Trichloroethene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Trichloroethene	ND		ug/m3	1.6	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dichloropropane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dichloropropane	ND		ug/m3	1.4	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Bromodichloromethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Bromodichloromethane	ND		ug/m3	2.0	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
cis-1,3-Dichloropropene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
cis-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
4-Methyl-2-Pentanone	**0.33**		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
4-Methyl-2-Pentanone	**1.3**		ug/m3	1.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Toluene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Toluene	ND		ug/m3	1.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
trans-1,3-Dichloropropene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
trans-1,3-Dichloropropene	ND		ug/m3	1.4	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1,2-Trichloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1,2-Trichloroethane	ND		ug/m3	1.6	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Tetrachloroethene	**0.36**		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Tetrachloroethene	**2.5**		ug/m3	2.0	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
2-Hexanone	ND		ppbv	0.75	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
2-Hexanone	ND		ug/m3	3.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Dibromochloromethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Dibromochloromethane	ND		ug/m3	2.6	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dibromoethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dibromoethane	ND		ug/m3	2.3	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Chlorobenzene	ND		ug/m3	1.4	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Ethylbenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Ethylbenzene	ND		ug/m3	1.3	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
m,p-Xylenes	ND		ppbv	0.60	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
m,p-Xylenes	ND		ug/m3	2.6	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
o-Xylene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
o-Xylene	ND		ug/m3	1.3	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Styrene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Styrene	ND		ug/m3	1.3	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Bromoform	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Bromoform	ND		ug/m3	3.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1,2,2-Tetrachloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1,2,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1,1,2-Tetrachloroethane	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,1,1,2-Tetrachloroethane	ND		ug/m3	2.1	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
4-Ethyltoluene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
4-Ethyltoluene	ND		ug/m3	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,3,5-Trimethylbenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,3,5-Trimethylbenzene	ND		ug/m3	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2,4-Trimethylbenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD

Results for any subcontracted analyses are not included in this section.

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Analysis Results for 515957

515957-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
1,2,4-Trimethylbenzene	ND		ug/m3	1.5	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,3-Dichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,3-Dichlorobenzene	ND		ug/m3	1.8	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,4-Dichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,4-Dichlorobenzene	ND		ug/m3	1.8	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Benzyl chloride	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Benzyl chloride	ND		ug/m3	1.6	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2-Dichlorobenzene	ND		ug/m3	1.8	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2,4-Trichlorobenzene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
1,2,4-Trichlorobenzene	ND		ug/m3	2.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Hexachlorobutadiene	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Hexachlorobutadiene	ND		ug/m3	3.2	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Xylene (total)	ND		ppbv	0.30	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Xylene (total)	ND		ug/m3	1.3	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD
Surrogates				**Limits**					
Bromofluorobenzene	104%		%REC	60-140	1.5	349958	09/13/24 01:25	09/13/24 01:25	OHD

ND Not Detected

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1185412**	**Batch:**	**349958**
Matrix:	**Air**	**Method:**	**EPA TO-15**	**Prep Method:**	**METHOD**

QC1185412 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Difluoroethane	9.512	10.00	ppbv	95%		70-130
Freon 12	8.752	10.00	ppbv	88%		70-130
Freon 114	8.752	10.00	ppbv	88%		70-130
Chloromethane	8.698	10.00	ppbv	87%		70-130
Vinyl Chloride	8.823	10.00	ppbv	88%		70-130
Bromomethane	8.603	10.00	ppbv	86%		70-130
Chloroethane	8.793	10.00	ppbv	88%		70-130
Trichlorofluoromethane	8.741	10.00	ppbv	87%		70-130
1,1-Dichloroethene	8.847	10.00	ppbv	88%		70-130
Freon 113	8.717	10.00	ppbv	87%		70-130
Acetone	8.461	10.00	ppbv	85%		70-130
Carbon Disulfide	8.835	10.00	ppbv	88%		70-130
Isopropanol (IPA)	9.000	10.00	ppbv	90%		70-130
Methylene Chloride	8.751	10.00	ppbv	88%		70-130
trans-1,2-Dichloroethene	9.605	10.00	ppbv	96%		70-130
MTBE	10.00	10.00	ppbv	100%		70-130
n-Hexane	9.704	10.00	ppbv	97%		70-130
1,1-Dichloroethane	9.354	10.00	ppbv	94%		70-130
Vinyl Acetate	9.957	10.00	ppbv	100%		70-130
cis-1,2-Dichloroethene	9.612	10.00	ppbv	96%		70-130
2-Butanone	9.878	10.00	ppbv	99%		70-130
Chloroform	9.339	10.00	ppbv	93%		70-130
1,1,1-Trichloroethane	9.700	10.00	ppbv	97%		70-130
Carbon Tetrachloride	9.746	10.00	ppbv	97%		70-130
Benzene	9.601	10.00	ppbv	96%		70-130
1,2-Dichloroethane	9.063	10.00	ppbv	91%		70-130
Trichloroethene	10.03	10.00	ppbv	100%		70-130
1,2-Dichloropropane	9.683	10.00	ppbv	97%		70-130
Bromodichloromethane	9.551	10.00	ppbv	96%		70-130
cis-1,3-Dichloropropene	10.09	10.00	ppbv	101%		70-130
4-Methyl-2-Pentanone	10.28	10.00	ppbv	103%		70-130
Toluene	9.745	10.00	ppbv	97%		70-130
trans-1,3-Dichloropropene	10.54	10.00	ppbv	105%		70-130
1,1,2-Trichloroethane	9.534	10.00	ppbv	95%		70-130
Tetrachloroethene	9.538	10.00	ppbv	95%		70-130
2-Hexanone	10.40	10.00	ppbv	104%		70-130
Dibromochloromethane	10.03	10.00	ppbv	100%		70-130
1,2-Dibromoethane	9.905	10.00	ppbv	99%		70-130
Chlorobenzene	9.990	10.00	ppbv	100%		70-130
Ethylbenzene	10.13	10.00	ppbv	101%		70-130
m,p-Xylenes	20.80	20.00	ppbv	104%		70-130
o-Xylene	10.39	10.00	ppbv	104%		70-130
Styrene	10.78	10.00	ppbv	108%		70-130
Bromoform	10.90	10.00	ppbv	109%		70-130
1,1,2,2-Tetrachloroethane	10.11	10.00	ppbv	101%		70-130
1,1,1,2-Tetrachloroethane	10.02	10.00	ppbv	100%		70-130
4-Ethyltoluene	10.54	10.00	ppbv	105%		70-130

ENTHALPY ANALYTICAL

Batch QC

QC1185412 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,3,5-Trimethylbenzene	10.79	10.00	ppbv	108%		70-130
1,2,4-Trimethylbenzene	10.88	10.00	ppbv	109%		70-130
1,3-Dichlorobenzene	10.38	10.00	ppbv	104%		70-130
1,4-Dichlorobenzene	10.69	10.00	ppbv	107%		70-130
Benzyl chloride	12.94	10.00	ppbv	129%	b	70-130
1,2-Dichlorobenzene	10.55	10.00	ppbv	106%		70-130
1,2,4-Trichlorobenzene	10.88	10.00	ppbv	109%		70-130
Hexachlorobutadiene	9.535	10.00	ppbv	95%		70-130
Surrogates						
Bromofluorobenzene	10.72	10.00	ppbv	107%		60-140

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample Duplicate**	**Lab ID:**	**QC1185413**	**Batch:**	**349958**
Matrix:	**Air**	**Method:**	**EPA TO-15**	**Prep Method:**	**METHOD**

QC1185413 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Difluoroethane	9.560	10.00	ppbv	96%		70-130	1	25
Freon 12	8.272	10.00	ppbv	83%		70-130	6	25
Freon 114	8.368	10.00	ppbv	84%		70-130	4	25
Chloromethane	8.375	10.00	ppbv	84%		70-130	4	25
Vinyl Chloride	8.392	10.00	ppbv	84%		70-130	5	25
Bromomethane	8.444	10.00	ppbv	84%		70-130	2	25
Chloroethane	8.572	10.00	ppbv	86%		70-130	3	25
Trichlorofluoromethane	8.384	10.00	ppbv	84%		70-130	4	25
1,1-Dichloroethene	8.394	10.00	ppbv	84%		70-130	5	25
Freon 113	8.352	10.00	ppbv	84%		70-130	4	25
Acetone	8.014	10.00	ppbv	80%		70-130	5	25
Carbon Disulfide	8.601	10.00	ppbv	86%		70-130	3	25
Isopropanol (IPA)	8.591	10.00	ppbv	86%		70-130	5	25
Methylene Chloride	8.422	10.00	ppbv	84%		70-130	4	25
trans-1,2-Dichloroethene	9.466	10.00	ppbv	95%		70-130	1	25
MTBE	9.785	10.00	ppbv	98%		70-130	2	25
n-Hexane	9.708	10.00	ppbv	97%		70-130	0	25
1,1-Dichloroethane	9.312	10.00	ppbv	93%		70-130	0	25
Vinyl Acetate	10.10	10.00	ppbv	101%		70-130	1	25
cis-1,2-Dichloroethene	9.424	10.00	ppbv	94%		70-130	2	25
2-Butanone	9.432	10.00	ppbv	94%		70-130	5	25
Chloroform	9.226	10.00	ppbv	92%		70-130	1	25
1,1,1-Trichloroethane	9.554	10.00	ppbv	96%		70-130	2	25
Carbon Tetrachloride	9.595	10.00	ppbv	96%		70-130	2	25
Benzene	9.609	10.00	ppbv	96%		70-130	0	25
1,2-Dichloroethane	9.027	10.00	ppbv	90%		70-130	0	25
Trichloroethene	9.679	10.00	ppbv	97%		70-130	4	25
1,2-Dichloropropane	9.478	10.00	ppbv	95%		70-130	2	25
Bromodichloromethane	9.625	10.00	ppbv	96%		70-130	1	25
cis-1,3-Dichloropropene	10.04	10.00	ppbv	100%		70-130	0	25
4-Methyl-2-Pentanone	10.05	10.00	ppbv	100%		70-130	2	25
Toluene	9.724	10.00	ppbv	97%		70-130	0	25
trans-1,3-Dichloropropene	10.46	10.00	ppbv	105%		70-130	1	25
1,1,2-Trichloroethane	9.466	10.00	ppbv	95%		70-130	1	25
Tetrachloroethene	9.421	10.00	ppbv	94%		70-130	1	25
2-Hexanone	10.15	10.00	ppbv	101%		70-130	2	25
Dibromochloromethane	9.978	10.00	ppbv	100%		70-130	0	25
1,2-Dibromoethane	9.683	10.00	ppbv	97%		70-130	2	25
Chlorobenzene	10.14	10.00	ppbv	101%		70-130	1	25
Ethylbenzene	10.36	10.00	ppbv	104%		70-130	2	25
m,p-Xylenes	21.28	20.00	ppbv	106%		70-130	2	25
o-Xylene	10.46	10.00	ppbv	105%		70-130	1	25
Styrene	11.09	10.00	ppbv	111%		70-130	3	25
Bromoform	11.12	10.00	ppbv	111%		70-130	2	25
1,1,2,2-Tetrachloroethane	10.23	10.00	ppbv	102%		70-130	1	25
1,1,1,2-Tetrachloroethane	10.17	10.00	ppbv	102%		70-130	1	25

ENTHALPY ANALYTICAL

Batch QC

QC1185413 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
4-Ethyltoluene	10.79	10.00	ppbv	108%		70-130	2	25
1,3,5-Trimethylbenzene	10.95	10.00	ppbv	110%		70-130	1	25
1,2,4-Trimethylbenzene	11.02	10.00	ppbv	110%		70-130	1	25
1,3-Dichlorobenzene	10.64	10.00	ppbv	106%		70-130	3	25
1,4-Dichlorobenzene	10.95	10.00	ppbv	109%		70-130	2	25
Benzyl chloride	13.21	10.00	ppbv	132%	b,*	70-130	2	25
1,2-Dichlorobenzene	10.76	10.00	ppbv	108%		70-130	2	25
1,2,4-Trichlorobenzene	11.08	10.00	ppbv	111%		70-130	2	25
Hexachlorobutadiene	9.720	10.00	ppbv	97%		70-130	2	25
Surrogates								
Bromofluorobenzene	10.95	10.00	ppbv	109%		60-140		

ENTHALPY ANALYTICAL

Batch QC

Type:	**Blank**	**Lab ID:**	**QC1185414**	**Batch:**	**349958**
Matrix:	**Air**	**Method:**	**EPA TO-15**	**Prep Method:**	**METHOD**

QC1185414 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1,1-Difluoroethane	ND		ppbv	1.0	09/12/24 08:35	09/12/24 08:35
Freon 12	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Freon 114	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Chloromethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Vinyl Chloride	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Bromomethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Chloroethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Trichlorofluoromethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,1-Dichloroethene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Freon 113	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Acetone	ND		ppbv	1.0	09/12/24 08:35	09/12/24 08:35
Carbon Disulfide	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Isopropanol (IPA)	ND		ppbv	1.0	09/12/24 08:35	09/12/24 08:35
Methylene Chloride	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
trans-1,2-Dichloroethene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
MTBE	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
n-Hexane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,1-Dichloroethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Vinyl Acetate	ND		ppbv	1.0	09/12/24 08:35	09/12/24 08:35
cis-1,2-Dichloroethene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
2-Butanone	ND		ppbv	1.0	09/12/24 08:35	09/12/24 08:35
Chloroform	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,1,1-Trichloroethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Carbon Tetrachloride	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Benzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,2-Dichloroethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Trichloroethene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,2-Dichloropropane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Bromodichloromethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
cis-1,3-Dichloropropene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
4-Methyl-2-Pentanone	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Toluene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
trans-1,3-Dichloropropene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,1,2-Trichloroethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Tetrachloroethene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
2-Hexanone	ND		ppbv	0.50	09/12/24 08:35	09/12/24 08:35
Dibromochloromethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,2-Dibromoethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Chlorobenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Ethylbenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
m,p-Xylenes	ND		ppbv	0.40	09/12/24 08:35	09/12/24 08:35
o-Xylene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Styrene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Bromoform	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,1,2,2-Tetrachloroethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,1,1,2-Tetrachloroethane	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
4-Ethyltoluene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35

ENTHALPY ANALYTICAL

Batch QC

QC1185414 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1,3,5-Trimethylbenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,2,4-Trimethylbenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,3-Dichlorobenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,4-Dichlorobenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Benzyl chloride	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,2-Dichlorobenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
1,2,4-Trichlorobenzene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Hexachlorobutadiene	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Xylene (total)	ND		ppbv	0.20	09/12/24 08:35	09/12/24 08:35
Surrogates				**Limits**		
Bromofluorobenzene	106%		%REC	60-140	09/12/24 08:35	09/12/24 08:35

* Value is outside QC limits
ND Not Detected
b See narrative

FIELD SOIL VAPOR PROBE SAMPLING FORM

Site Name: Bonadelle Armstrong

Sampling Point ID: V-SGP-1-5

Key No./Facility: 1099 South Armstrong

Atmospheric Pressure: 29.96

Date: 8-19-24

Surface Description:

SOIL	CONCRETE	ASPHALT
Slab thickness (in)		

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:

SUNNY	CLOUDY	RAINY	?

TEMP	90 °F

Shut-in Leak Check Performed? X -10 Starting Pressure -10 Ending Pressure

AIR COLUMN HEIGHT

Date	Time	Completion Depth (feet)	Length of Sampling Train (ft) (Completion depth + 5 ft)
~~8-19-24~~ 8-16-24	16:00	5'	7'

PURGE VOLUME

Tubing Inner Diam. (inches)	Tubing Volume/Linear Foot (mL) (See conversions below)	Filter Pack Vol./LF (mL) (See below)	Total Purge Vol.* (mL) (Tubing + Filter Pack)	3x Purge Vol. (mL)
0.19	39.0 mL	73.3 mL	112.3 mL	337 mL

TUBING VOLUME CONVERSIONS (Use tubing inner diameter to determine Volume/Linear Foot)

0.17" = 4.46 mL (LDPE/HDPE/Teflon Tubing)	0.1875" = 5.43 mL (Teflon/Teflon Lined LDPE Tubing)	0.19" = 5.58 mL Nylaflow Tubing

*1 well volume = Volume/Linear Foot x Length of Sampling Train (in feet)

FILTER PACK VOLUME CONVERSIONS (Use 1 ft of #3 Sand & 1 ft dry granular bentonite length to determine Volume/Linear Ft)

Ø 1.5" = 174 mL	Ø 2" = 310 mL	Ø 4" = 1,233 mL	Ø 6" = 2,780 mL

Note: 0.25 used for porosity

WELL PURGE AIR QUALITY

sec = (3x purge vol.(mL) ÷ 200 mL/min) ÷ 60 sec/min

Purge Start Time: 13:45 Purge End Time: 13:47 Total Purge Time (sec): 90 seconds

Well Volume	Purged (mL)	PID Reading (ppbV) PID Model #:
0	0	0
3x	337 mL	0
Total Volume Purged:		

Purge Equipment Used (syringe, canister, etc): SKC Pocket Pump

Leak Detection Used (Isopropyl alcohol wipe, etc): Isopropyl Alcohol Wipe

SOIL VAPOR SAMPLING DATA

Date	Start Time	End Time	Sample ID	Canister ID	Flow Regulator #	Initial Vacuum	Final Vacuum
8-19-24	13:52	14:01	V-SGP-1-5	C10702	A10617	-28	-1

Sampling Equipment Used: 1-liter Passivated Summa & Down Hole Sampler

SAMPLER: Charles C. Barsamian (PRINTED NAME) (SIGNATURE)

FIELD SOIL VAPOR PROBE SAMPLING FORM

Site Name: BONADELLE ARMSTRONG

Key No./Facility: 1183 S. ARMSTRONG

Date: 8-19-2024

Sampling Point ID: SGP-2-5

Atmospheric Pressure: 29.91

Surface Description:

SOIL	CONCRETE	ASPHALT
Slab thickness (in)		

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:

SUNNY	CLOUDY	RAINY	?

TEMP	°F

Shut-in Leak Check Performed? X -10 Starting Pressure -10 Ending Pressure

AIR COLUMN HEIGHT

Date	Time	Completion Depth (feet)	Length of Sampling Train (ft) (Completion depth + 5 ft)
8-16-24	15:45	5'	7'

PURGE VOLUME

Tubing Inner Diam. (inches)	Tubing Volume/Linear Foot (mL) (See conversions below)	Filter Pack Vol./LF (mL) (See below)	Total Purge Vol.* (mL) (Tubing + Filter Pack)	3x Purge Vol. (mL)
0.19	39.0 mL	73.3 mL	112.3 mL	337 mL

TUBING VOLUME CONVERSIONS (Use tubing inner diameter to determine Volume/Linear Foot)

0.17" = 4.46 mL (LDPE/HDPE/Teflon Tubing)	0.1875" = 5.43 mL (Teflon/Teflon Lined LDPE Tubing)	0.19" = 5.58 mL Nylaflow Tubing

*1 well volume = Volume/Linear Foot x Length of Sampling Train (in feet)

FILTER PACK VOLUME CONVERSIONS (Use 1 ft of #3 Sand & 1 ft dry granular bentonite length to determine Volume/Linear Ft)

Ø 1.5" = 174 mL	Ø 2" = 310 mL	Ø 4" = 1,233 mL	Ø 6" = 2,780 mL

Note: 0.25 used for porosity

WELL PURGE AIR QUALITY

sec = (3x purge vol.(mL) ÷ 200 mL/min) ÷ 60 sec/min

Purge Start Time: 14:44 Purge End Time: 14:46 Total Purge Time (sec): 90 SECONDS

Well Volume	Purged (mL)	PID Reading (ppbV) PID Model #:
0	0	Ø
3x	337	Ø
Total Volume Purged:		

Purge Equipment Used (syringe, canister, etc): SKC POCKET PUMP

Leak Detection Used (Isopropyl alcohol wipe, etc): ISOPROPYL ALCOHOL WIPE

SOIL VAPOR SAMPLING DATA

Date	Start Time	End Time	Sample ID	Canister ID	Flow Regulator #	Initial Vacuum	Final Vacuum
8-19-24	14:53	15:02	V-SGP-2.5	C10794	A10356	-29	-1

Sampling Equipment Used: 1-LITER PASSIVATED SUMMA & DOWNHOLE SAMPLER

SAMPLER: CHARLES L. BARGAMIAN (PRINTED NAME)

(SIGNATURE)

FIELD SOIL VAPOR PROBE SAMPLING FORM

Site Name: BONADELLE ARMSTRONG

Key No./Facility: 15' WEST OF SGP-2-5

Date: 9-10-24

Sampling Point ID: SGP-3-5'

Atmospheric Pressure: 29.70 in.

Surface Description:

SOIL	CONCRETE	ASPHALT
Slab thickness (in)		

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:

SUNNY	CLOUDY	RAINY	?

TEMP	96 °F

Shut-in Leak Check Performed? [X] -10 Starting Pressure -10 Ending Pressure

AIR COLUMN HEIGHT

Date	Time	Completion Depth (feet)	Length of Sampling Train (ft) (Completion depth + ~~5~~ ft) 2
9-10-24	~~1~~2:30	5'	7'

PURGE VOLUME

Tubing Inner Diam. (inches)	**Tubing** Volume/Linear Foot (mL) (See conversions below)	**Filter Pack** Vol./LF (mL) (See below)	Total Purge Vol.* (mL) (Tubing + Filter Pack)	3x Purge Vol. (mL)
0.19	5.58 x 7 = 39.06	~80 mL	~119	357 mL

TUBING VOLUME CONVERSIONS (Use tubing inner diameter to determine Volume/Linear Foot)

0.17" = 4.46 mL (LDPE/HDPE/Teflon Tubing)	0.1875" = 5.43 mL (Teflon/Teflon Lined LDPE Tubing)	0.19" = 5.58 mL Nylaflow Tubing

*1 well volume = Volume/Linear Foot x Length of Sampling Train (in feet)

FILTER PACK VOLUME CONVERSIONS (Use 1 ft of #3 Sand & 1 ft dry granular bentonite length to determine Volume/Linear Ft)

Ø 1.5" = 174 mL	Ø 2" = 310 mL	Ø 4" = 1,233 mL	Ø 6" = 2,780 mL

Note: 0.25 used for porosity

WELL PURGE AIR QUALITY

sec = (3x purge vol.(mL) ÷ 200 mL/min) ÷ 60 sec/min

Purge Start Time: 4:50 Purge End Time: 4:52 Total Purge Time (sec): 90 SECONDS

Well Volume	Purged (mL)	PID Reading (ppbV) PID Model #:
0	0	Ø
3x	357 mL	Ø
Total Volume Purged:		

Purge Equipment Used (syringe, canister, etc): SKC POCKET PUMP

Leak Detection Used (Isopropyl alcohol wipe, etc): ISOPROPYL ALCOHOL WIPE

SOIL VAPOR SAMPLING DATA

Date	Start Time	End Time	Sample ID	Canister ID	Flow Regulator #	Initial Vacuum	Final Vacuum
9-10-24	4:59	5:08	V-SGP-3-5	C10441	A10293	-29	-2

Sampling Equipment Used: 1-1 LITER SUMMA & DOWNHOLE SAMPLER

SAMPLER: C. BARSAMIAN (PRINTED NAME) (SIGNATURE)

FIELD SOIL VAPOR PROBE SAMPLING FORM

Site Name: Bonadelle Armstrong

Sampling Point ID: SGP-4-5

Key No./Facility: 20' Northwest of SGP-2-5

Atmospheric Pressure: 29.70

Date: 9-10-24

Surface Description:

SOIL	CONCRETE	ASPHALT
Slab thickness (in)		

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:

SUNNY	CLOUDY	RAINY	?

TEMP	96 °F

Shut-in Leak Check Performed? [x] -10 Starting Pressure -10 Ending Pressure

AIR COLUMN HEIGHT

Date	Time	Completion Depth (feet)	Length of Sampling Train (ft) (Completion depth + ~~5~~ ft) 2
9-10-24	2:45	5'	7

PURGE VOLUME

Tubing Inner Diam. (inches)	Tubing Volume/Linear Foot (mL) (See conversions below)	Filter Pack Vol./LF (mL) (See below)	Total Purge Vol.* (mL) (Tubing + Filter Pack)	3x Purge Vol. (mL)
0.19	5.58×0.19=36.06	~80 mL	~119 mL	357 mL

TUBING VOLUME CONVERSIONS (Use tubing inner diameter to determine Volume/Linear Foot)

0.17" = 4.46 mL (LDPE/HDPE/Teflon Tubing)	0.1875" = 5.43 mL (Teflon/Teflon Lined LDPE Tubing)	0.19" = 5.58 mL Nylaflow Tubing

*1 well volume = Volume/Linear Foot x Length of Sampling Train (in feet)

FILTER PACK VOLUME CONVERSIONS (Use 1 ft of #3 Sand & 1 ft dry granular bentonite length to determine Volume/Linear Ft)

Ø 1.5" = 174 mL	Ø 2" = 310 mL	Ø 4" = 1,233 mL	Ø 6" = 2,780 mL

Note: 0.25 used for porosity

WELL PURGE AIR QUALITY

sec = (3x purge vol.(mL) ÷ 200 mL/min) ÷ 60 sec/min

Purge Start Time: 5:08 Purge End Time: 5:10 Total Purge Time (sec): 90 seconds

Well Volume	Purged (mL)	PID Reading (ppbV) PID Model #:
0	0	0
3x	357 mL	0
Total Volume Purged:		

Purge Equipment Used (syringe, canister, etc): SKC Pocket Pump

Leak Detection Used (Isopropyl alcohol wipe, etc): Isopropyl Alcohol Wipe

SOIL VAPOR SAMPLING DATA

Date	Start Time	End Time	Sample ID	Canister ID	Flow Regulator #	Initial Vacuum	Final Vacuum
9-10-24	5:10	5:19	V-SGP-4-5	C10336	A10436	-30	-2

Sampling Equipment Used: 1-Liter Summa Canister & Downhole Sampler

SAMPLER: Charles Barsamian (PRINTED NAME) (SIGNATURE)

ACOUSTICAL ANALYSIS

TRACT 6376
FRESNO, CALIFORNIA

WJVA Project No. 23-42

PREPARED FOR

BONADELLE NEIGHBORHOODS
7030 N. FRUIT AVENUE, #101
FFRESNO, CALIFORNIA 93711

PREPARED BY

WJV ACOUSTICS, INC.
VISALIA, CALIFORNIA

wjv acoustics

OCTOBER 25, 2023
(UPDATED JULY 12, 2024)

INTRODUCTION

The project is a proposed 212-lot single-family residential development to be located in Fresno, California. The project site is located at the east side of South Armstrong Avenue, north of East Church Avenue, within the City of Fresno. This analysis, prepared by WJV Acoustics, Inc. (WJVA), is based upon a project site plan provided by the project applicant, traffic data provided by the Fresno Council of Governments (Fresno COG) and the findings of on-site noise level measurements. Revisions to the site plan may affect the findings and recommendations of this report. The site plan is provided as Figure 1.

Appendix A provides a description of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported are in A-weighted decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a high degree of correlation with human annoyance and health effects. Appendix B provides typical A-weighted sound levels for common noise sources.

In terms of human perception, a 5 dB increase or decrease is considered to be a noticeable change in noise levels. Additionally, a 10 dB increase or decrease is perceived by the human ear as half as loud or twice as loud. In terms of perception, generally speaking the human ear cannot perceive an increase (or decrease) in noise levels less than 3 dB.

NOISE EXPOSURE CRITERIA

The City of Fresno General Plan Noise Element (adopted 12/18/14) provides noise level criteria for land use compatibility for both transportation and non-transportation noise sources. The General Plan sets noise compatibility standards for transportation noise sources in terms of the Day-Night Average Level (L_{dn}). The L_{dn} represents the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The L_{dn} represents cumulative exposure to noise over an extended period of time and are therefore calculated based upon *annual average* conditions. Table I provides the General Plan noise level standards for transportation noise sources.

TABLE I

CITY OF FRESNO GENERAL PLAN NOISE LEVEL STANDARDS TRANSPORTATION (NON-AIRCRAFT) NOISE SOURCES

Noise-Sensitive Land Use	Outdoor Activity Areas[1]	Interior Spaces	
	L_{dn}/CNEL, dB	L_{dn}/CNEL, dB	L_{eq} dB[2]
Residential	65	45	---
Transient Lodging	65	45	---
Hospitals, Nursing Homes	65	45	---
Theaters, Auditoriums, Music Halls	---	---	35
Churches, Meeting Halls	65	---	45
Office Buildings	---	---	45
Schools, Libraries, Museums	---	---	45

1 Where the location of the outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.

2 As determined for a typical worst-case hour during periods of use.

Source: City of Fresno General Plan

Additionally, Implementing Policy NS-1-h of the noise element requires that interior noise levels attributable to exterior transportation noise sources not exceed 45 dB L_{dn}. The intent of the interior noise level standard is to provide an acceptable noise environment for indoor communication and sleep.

PROJECT SITE NOISE EXPOSURE

The project site is located at the west side of South Armstrong Avenue, north of East Church Avenue, in Fresno, California. The project site is exposed traffic noise associated with vehicles on S. Armstrong Avenue and train noise associated with train operations on the San Joaquin Valley Railroad (SJVR). The distance from center of the backyards of the closest proposed lots to the centerline of S. Armstrong Avenue is approximately 80 feet. The distance from the center of the backyards of the closest proposed lot to the SJVR line is approximately 70 feet (lot 76). Additionally, the backyards of the remaining lots along the south side of E. Erin Avenue would be located approximately 115 feet from the SJRV line.

Traffic Noise Exposure

Noise exposure from traffic on S. Armstrong Avenue was calculated for existing and future (2046) conditions using the FHWA Traffic Noise Model and traffic data obtained from Fresno COG.

WJVA utilized the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA Model is a standard analytical method used for roadway traffic noise calculations. The model is based upon reference energy emission levels for automobiles, medium trucks (2 axles) and heavy trucks (3 or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model was developed to predict hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within ±1.5 dB. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical day and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

Noise level measurements and concurrent traffic counts were conducted by WJVA staff within the project site on October 23, 2023. The purpose of the measurement was to evaluate the accuracy of the FHWA Model in describing traffic noise exposure within the project site. One measurement site was located within the project site at a distance of approximately 40 feet from the centerline of S. Armstrong Avenue. The speed limit posted in the project vicinity along both roadways was 40 mph (miles per hour). The project vicinity and noise monitoring site location are provided as Figure 2. A photograph showing the S. Armstrong Avenue noise measurement site is provided as Figure 3.

Noise monitoring equipment consisted of Larson-Davis Laboratories Model LDL-820 sound level analyzer equipped with a B&K Type 4176 1/2” microphone. The equipment complies with the specifications of the American National Standards Institute (ANSI) for Type I (Precision) sound level meters. The meter was calibrated in the field prior to use with a B&K Type 4230 acoustic calibrator to ensure the accuracy of the measurements. The microphone was located on a tripod at 5 feet above the ground. The project site presently consists of undeveloped land and a portion is currently used for industrial purposes.

Noise measurements were conducted in terms of the equivalent energy sound level (L_{eq}). Measured L_{eq} values were compared to L_{eq} values calculated (predicted) by the FHWA Model

using as inputs the traffic volumes, truck mix and vehicle speed observed during the noise measurements. The results of the comparison are shown in Table II.

From Table II it may be determined that the traffic noise levels predicted by the FHWA Model were 1.5 dB lower than those measured for the conditions observed at the time of the noise measurements for S. Armstrong Avenue. This is considered to be reasonable agreement with the model and therefore no adjustments to the model are necessary.

TABLE II

COMPARISON OF MEASURED AND PREDICTED (FHWA MODEL) NOISE LEVELS TRACT 6376, FRESNO

	S. Armstrong Avenue
Measurement Start Time	8:50 a.m.
Observed # Autos/Hr.	216
Observed # Medium Trucks/Hr.	0
Observed # Heavy Trucks/Hr.	0
Observed Speed (MPH)	40
Distance, ft. (from center of roadway)	40
L_{eq}, dBA (Measured)	61.1
L_{eq}, dBA (Predicted)	59.6
Difference between Predicted and Measured L_{eq}, dBA	**1.5**

Note: FHWA "soft" site assumed for calculations.
Source: WJV Acoustics, Inc.

Annual Average Daily Traffic (AADT) data for S. Armstrong Avenue in the project vicinity was obtained from Fresno COG. Truck percentages and the day/night distribution of traffic were estimated by WJVA, based upon previous studies conducted in the project vicinity since project-specific data were not available from government sources. A speed limit of 40 mph (as posted) was assumed for the roadway. Table III summarizes annual average traffic data used to model noise exposure within the project site.

TABLE III TRAFFIC NOISE MODELING ASSUMPTIONS TRACT 6376, FRESNO		
	S. Armstrong Ave.	
	Existing	2046
Annual Avenue Daily Traffic (AADT)	1,929	2,304
Day/Night Split (%)	90/10	
Assumed Vehicle Speed (mph)	40	
% Medium Trucks (% AADT)	2	
% Heavy Trucks (% AADT)	1	

Sources: Fresno COG
WJV Acoustics, Inc.

Using data from Table III, the FHWA Model, annual average traffic noise exposure was calculated for the closest proposed backyards from S. Armstrong Avenue. The calculated noise exposures for existing and future (2046) traffic conditions for the closest proposed setbacks to S. Armstrong Avenue were approximately 55 dB L_{dn} for existing traffic conditions and approximately 56 dB L_{dn} future (2046) traffic conditions. Such noise exposure levels are below the City's 65 dB L_{dn} exterior noise level standard and further mitigation of traffic noise is therefore not required.

Railroad Noise Exposure:

The San Joaquin Valley Railroad (SJVR) line is located approximately 70 feet from the backyard of lot 76. Additionally, the backyards of the remaining lots along the south side of E. Erin Avenue would be located approximately 115 feet from the SJRV line. The railroad consists of jointed rails with the top of the rails being approximately one foot above the grade of the project site.

Train engineers are required to sound warning horns when within approximately ¼ mile of a grade crossing. As the entire project site railroad frontage is located within ¼ mile of the S. Armstrong Avenue grade crossing, all lots adjacent to the SJRV line would be impacted by train warning horns.

According to data obtained from the U.S. Department of Transportation Federal Railroad Administration (FRA), trains along this portion of the railroad line do not exceed 25 mph in speed. According to the local trainmaster they typically pass by at speeds in the range of 10-20 mph. Additionally, according to both the FRA and the SJVR trainmaster, typical operations consist of two train movements per day along the line, typically one occurring during daytime hours and one occurring during nighttime hours. There is a grade crossing at South Armstrong Avenue where locomotive engineers are required to blow their warning horn.

WJVA observed one train movement on January 22, 2018 at a different project site located along the same section of SJVR railroad line, east of the project site. A westbound freight train passby occurred at approximately 2:45 p.m. Noise levels were measured from two locations along the track using automated sound level meters. Both meters were located approximately 50 feet from

the tracks. One meter was located approximately 500 feet west of the grade crossing, and noise levels of the train event were measured to 102.8 dB (SEL). The second meter was located approximately 1,300 feet from the grade crossing at South Temperance, and noise levels of the train event were measured to be 98.6 dB (SEL). The difference in noise levels is a result of varying distances from the grade crossing, where the engineer is required to sound their warning horn. WJVA also reviewed other noise measurements obtained along the SJVR to assess noise levels for parcels closer to grade crossings along the SJVR railroad line, and determined the average SEL at the closest lots adjacent to the SJVR railroad line to be 105.8 dB (SEL).

Railroad noise exposure may be quantified in terms of the L_{dn} using the following formula:

$L_{dn} = SEL + 10 \log Neq - 49.4$

where,

SEL is the average SEL for a train pass-by, Neq is the equivalent number of pass-bys in a typical 24-hour period determined by adding 10 times the number of nighttime movements (10 p.m.-7 a.m.) to the actual number of daytime movements (7 a.m.-10 p.m.). 49.4 is a time constant equal to 10 times the log of the number of seconds in a day.

Using the above-described formula, railroad operations data (assuming one train event during daytime hours and one train event during nighttime hours) and noise measurement results, the railroad noise exposure within the backyards of the proposed lots closest to the SJVR line. Using the above-described train noise measurements and calculations, SJVR train noise was calculated to be as follows:

- Lot 76: 68 dB L_{dn}
- Lots along south side of E. Erin Avenue: 65 dB L_{dn}

These noise levels indicate that exterior noise levels along the lots closest to the SJVR railroad line exceed the City's exterior maximum noise level standard, and mitigation measures must be incorporated into project design.

NOISE MITIGATION

Exterior Noise Mitigation:

The City of Fresno Noise Element of the General Plan establishes a 65 dB L_{dn} criterion within outdoor activity areas (backyards) of single-family homes. Exterior noise levels at the closest proposed lots to the SJVR line exceed this City of Fresno noise level standard, and mitigation must be incorporated.

A sound wall insertion loss program based on the FHWA Model was utilized to calculate the minimum required height of a noise barrier along the southern portion of the project site. The model calculates the insertion loss (noise reduction) of a wall of given height based on the effective height of the noise source, height of the receiver, distance from the receiver to the wall, and distance from the noise source to the wall. It was assumed for the sound wall calculations that the effective railroad source height is 10 feet above the tracks. For traffic noise sources, the standard assumptions used in the sound wall calculations are effective source heights of 8, 2 and 0 feet above the roadway for heavy trucks, medium trucks, and automobiles, respectively. The standard height of a residential receiver is five feet above the ground elevation.

Based upon the above-described calculated noise exposure levels, standard assumptions, and method of analysis, WJVA determined that a sound wall constructed along the entire project site frontage with the SJVR line. In the vicinity of Lot 76, the wall must be constructed to a minimum height of eight feet six inches (8’6”) above project site grade, and a sound wall constructed to a minimum height of seven (7) feet above project site grade must be constructed along the remainder of the SJVR project site frontage. In order to be effective, the sound wall must be turned inward (southward) for a minimum distance of twenty (20) feet along the east side of Lot 76. The locations and heights of the required sound walls are provided on Figure 1.

Interior Noise Exposure:

The City of Fresno interior noise level standard is 45 dB L_{dn}. The worst-case noise exposure within the proposed residential development would be approximately 68 dB L_{dn} (existing conditions). This means that the proposed residential construction must be capable of providing a minimum outdoor-to-indoor noise level reduction (NLR) of approximately 23 dB (68-45=23).

A specific analysis of interior noise levels was not performed. However, it may be assumed that residential construction methods complying with current building code requirements will reduce exterior noise levels by approximately 25 dB if windows and doors are closed. This will be sufficient for compliance with the City’s 45 dB L_{dn} interior standard at all proposed lots. Requiring that it be possible for windows and doors to remain closed for sound insulation means that air conditioning or mechanical ventilation will be required.

CONCLUSIONS AND RECOMMENDATIONS

The proposed 212-lot single-family residential development will comply with all City of Fresno exterior and interior noise level standards, provided the following mitigation measures are incorporated into project design.

- A sound wall constructed along the entire project site frontage with the SJVR railroad line. In the vicinity of Lot 76, the wall must be constructed to a minimum height of eight feet six inches (8'6") above project site grade, and the sound wall must be constructed to a minimum height of seven (7) feet above project site grade along the remainder of the SJVR project site frontage. In order to be effective, the sound wall must be turned inward (southward) for a minimum distance of twenty (20) feet along the east side of Lot 76. The locations and heights of the required sound walls are provided on Figure 1. Suitable construction materials include concrete blocks, masonry, or stucco on both sides of a wood or steel stud wall.

- Mechanical ventilation or air conditioning must be provided for all homes so that windows and doors can remain closed for sound insulation purposes.

The conclusions and recommendations of this acoustical analysis are based upon the best information known to WJV Acoustics Inc. (WJVA) at the time the analysis was prepared concerning the proposed lot layout plan, project site elevation, railroad operations, traffic volumes and roadway configurations. Any significant changes in these factors will require a reevaluation of the findings of this report. Additionally, any significant future changes in motor vehicle technology, noise regulations or other factors beyond WJVA's control may result in long-term noise results different from those described by this analysis.

Respectfully submitted,

Walter J. Van Groningen
President

WJV:wjv

FIGURE 1: SITE PLAN

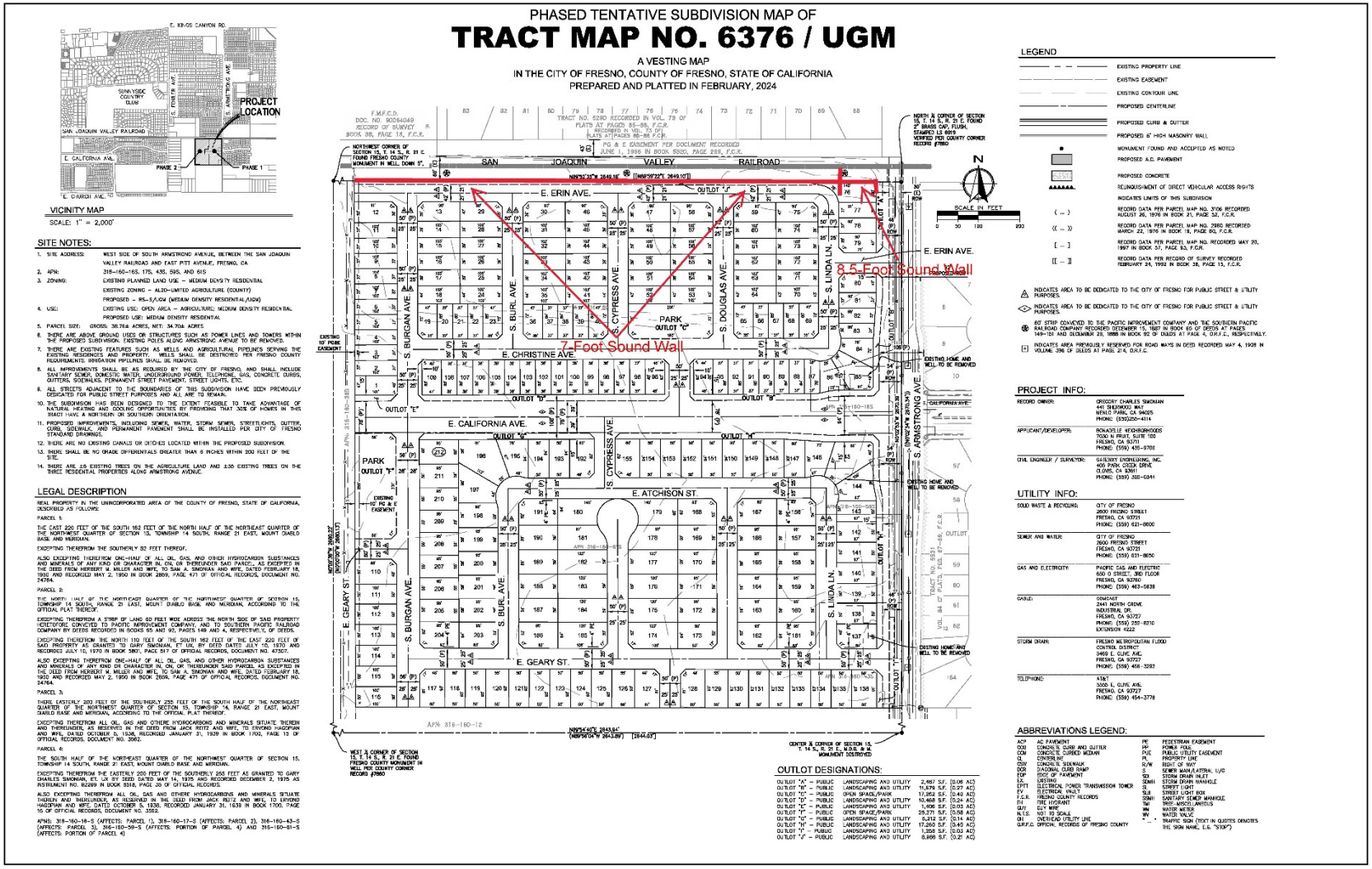


FIGURE 2: PROJECT SITE VICINITY AND NOISE MEASUREMENT LOCATION

FIGURE 3: S. ARMSTRONG AVENUE NOISE MEASUREMENT SITE

APPENDIX A

ACOUSTICAL TERMINOLOGY

AMBIENT NOISE LEVEL: The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

CNEL: Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

DECIBEL, dB: A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

DNL/L_{dn}: Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

L_{eq}: Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.

NOTE: The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while L_{eq} represents the average noise exposure for a shorter time period, typically one hour.

L_{max}: The maximum noise level recorded during a noise event.

L_n: The sound level exceeded "n" percent of the time during a sample interval (L_{90}, L_{50}, L_{10}, etc.). For example, L_{10} equals the level exceeded 10 percent of the time.

A-2

ACOUSTICAL TERMINOLOGY

NOISE EXPOSURE CONTOURS: Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

NOISE LEVEL REDUCTION (NLR): The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of "noise level reduction" combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

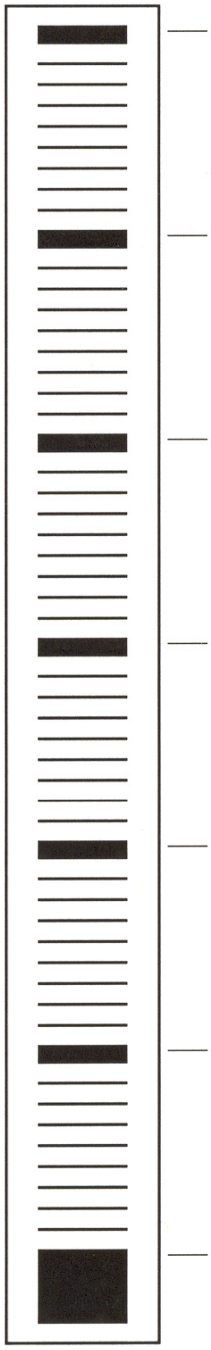
SEL or SENEL: Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SOUND LEVEL: The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

SOUND TRANSMISSION CLASS (STC): The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

APPENDIX B
EXAMPLES OF SOUND LEVELS

NOISE SOURCE	SOUND LEVEL	SUBJECTIVE DESCRIPTION
AMPLIFIED ROCK 'N ROLL	120 dB	
JET TAKEOFF @ 200 FT		DEAFENING
	100 dB	
BUSY URBAN STREET		VERY LOUD
	80 dB	
FREEWAY TRAFFIC @ 50 FT		LOUD
CONVERSATION @ 6 FT	60 dB	
TYPICAL OFFICE INTERIOR		MODERATE
SOFT RADIO MUSIC	40 dB	
RESIDENTIAL INTERIOR		FAINT
WHISPER @ 6 FT	20 dB	
HUMAN BREATHING		VERY FAINT
	0 dB	



Traffic Impact Analysis Report

Tract 6376
(Single-Family Housing)

Located on the Southwest Corner of Armstrong Avenue and the San Joaquin Valley Railroad

In the City of Fresno, California

Prepared for:

Bonadelle Neighborhoods
7030 N. Fruit Avenue, Suite 101
Fresno, CA 93711

December 9, 2024

Project No. 004-223

JLB TRAFFIC ENGINEERING, INC.

Traffic Engineering, Transportation Planning, & Parking Solutions
516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Phone: (559) 570-8991
www.JLBtraffic.com

Traffic Engineering, Transportation Planning, & Parking Solutions

Traffic Impact Analysis Report

For Tract 6376 located on the Southwest Corner of Armstrong Avenue and the San Joaquin Valley Railroad

In the City of Fresno, CA

December 9, 2024

This Traffic Impact Analysis Report has been prepared under the direction of a licensed Traffic Engineer. The licensed Traffic Engineer attests to the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data from which recommendations, conclusions and decisions are based.

Prepared by:

_____

Jose Luis Benavides, PE, TE

President

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Introduction and Summary

Introduction

This Report describes a Traffic Impact Analysis (TIA) prepared by JLB Traffic Engineering, Inc. (JLB) for Tract 6376 (Project) located on the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad in the City of Fresno. The Project proposes to develop approximately 202 single-family residential units. According to information provided to JLB, the Project is consistent with the City of *Fresno General Plan*. Figure 1 shows the location of the proposed Project site relative to the surrounding roadway network.

The purpose of the TIA is to evaluate the potential on-site and off-site traffic impacts, identify short-term and long-term roadway needs, determine potential roadway improvement measures and identify any critical traffic issues that should be addressed in the ongoing planning process. The TIA primarily focused on evaluating traffic conditions at study intersections that may potentially be impacted by the proposed Project. The Scope of Work was prepared via consultation with City of Fresno, Fresno County and Caltrans.

Summary

The potential traffic impacts of the proposed Project were evaluated in accordance with the standards set forth by the Level of Service (LOS) policies of the City of Fresno and Fresno County.

Existing Traffic Conditions

- JLB conducted a search of the Statewide Integrated Traffic Records System (SWITRS) to obtain collision reports for the most recent five-year period. Based on a review of the collision reports, a total of twenty-three (23) collisions were reported within the influence zone of the study intersections. Based on the number of correctable collisions, JLB does not recommended changes to the existing traffic controls at any of these intersections as a result of collision activity.
- At present, all study intersections operate at an acceptable LOS.
- At present, the study segment operates at an acceptable LOS.

Existing plus Project Traffic Conditions

- JLB analyzed the location of the existing and proposed roadways and access points. This review revealed that all access points are located at points that minimize traffic operational impacts to existing and future roadway networks.
- At buildout, the proposed Project is estimated to generate a maximum of 1,905 daily trips, 141 AM peak hour trips and 190 PM peak hour trips.
- It is recommended that the Project implement a Class II Bikeways along its frontages to Armstrong Avenue and California Avenue.
- It is recommended that left-turn pockets with a storage capacity of 150 feet be included as part of the design of California Avenue at its intersections with Burgan Avenue and Cypress Avenue.
- It is recommended that the Project implement ADA compliant pedestrian sidewalks along internal streets connecting all uses to external sidewalks and along its frontages to Armstrong Avenue and California Avenue.

- It is recommended that the Project and SUSD look into funding sources to enhance the walkways for Middle and High School students for and from the new Sanger West High School and Middle School Project.
- Under this scenario, all study intersections are projected to continue operating at an acceptable LOS.
- Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

Near Term plus Project Traffic Conditions

- The total trip generation for the Near Term Projects is 96,426 weekday daily trips, 6,883 weekday AM peak hour trips and 8,598 weekday PM peak hour trips.
- Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during AM peak period. Additional details as to the recommended improvements for these intersections are presented later in this Report.
- Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

Cumulative Year 2046 plus Project Traffic Conditions

- Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue, Temperance Avenue at California Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during one or both peak periods. Additional details as to the recommended improvements for this intersection are presented later in this Report.
- Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

Scope of Work

The TIA focused on evaluating traffic conditions at study intersections that may potentially be impacted by the proposed Project. Previously, a Draft Scope of Work was provided to the City of Fresno, County of Fresno and Caltrans on July 7, 2021 for their review and comment. Caltrans approved the draft scope of work without changes. The comments that were provided by the City of Freno and the County of Fresno in that initial analysis were included in the Draft Scope of Work for this version of the TIA. On July 25, 2024, a Draft Scope of Work for the preparation of a Traffic Impact Analysis for this Project was provided to the City of Fresno. On September 20, 2024, a Draft Scope of Work for the preparation of a Traffic Impact Analysis for this Project was provided to the Fresno County for their review and comment.

On August 15, 2024, the City of Fresno requested that JLB include the intersection of Fowler Avenue at Hamilton Avenue as one of the study intersections to the Draft Scope of Work. On September 30, 2024, the County of Fresno replied with the request that we include the segment of Armstrong Avenue between Church Avenue and Geary Street as a study segment to the Draft Scope of Work.

Based on the comments received, this TIA added the intersection of Fowler Avenue at Hamilton as a study intersection and the segment of Armstrong Avenue between Geary Avenue and Church Street as a study segment. JLB also coordinated with the City of Fresno Planning Department to verify the list of pending/approved projects. The Scope of Work and the comments received from the lead agency and responsible agencies are included in Appendix A.

Study Facilities

The existing intersection peak hour turning movement and segment volume counts were conducted at the study intersections and segments in June, August and September of 2024 while schools the vicinity of the Project site were in session. The intersection turning movement counts included pedestrian and bicycle volumes. The traffic counts for the existing study intersections and segments are contained in Appendix B. The existing intersection turning movement volumes, intersection geometrics and traffic controls are illustrated in Figure 2.

Study Intersections

1. Fowler Avenue / Hamilton Avenue
2. Armstrong Avenue / Hamilton Avenue
3. Temperance Avenue / Hamilton Avenue
4. Armstrong Avenue / California Avenue
5. Temperance Avenue / California Avenue (future intersection)
6. Fowler Avenue / Church Avenue
7. Armstrong Avenue / Church Avenue

Study Segments

1. Armstrong Avenue between Geary Avenue and Church Avenue

Study Scenarios

Existing Traffic Conditions

This scenario evaluates the Existing Traffic Conditions based on existing traffic volumes and roadway conditions from traffic counts and field surveys conducted in June, August and September of 2024. The traffic counts for the existing study intersections and segments are contained in Appendix B.

Existing plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Existing plus Project Traffic Conditions. The Existing plus Project traffic volumes were obtained by adding the Project Only Trips to the Existing Traffic Conditions. The Project Only Trips to the study facilities were developed based on existing travel patterns, the Project Select Zone, the surrounding roadway network, engineering judgment, data provided by the developer, knowledge of the study area, existing residential and commercial densities, and the *Fresno General Plan* Circulation Element in the vicinity of the Project site. The Fresno COG Project Select Zone results are contained in Appendix C.

Near Term plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Near Term plus Project Traffic Conditions. The Near Term plus Project traffic volumes were obtained by adding the Near Term related trips to the Existing plus Project Traffic Conditions scenario.

Cumulative Year 2046 plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadways conditions based on the Cumulative Year 2046 plus Project Traffic Conditions. The Cumulative Year 2046 plus Project traffic volumes were obtained by using a combination of the Fresno COG activity-based model (ABM) (Base Year 2019 and Cumulative Year 2046) and existing traffic counts. Under this scenario, the increment method, as recommended by the Model Steering Committee was utilized to determine the Cumulative Year 2046 traffic volumes. The Fresno COG ABM results provided by Kittelson & Associates are contained in Appendix C.

LOS Methodology

LOS is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from "A" to "F", with "A" indicating no congestion of any kind and "F" indicating unacceptable congestion and delays. LOS in this study describes the operating conditions for signalized and unsignalized intersections.

The *Highway Capacity Manual* (HCM) 7th Edition is the standard reference published by the Transportation Research Board and contains the specific criteria and methods to be used in assessing LOS. U-turn movements were analyzed using HCM 2000 methodologies and would yield more accurate results for the reason that HCM 7th Edition methodologies do not allow the analysis of U-turns. Lane configurations not reflective of existing conditions are a result of software limitations and thus represent a worst-case scenario. Synchro software was used to define LOS in this study. Details regarding these calculations are included in Appendix D.

While LOS is no longer the criteria of significance for traffic impacts in the state of California, the City of Fresno continues to apply congestion-related conditions or requirements for land development projects through planning approval processes outside of CEQA Guidelines in order to continue the implementation of *Fresno General Plan* policies.

LOS Thresholds

The *Fresno General Plan* has established various degrees of acceptable LOS on its major streets, which are dependent on four (4) Traffic Impact Zones (TIZ) within the City (City of Fresno, 2014). The standard LOS threshold for TIZ I is LOS F, that for TIZ II is LOS E, that for TIZ III is LOS D, and that for TIZ IV is LOS E. Additionally, the 2035 MEIR made findings of overriding consideration to allow a lower LOS threshold than that established by the underlying TIZ's. For those cases in which a LOS criterion for a roadway segment differs from that of the underlying TIZ, such criteria are identified in the roadway description. As all the study facilities fall within TIZ III, LOS D is used to evaluate the potential LOS impacts for the study intersections within the City of Fresno pursuant to the *Fresno General Plan*.

The *Fresno County General Plan* has established LOS C as the acceptable level of traffic congestion on county roads and streets that fall entirely outside the Sphere of Influence (SOI) of a City (Fresno County 2000). For those areas that fall within the SOI of a City, the LOS threshold of the City is used in this report. In this case, no study facilities fall within the County of Fresno SOI, therefore, the City of Fresno LOS thresholds are utilized.

Caltrans no longer considers delay as a significant impact to the environment for land use project plans. According to the Caltrans document *VMT Focused Transportation Impact Study Guidelines* dated May 2020, Caltrans review of land use projects and plans is focused on a VMT metric consistent with CEQA. In this TIA, however, all study intersections fall within the City of Fresno SOI. Therefore, the City of Fresno LOS thresholds are utilized.

Operational Analysis Assumptions and Defaults

The following operational analysis values, assumptions and defaults were used in this study to ensure a consistent analysis of LOS among the various scenarios.

- Yellow time consistent with the *California Manual on Uniform Traffic Control Devices* (CA MUTCD) based on approach speeds (Caltrans, 2024)
- Yellow time of 3.2 seconds for left-turn phases
- All-red clearance intervals of 1.0 second for all phases
- Walk intervals of 7.0 seconds
- Flashing Don't Walk based on 3.5 feet/second walking speed with yellow plus all-red clearance subtracted and 2.0 seconds added
- At existing intersections, the heavy vehicle factor observed for each intersection or a minimum of 3 percent were utilized under all scenarios.
- The number of observed pedestrians at existing intersections was utilized under all study scenarios.
- An average of 10 pedestrian calls per hour at signalized intersections.
- At existing intersections, the observed approach Peak Hour Factor (PHF) is utilized in the Existing, Existing plus Project and Near Term plus Project scenarios.
- For the Cumulative Year 2046 scenario, the following PHF was utilized to reflect traffic operations and an increase in future traffic volumes. As roadways start to reach their saturated flow rates, PHF's tend to increase to 0.90 or higher in urban settings. A PHF of 0.92, or the existing PHF if higher, is utilized for all remaining study intersections.
  - For the intersections Temperance Avenue at California Avenue, Fowler Avenue at Church Avenue and Armstrong Avenue at Church Avenue, the following PHF's were utilized due to their proximity to schools:
    - A PHF of 0.86, or the existing if higher, is utilized during the AM peak.
    - A PHF of 0.90, or the existing if higher, is utilized during the PM peak.
  - A PHF of 0.92, or the existing if higher, is utilized for all remaining study intersections.

Existing Traffic Conditions

Roadway Network

The Project site and surrounding study area are illustrated in Figure 1. Important roadways serving the Project are discussed below.

Fowler Avenue is an existing north-south three-lane divided arterial in the vicinity of the proposed Project site. In this area, Fowler Avenue is a four-lane divided arterial between the State Route 180 Interchange and Kings Canyon Road, a two to three-lane arterial divided by a two-way left-turn lane between Kings Canyon Road and the San Joaquin Valley Railroad, a two to three-lane divided arterial between the San Joaquin Valley Railroad and Jensen Avenue and a two-lane undivided arterial between Jensen Avenue and North Avenue. The *Fresno General Plan* Circulation Element designates Fowler Avenue as a four-lane divided arterial between State Route 180 and Kings Canyon Road, a two-lane arterial between Kings Canyon Road and Hamilton Avenue and Hamilton Avenue, a four-lane arterial between Hamilton Avenue and Jensen Avenue and a two-lane collector between Jensen Avenue and North Avenue.

Armstrong Avenue is an existing north-south three-lane undivided collector adjacent to the proposed Project. In this area, Armstrong Avenue is a three- to four-lane undivided collector between Kings Canyon Road and Hamilton Avenue, a three to four-lane collector divided by a two-way left-turn lane between Hamilton Avenue and Truman Avenue, a two-lane undivided collector between Truman Avenue and North Avenue. The *Fresno General Plan* Circulation Element designates Armstrong Avenue as a four-lane collector between Kings Canyon Road and Jensen Avenue and a two-lane collector between Jensen Avenue and North Avenue.

Temperance Avenue is an existing north-south two-lane undivided super arterial in the vicinity of the proposed Project. In this area, Temperance Avenue is a two-lane undivided super arterial between Kings Canyon Road and Butler Avenue, a four-lane divided super arterial between Butler Avenue and Hamilton Avenue and a two-lane undivided super arterial between Hamilton Avenue and North Avenue. The *Fresno General Plan* Circulation Element designates Temperance Avenue as a six-lane super arterial between Kings Canyon Road and Jensen Avenue and a four-lane super arterial between Jensen Avenue and North Avenue.

Hamilton Avenue is an existing east-west two-lane collector divided by a two-way left-turn lane in the vicinity of the proposed Project. In this area, Hamilton Avenue exists as a two-lane collector divided by a two-way left-turn lane between Fowler Avenue and Temperance Avenue. The *Fresno General Plan* Circulation Element designates Hamilton Avenue as a two-lane collector between Fowler Avenue and Temperance Avenue.

California Avenue is an existing east-west four-lane collector west of Fowler Avenue and east of Armstrong Avenue. Through the Project, California Avenue is proposed to be designed as a modified collector which will include a single vehicle lane in each direction divided by a 16-foot wide raised median with landscaping and a curbside Class II or Class IV bikeways. In this area, California Avenue exists between Armstrong Avenue and approximately 100 feet west of Temperance Avenue. The *Fresno General Plan* Circulation Element designates California Avenue as a four-lane collector between Fowler Avenue and

Temperance Avenue. However, the Fresno COG traffic forecasting and the LOS operations within this TIA support the proposed cross section with a maximum of one vehicular lane per direction. Based on information provided by City of Fresno staff, the easterly extension of California Avenue to Temperance Avenue will be constructed and operational by early 2026.

Church Avenue is an existing east-west two-lane undivided collector in the vicinity of the proposed Project site. In this area, Church Avenue is a four-lane collector divided by a two-way left-turn lane between Peach Avenue and Sunnyside Avenue, a three-lane divided collector between Sunnyside Avenue and Fowler Avenue, a two-lane undivided collector between Fowler Avenue and Temperance Avenue and a two-lane undivided roadway between Temperance Avenue and Leonard Avenue. The *Fresno General Plan* Circulation Element designates Church Avenue as a four-lane collector between Willow Avenue and Temperance Avenue and a two-lane local roadway between Temperance Avenue and Highland Avenue.

Collision Analysis

JLB conducted a search of SWITRS to obtain collision reports for the most recent five-year period (January 1st, 2019 to December 31st, 2023). The SWITRS "is a database that serves as a means to collect and process data gathered from a collision scene. The internet SWITRS application is a tool by which the California Highway Patrol (CHP) staff and members of its Allied Agencies throughout California can request various types of statistical reports in an electronic format." All collision reports between January 1st, 2019 and December 31st, 2023 were included in the collision analysis. In the five-year period, a total of twenty-three (23) collisions were reported within the influence zone (assumed to be within 250 feet) of the study intersections. The SWITRS collision data are found in Appendix E.

Table I summarizes the type of collision, severity, violation, and identifies involvement with another vehicle, a pedestrian/bicyclist or a fixed object. Based on the five-year collision data contained within SWITRS, most study intersections have experienced a relatively low number and severity of collisions per year. After thorough review of the data contained within the collision reports for the five-year analysis period, no changes are recommended to the study intersections as a result of collision activity.

Table I: Five-Year (2019-2023) Intersection Collision Analysis

ID	Intersection	Number of Collisions	Type of Collision						Severity					Type of Violation						Motor Vehicle Involved with...			
			Broadside	Rear End	Head-On	Hit Object	Sideswipe	Other	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain/Injury	Property Damage Only	Traffic Signals & Signs	Right of Way	Unsafe Speed	Improper Turning	Driving Under Influence	Other	Pedestrian/Bicyclist	Other Motor Vehicle	Fixed Object	Other
1	Fowler Avenue / Hamilton Avenue	**5**	1	-	-	4	-	-	-	-	1	-	4	-	-	3	1	1	-	-	1	4	-
2	Armstrong Avenue / Hamilton Avenue	**3**	2	-	1	-	-	-	-	-	-	1	2	1	1	-	-	1	-	-	3	-	-
3	Temperance Avenue / Hamilton Avenue	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Armstrong Avenue / California Avenue	**3**	1	-	-	2	-	-	-	1	-	-	2	-	2	-	1	-	-	-	1	2	-
5	Temperance Avenue / California Avenue	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Fowler Avenue / Church Avenue	**7**	2	-	-	5	-	-	-	-	2	-	5	2	1	-	2	1	1	1	2	4	-
7	Armstrong Avenue / Church Avenue	**5**	2	2	-	-	1	-	-	-	1	-	4	-	2	2	1	-	-	-	5	-	-
Totals		**23**	**8**	**2**	**1**	**11**	**1**	**0**	**0**	**1**	**4**	**1**	**17**	**3**	**6**	**5**	**5**	**3**	**1**	**1**	**12**	**10**	**0**

Traffic Signal Warrants

The CA MUTCD indicates that an engineering study of traffic conditions, pedestrian characteristics and physical features of an intersection shall be conducted to determine whether the installation of traffic signal controls are justified. The CA MUTCD provides a total of nine (9) warrants to evaluate the need for traffic signal controls. These warrants include 1) Eight-Hour Vehicular Volume, 2) Four-Hour Vehicular Volume, 3) Peak Hour, 4) Pedestrian Volume, 5) School Crossing, 6) Coordinated Signal System, 7) Crash Experience, 8) Roadway Network and 9) Intersection Near a Grade Crossing. Signalization of an intersection may be appropriate if one or more of the signal warrants is satisfied. However, the CA MUTCD also states that "[t]he satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic control signal" (Caltrans, 2021).

If traffic signal warrants are satisfied when a LOS threshold impact is identified at an unsignalized intersection, then installation of a traffic signal control may serve as an improvement measure. For instances where traffic signal warrants are satisfied, a traffic signal control is not considered to be the default improvement measure. Since the installation of a traffic signal control typically requires the construction of additional lanes, an attempt is made to improve the intersection approach lane geometrics in order to improve its LOS while maintaining the existing intersection controls. If the additional lanes did not result in acceptable LOS at the intersection, then in those cases implementation of a traffic signal control would be considered.

Warrants 1, 2 and 3 were prepared for the unsignalized intersections under the Existing Traffic Conditions scenario. These warrants are contained in Appendix J. At present, Warrant 1 is met for the study intersections of Fowler Avenue at Hamilton Avenue and Fowler Avenue at Church Avenue. Warrant 2 is

met for the study intersections of Fowler Avenue at Hamilton Avenue, Temperance Avenue at Hamilton Avenue and Fowler Avenue at Church Avenue. Warrant 3 is met for the study intersections of Fowler Avenue at Hamilton Avenue, Temperance Avenue at Hamilton Avenue, Fowler Avenue at Church Avenue and Armstrong Avenue at Church Avenue under one or both peak periods. Based on the operational analysis and engineering judgment, it is not recommended that any study intersection be signalized since all unsignalized study intersections operate at an acceptable LOS under both peak periods with the exception of Fowler Avenue at Church Avenue. It is recommended that the Sanger Unified School District continue with its construction of the signalization of the intersection of Fowler Avenue at Church Avenue in an effort to improve pedestrian safety as its student population continues to increase.

Results of Existing Level of Service Analysis

Figure 2 illustrates the Existing Traffic Conditions turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing Traffic Conditions scenario are provided in Appendix F. Table II presents a summary of the Existing peak hour LOS at the study intersections. Table III presents a summary of the Existing LOS for the study segment.

At present, all study intersections operate at an acceptable LOS.

It is important to note that Synchro has a three-lane limitation on all-way stop intersections. Therefore, the intersection of Armstrong Avenue at Hamilton Avenue and Fowler Avenue at Church Avenue is coded with three lanes on legs that currently contain four lanes. These legs include the north leg of the intersection of Fowler Avenue at Church Avenue as well as the north and south legs of the intersection of Armstrong Avenue at Hamilton Avenue.

Table II: Existing Intersection LOS Results

ID	Intersection	Intersection Control	AM (7 - 9) Peak Hour		PM (4 - 6) Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Fowler Avenue / Hamilton Avenue	One-Way Stop	17.6	C	16.0	C
2	Armstrong Avenue / Hamilton Avenue	All-Way Stop	11.1	B	10.1	B
3	Temperance Avenue / Hamilton Avenue	All-Way Stop	14.8	B	10.3	B
4	Armstrong Avenue / California Avenue	One-Way Stop	12.0	B	9.9	A
5	Temperance Avenue / California Avenue	Does Not Exist	-	-	-	-
6	Fowler Avenue / Church Avenue	All-Way Stop	33.1	D	13.5	B
7	Armstrong Avenue / Church Avenue	All-Way Stop	26.9	D	8.3	A

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

At present, the study segment operates at an acceptable LOS.

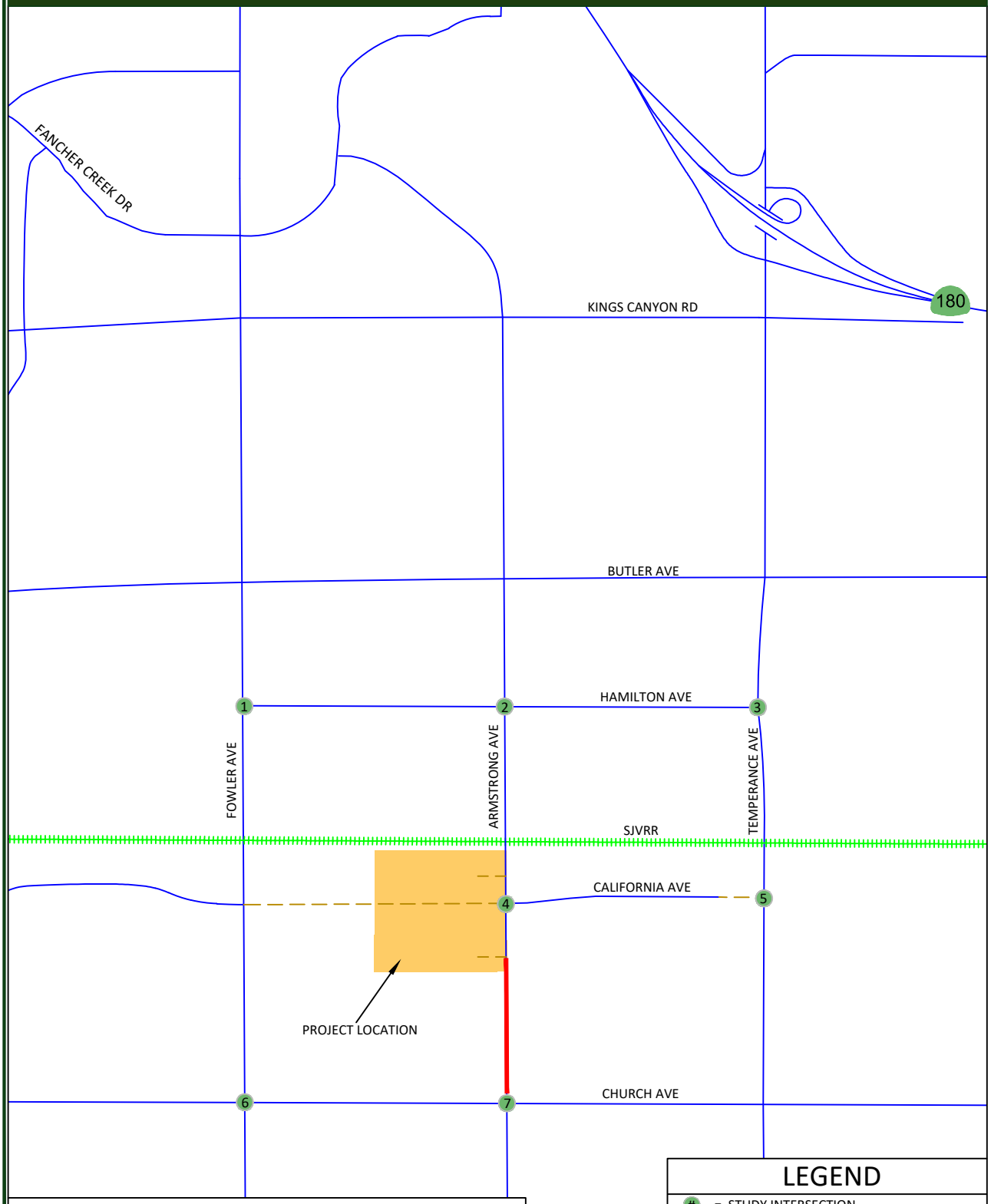
Table III: Existing Segment LOS Results

ID	Segment	Limits	Lanes	24-hour Volume	AM Peak Volume	AM LOS	PM Peak Volume	PM LOS
1	Armstrong Avenue	Geary Avenue and Church Avenue	2	3,870	577	C	246	A

Note: LOS = Level of Service per HCM 6th Edition methodologies in HCS7 software

Tract 6376 - City of Fresno
Vicinity Map

Figure 1



LEGEND

= STUDY INTERSECTION
= FUTURE ROADWAY
= STUDY SEGMENT

N

Not To Scale

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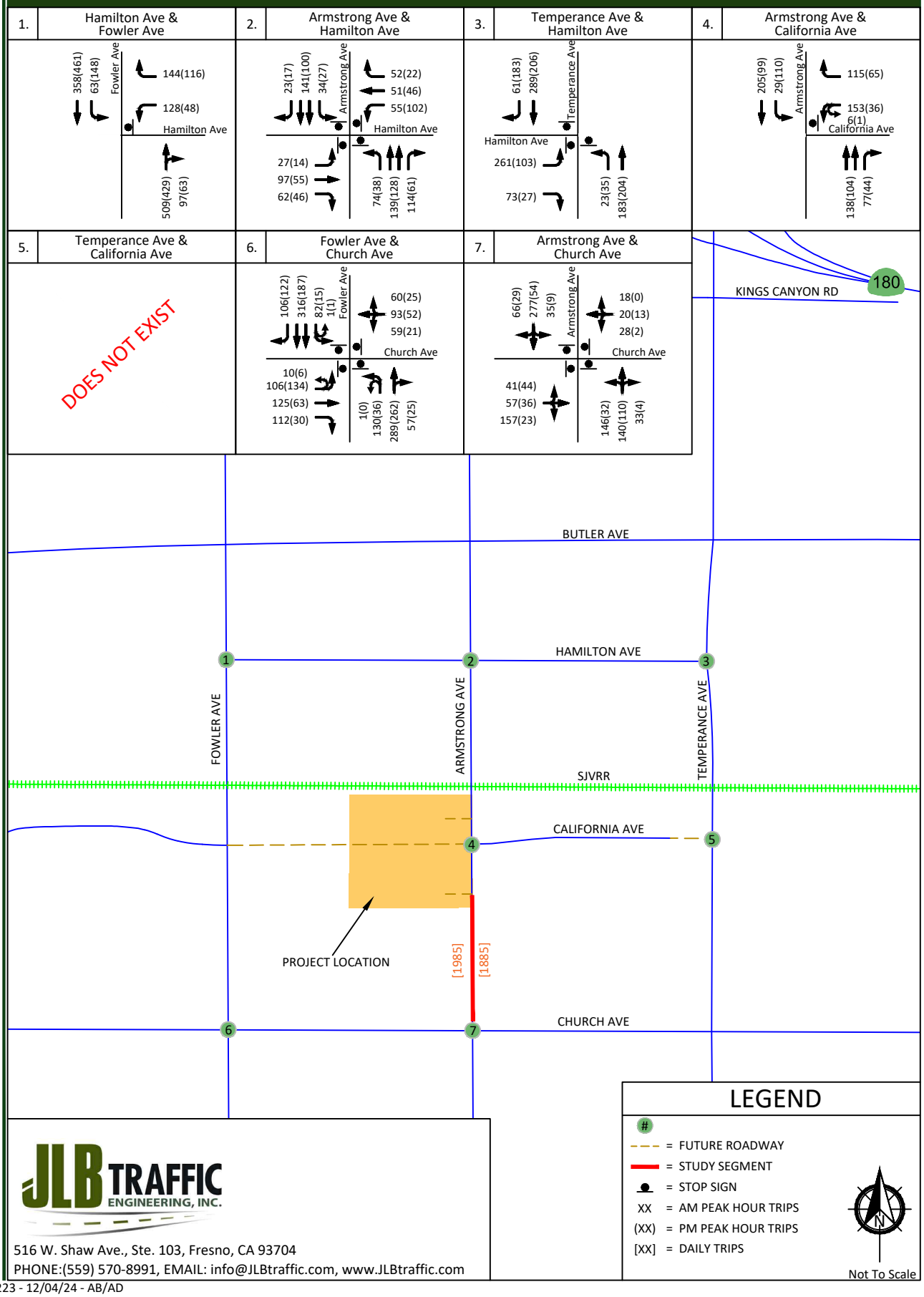
Tract 6376 - City of Fresno
Existing - Traffic Volumes, Geometrics and Controls

Figure 2



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004-223 - 12/04/24 - AB/AD

Existing plus Project Traffic Conditions

Project Description

The Project is proposing to develop 202 single-family residential units. However, the site plan that this study was based off contains 203 dwelling units. Therefore, this analysis shall present a conservative analysis. Based on information provided to JLB, the Project is consistent with the *Fresno General Plan*. Figure 3 illustrates the latest Project Site Plan.

Project Access

Access to and from the proposed Project site will be from four (4) access points along future California Avenue west of Armstrong Avenue and 2 (two) along the west side of Armstrong Avenue at buildout. The Project proposes to construct California Avenue west of Armstrong Avenue within the Project site for approximately 1,300 feet. The four (4) access points along California Avenue include two (2) access points located on either side of future California Avenue approximately 1,150 feet west of Armstrong Avenue and two (2) access point located on either side of future California Avenue approximately 550 feet west of Armstrong Avenue. All four (4) access points are proposed to have full access to California Avenue. The two (2) access points proposed along the west side of Armstrong Avenue are located approximately 330 feet north of California Avenue and approximately 600 feet south of California Avenue. Both of these access points are proposed to have full access to Armstrong Avenue. Furthermore, one (1) outlet on the south, one (1) outlet on the west and California Avenue on the west can all be connected to for more access in the future.

JLB analyzed the location of the existing and proposed roadways and access points relative to those in the vicinity of the Project site. A review of the existing and proposed roadways and access points indicates that they are located at points that minimize traffic operational impacts to existing and future roadway networks. A Project Site Plan with the Project's opening day trip assignment can be found in Figure 3. It is recommended that left-turn pockets with a storage capacity of 150 feet be included as part of the design of California Avenue at its intersections with Burgan Avenue and Cypress Avenue.

Project Trip Generation

The trip generation rates for the proposed Project were obtained from the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table IV presents the trip generation for the proposed Project with trip generation rates for 202 Single-Family Detached Housing dwelling units. At buildout, the proposed Project is estimated to generate approximately 1,905 daily trips, 141 AM peak hour trips and 190 PM peak hour trips.

Table IV: Project Trip Generation

Land Use (ITE Code)	*Size*	*Unit*	*Daily*		*AM (7-9) Peak Hour*						*PM (4-6) Peak Hour*					
			Rate	*Total*	*Trip Rate*	*In*	*Out*	*In*	*Out*	*Total*	*Trip Rate*	*In*	*Out*	*In*	*Out*	*Total*
						%						*%*				
Single-Family Detached Housing (210)	202	d.u.	93.43	1,905	0.70	26	74	37	104	141	0.94	63	37	120	70	190
Total Driveway Trips				**1,905**				**37**	**104**	**141**				**120**	**70**	**190**

Note: d.u. = Dwelling Units

Trip Distribution

The trip distribution assumptions were developed based on existing travel patterns, the Fresno COG Project Select Zone, the existing roadway network, engineering judgment, data provided by the developer, knowledge of the study area, existing residential and commercial densities and the *Fresno General Plan* Circulation Element in the vicinity of the Project site. The Project's trip generation data was provided to Fresno COG to conduct a Project-specific Traffic Analysis Zone (TAZ) analysis using the Fresno COG ABM (Cumulative Year 2046). The Fresno COG Project Select Zone results are contained in Appendix C. Figure 4 illustrates the Project Only Trips at the study intersections.

Active Transportation Plan

The Fresno Active Transportation Plan (ATP) is an extensive guide detailing the conception for active transportation in the City of Fresno that was adopted in December 2016. This ATP aims to improve the safety, increase non-motorized trips, improve access and fill in gaps in networks for Fresno's pedestrians and bicyclists. In order to achieve these goals for active transportation, this ATP proposes a comprehensive network of citywide bikeways, trails and sidewalks. The recommended network would add 166 miles of Class I Bike Paths, 691 miles of Class II Bike Lanes, 69 miles of Class III Bike Routes, 21 miles of Class IV Separated Bikeways and 661 miles of sidewalks. This ATP also recommends bicycle detection at traffic signals, destination signage, bicycle parking, showers and changing facilities and bikeway maintenance. This network will be constructed in conjunction with adjacent land developments, roadway maintenance and active transportation infrastructure projects using funds from different local, state and federal sources.

Bikeways

The *Fresno ATP* classifies bicycle facilities into the following types:

- Class I Bikeway (Bike Path) – Provides a completely separated right-of-way for exclusive use of bicycles and pedestrians with crossflow minimized.
- Class II Bikeway (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bikeway (Bike Route) – Provides a shared use with pedestrians or motor vehicle traffic, typically on lower volume roadways.
- Class IV Bikeways (Separated Bikeways) – Provides a protected lane for one-way bike travel (one-way cycle track) and protected lanes for two-way bike travel (two-way cycle track) on a street or highway.

Class II (Bike Lane) Bikeways exist in the vicinity of the Project site. In the vicinity of the Project site, Class II Bikeways exist along portions of Fowler Avenue, Armstrong Avenue, Hamilton Avenue, California Avenue and Church Avenue. The *Fresno ATP* recommends that Class II Bikeways be implemented adjacent to and in the vicinity of the Project site (City of Fresno, 2016). Adjacent to the Project site, a Class II Bikeway is planned along the west side of Armstrong Avenue. In the vicinity of the Project site, Class II Bikeways are planned on remaining stretches Fowler Avenue, Armstrong Avenue, Temperance Avenue, Hamilton Avenue, California Avenue and Church Avenue. In the vicinity of the Project site, a Class I Bikeway is planned on Temperance Avenue between SR 180 and North Avenue. Therefore, it is recommended that the Project construct a Class II Bikeway on its frontages to Armstrong Avenue and California Avenue.

Walkways

The *Fresno ATP* classifies pedestrian facilities into sidewalks and Class I Bike Paths. Pedestrian sidewalks exist in the vicinity of the Project site along portions of Fowler Avenue, Armstrong Avenue, Temperance Avenue, Hamilton Avenue, California Avenue and Church Avenue. The *Fresno ATP* recommends that pedestrian sidewalks be implemented in the vicinity of the Project site along remaining stretches of Fowler Avenue, Armstrong Avenue, Temperance Avenue, Hamilton Avenue, California Avenue and Church Avenue. Therefore, it is recommended the Project construct ADA compliant pedestrian sidewalks along internal streets connecting all uses to external sidewalks and along its frontages to Armstrong Avenue and California Avenue.

Transit

Fresno Area Express (FAX), is the transit operator in the City of Fresno. At present, there are two (2) FAX transit routes that operate in the vicinity of the proposed Project site, Routes 1 and 22. FAX Route 1, which runs on a portion of Kings Canyon Road, operates at 15-minute intervals on weekdays and weekends. The nearest stop on this route to the Project site is located along the north side of Kings Canyon Road approximately 750 feet east of Clovis Avenue. This route provides a direct connection to the River Park Shopping Center, Manchester Center, Fresno City College, Downtown Fresno, the Big Fresno Fair grounds and Sunnyside High School. FAX Route 22, which runs on Clovis Avenue, operates at 30-minute intervals on weekdays and weekends. The nearest stop on this route to the Project site is located along the west side of Burgan Avenue approximately 100 feet north of Lyell Avenue and is only used during peak hours. This route provides a direct connection Roosevelt High, the Amtrak Station, Central Library, Downtown Transit Center, Downtown Fresno, Community Center, Talking Book Library, West Lan Shopping Center and Fig Garden Library. It is worth noting that retention of the existing and expansion of future transit routes is dependent on transit ridership demand and available funding.

Safe Routes to School

Kindergarten through 12th grade students from the Project will be served by the Sanger Unified School District (SUSD). SUSD provides transportation for students who live in excess of an established radius zone. The zone is a radius of 0.5 miles for Kindergarten, 0.75 miles for grades 1 through 6, 1.5 miles for grades 7 through 8 and 2 miles for grades 9 through 12.

Based on attendance area boundaries at the time of the preparation of this TIA, elementary school students would attend Sequoia Elementary School located at the northeast quadrant of Armstrong Avenue at Jensen Avenue. Sequoia Elementary School is located 0.57 and 0.85 miles from the nearest and farthest home on the Project. Therefore, it is anticipated that elementary school students will need to walk, bike or be driven between the Project and the school.

The most direct path from the Project to the Sequoia Elementary School campus can begin from the southwest corner of Armstrong Avenue at California Avenue. Students would proceed to travel south on the west side of Armstrong Avenue until reaching the northwest corner of Armstrong Avenue at Church Avenue. The intersection of Armstrong Avenue at Church Avenue is controlled by an all-way stop that contains no marked crosswalks. Students would cross either the north and east legs or the west and south legs at this intersection to reach the southeast corner of Armstrong Avenue at Church Avenue. Students would proceed to travel south on the east side of Armstrong Avenue until reaching the entrance to the school campus.

At the time of this TIA, most middle school and high school students will attend Washington Academic Middle School and Sanger West High School, respectively. Washington Academic Middle School is located 6.39 and 6.67 miles from the nearest and farthest home on the Project. Sanger West High School is located 0.64 and 0.94 miles from the nearest and farthest home on the Project. Therefore, it is anticipated that these middle school students would be bussed between the Project and the school and some high school students will need to walk, bike or be driven to school. However, in the future, all middle school and high school students will attend the SUSD Educational Center located at the southeast corner of Fowler Avenue at Church Avenue. SUSD Educational Center is located 0.64 and 0.94 miles from the nearest and furthest home on the Project. Therefore, it is anticipated that eventually middle school and high school students attending SUSD Educational Center will need to walk, bike or be driven between the Project and the school.

The most direct path from the Project to the SUSD Educational Center campus can begin from southwest corner of Armstrong Avenue at California Avenue. Students would proceed to travel south on the west side of Armstrong Avenue until reaching the northwest corner of Armstrong Avenue at Church Avenue. The intersection of Armstrong Avenue at Church Avenue is controlled by an all-way stop that contains no marked crosswalks. Students would cross the west leg at this intersection to reach the southwest corner of Armstrong Avenue at Church Avenue. Students would proceed to travel west along the south side of Church Avenue until reaching an entrance to the school campus.

Stretches of Armstrong Avenue and Church Avenue that will be utilized by students to reach school campuses do not contain sidewalks. Also, the intersection of Armstrong Avenue at Church Avenue has no marked crosswalks. It is recommended that the Project and SUSD look into funding sources to enhance the walkways for Middle and High School students for and from the new Sanger West High School and Middle School.

Traffic Signal Warrants

Warrant 3 was prepared for the unsignalized intersections under the Existing plus Project Traffic Conditions scenario. These warrants are contained in Appendix J. Under this scenario, the intersections of Fowler Avenue at Hamilton Avenue, Temperance Avenue at Hamilton Avenue and Armstrong Avenue at Church Avenue are projected to satisfy Warrant 3 during one or both peak periods. Based on the traffic operational analysis and engineering judgment, it is not recommended that any study intersection be signalized since all unsignalized study intersections operate at an acceptable LOS under both peak periods.

Roadway Network

The Existing plus Project Traffic Conditions scenario assumes that the existing roadway geometrics and traffic controls will remain in place except for improvements along Armstrong Avenue, an extension of California Avenue west of Armstrong and east to Temperance Avenue and the signalization of Fowler Avenue at Church Avenue. As part of the Project, it is anticipated that California Avenue will be extended approximately 1,300 feet west of Armstrong Avenue and a second southbound lane would be added within the Project limits. Furthermore, a southbound right-turn lane will be added at the intersection of Armstrong Avenue at California Avenue. The intersection of Armstrong Avenue at California Avenue will be modified to accommodate these improvements. Based on feedback from the City of Fresno, this scenario assumes that the extension of California Avenue east to Temperance Avenue is completed by early 2023. Furthermore, the intersection of Temperance Avenue at California Avenue will be controlled by a one-way stop with a stop sign on the west leg of California Avenue. Also, it is assumed that the intersection of Fowler Avenue at Church Avenue would be signalized as part of the Sanger West High School and Middle School Project. These roadway network changes result in a modification of existing traffic patterns. Figure 5 illustrates the assumed intersection geometrics and traffic controls for these intersections under this scenario.

Results of Existing plus Project Level of Service Analysis

Figure 5 illustrates the Existing plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing plus Project Traffic Conditions scenario are provided in Appendix G. Table V presents a summary of the Existing plus Project peak hour LOS at the study intersections. Table VI presents a summary of the Existing plus Project peak hour LOS at the study segment.

Under this scenario, all study intersections are projected to continue operating at an acceptable LOS.

It is important to note that Synchro has a three-lane limitation on all-way stop intersections. Therefore, the intersection of Armstrong Avenue at Hamilton Avenue is coded with three lanes on legs that currently contain four lanes. These legs include the north and south legs of the intersection of Armstrong Avenue at Hamilton Avenue.

Table V: Existing plus Project Intersection LOS Results

ID	Intersection	Intersection Control	AM (7 - 9) Peak Hour		PM (4 - 6) Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Fowler Avenue / Hamilton Avenue	One-Way Stop	18.3	C	16.7	C
2	Armstrong Avenue / Hamilton Avenue	All-Way Stop	11.4	B	10.2	B
3	Temperance Avenue / Hamilton Avenue	All-Way Stop	14.8	B	11.2	B
4	Armstrong Avenue / California Avenue	Two-Way Stop	12.4	B	10.9	B
5	Temperance Avenue / California Avenue	One-Way Stop	13.4	B	12.3	B
6	Fowler Avenue / Church Avenue	Traffic Signal	25.1	C	27.4	C
7	Armstrong Avenue / Church Avenue	All-Way Stop	26.2	D	8.4	A

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

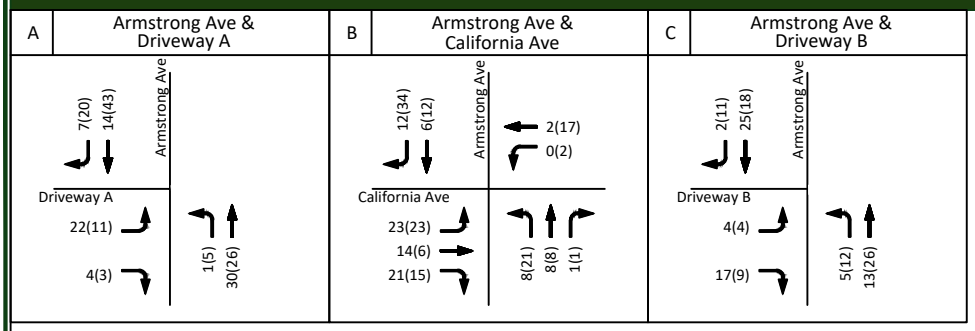
Table VI: Existing plus Project Segment LOS Results

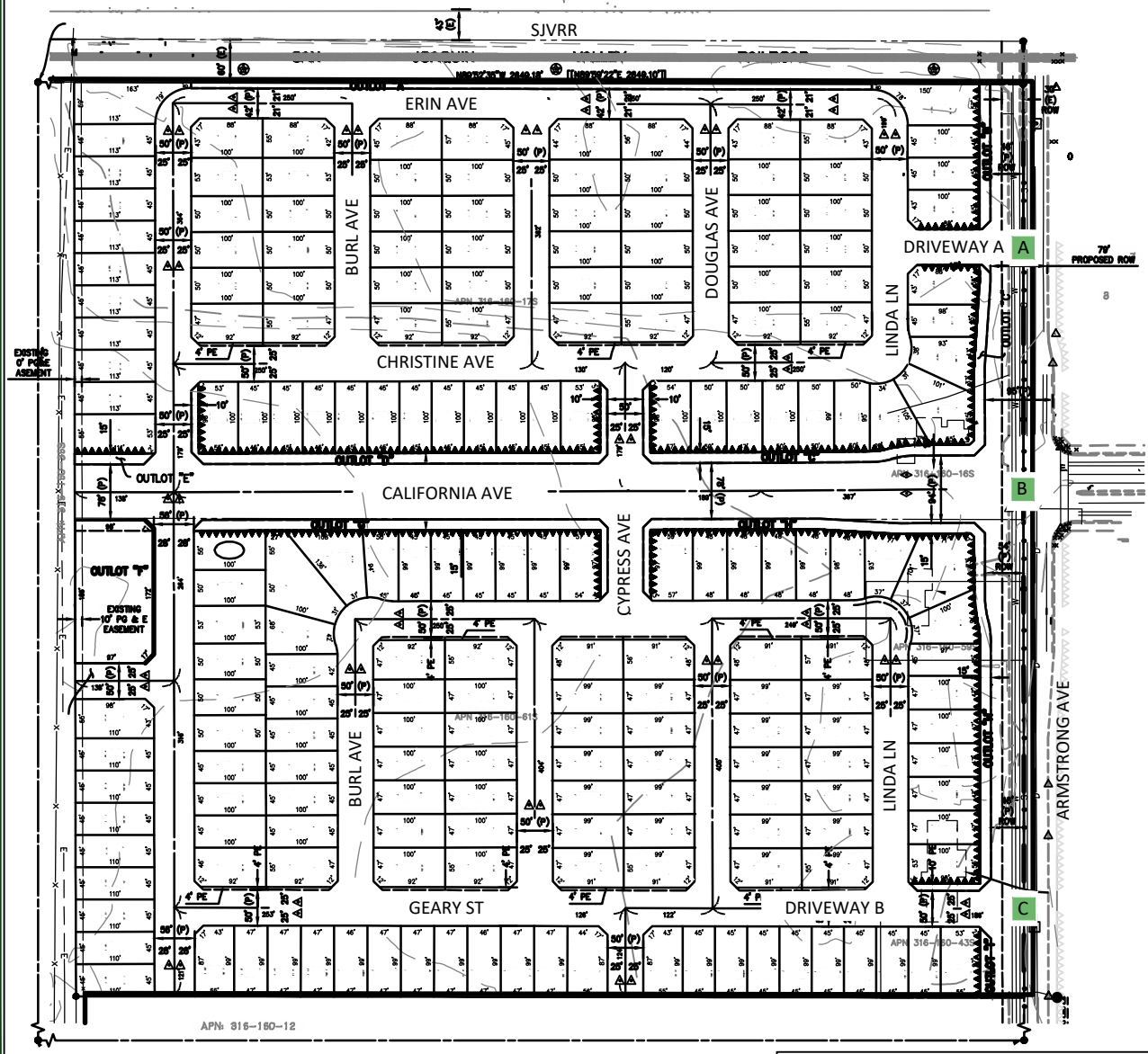
ID	Segment	Limits	Lanes	24-hour Volume	AM Peak Volume	AM LOS	PM Peak Volume	PM LOS
1	Armstrong Avenue	Geary Avenue and Church Avenue	2	4,138	576	C	275	A

Note: LOS = Level of Service per HCM 6th Edition methodologies in HCS7 software

Tract 6376 - City of Fresno
Project Site Plan

Figure 3





LEGEND

X = PROJECT DRIVEWAY
XX = AM PROJECT ONLY TRIPS
(XX) = PM PROJECT ONLY TRIPS

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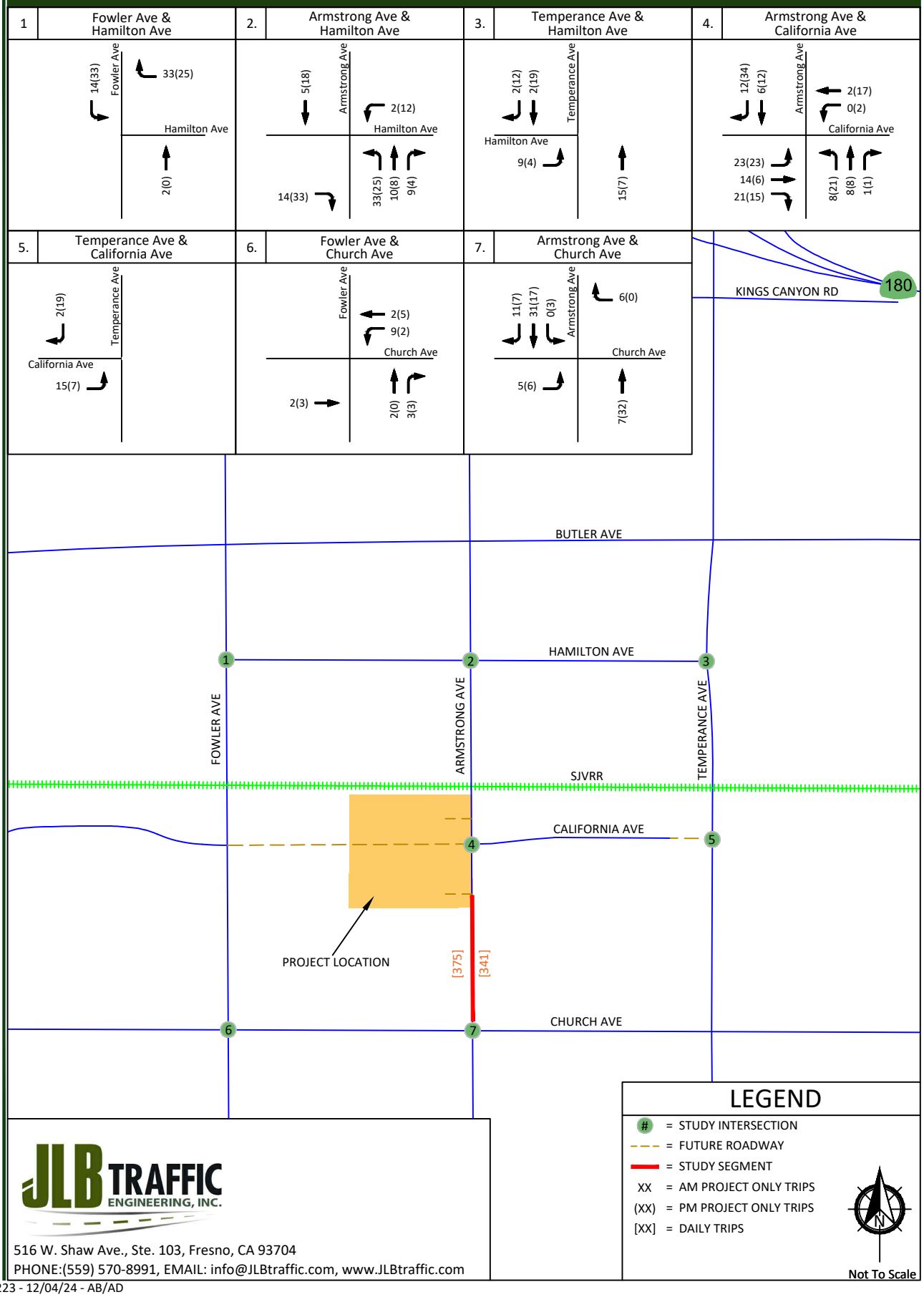
Tract 6376 - City of Fresno
Project Trip Distribution

Figure 4



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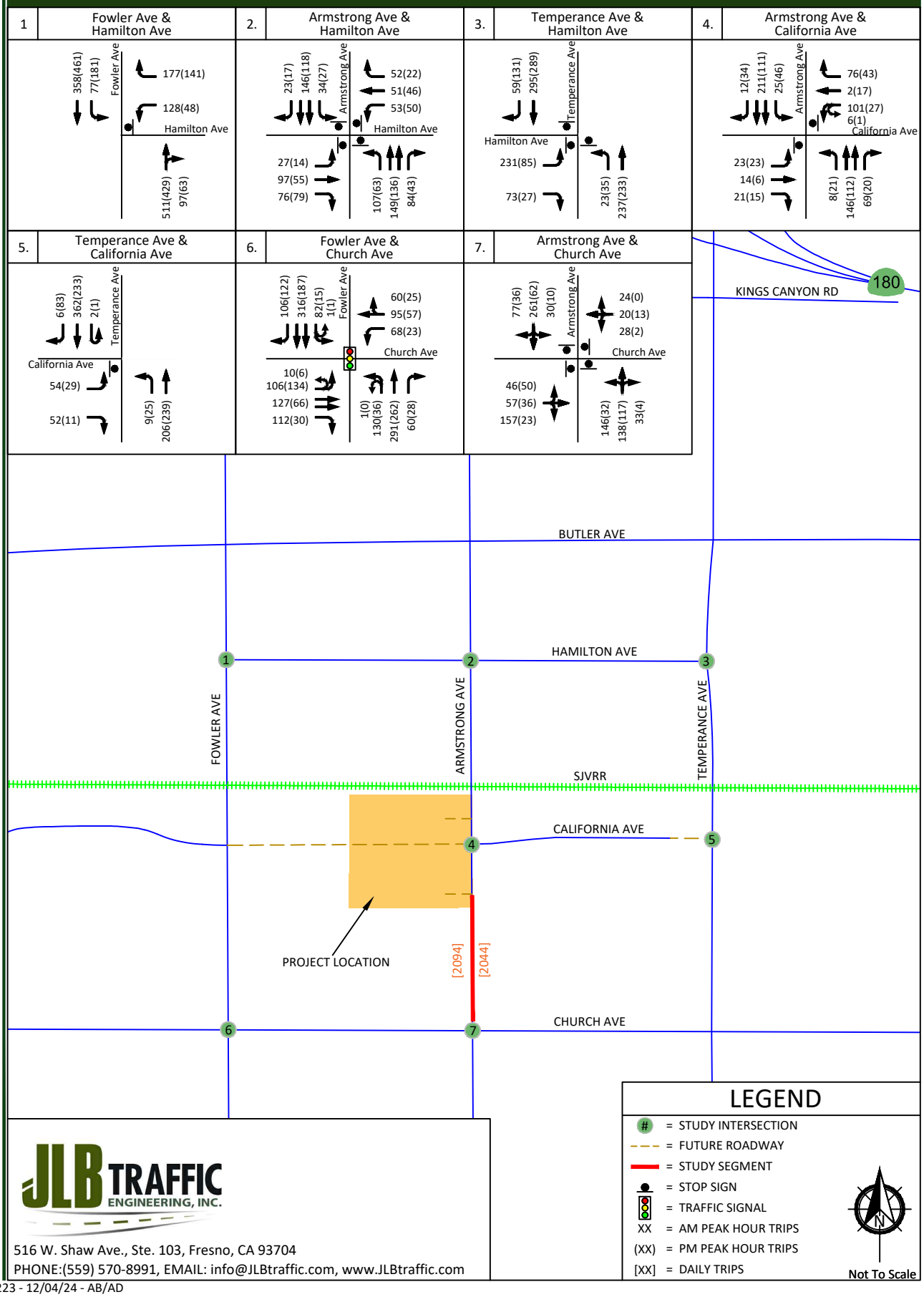
Tract 6376 - City of Fresno
Existing plus Project - Traffic Volumes, Geometrics and Controls

Figure 5



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Near Term plus Project Traffic Conditions

Description of Near Term Projects

Near Term Projects consist of developments that are either under construction, built but not fully occupied, are not built but have final site development review (SDR) approval, or for which the lead agency or responsible agencies have knowledge of. The City of Fresno and County of Fresno staff were consulted throughout the preparation of this TIA regarding Near Term Projects that could potentially impact the study intersections. JLB staff conducted a reconnaissance of the surrounding area to confirm the Near Term Projects. Therefore, the Near Term Projects listed in Table VII were within the proximity of the Project site.

Table VII: Near Term Projects' Trip Generation

Near Term Project ID	*Near Term Project Name*	*Daily Trips*	*AM Peak Hour*	*PM Peak Hour*
A	Tract 5498[1]	754	56	75
B	Tract 5717 (portion of)[1]	2,625	89	250
C	Tract 6201 (portion of)[2]	1,510	118	158
D	Tract 6214 (portion of)[2]	94	7	10
E	Tract 6219[1]	1,207	90	120
F	Tract 6224 (portion of)[3]	897	70	94
G	Tract 6298[2]	1,048	82	110
H	Tract 6299 (portion of)[2]	481	38	50
I	Tract 6325[1]	594	44	59
J	7/11 and Fuel Station[1]	2,566	157	213
K	BDM Builders[2]	10,432	727	833
L	Fancher Creek Town Center (portion of)[1]	55,815	2,065	4,865
M	Fowler Commercial[1]	3,404	287	229
N	Fowler-McKinley Elementary School[2]	605	214	54
O	Hale Property[1]	1,367	102	136
P	Lennar Homes (portion of)[1]	57	4	6
Q	Malaga[2]	4,640	603	568
R	Ohanesian[2]	1,879	147	197
S	SUSD Educational Center[3]	5,128	1,514	452
T	SUSD Temperance Elementary School[2]	1,323	469	119
Total Near Term Project Trips		**96,426**	**6,883**	**8,598**

Note: 1 = Trip Generation prepared by JLB Traffic Engineering, Inc. based on readily available information
2 = Trip Generation based on JLB Traffic Engineering, Inc. Traffic Impact Analysis Report
3 = Trip Generation based on a Traffic Impact Analysis Report by another Traffic Engineering Firm

The trip generation listed in Table VII is that which is anticipated to be added to the streets and highways by Near Term Projects between the time of the preparation of this Report and five (5) years after buildout of the proposed Project. As shown in Table VII, the total trip generation for the Near Term Projects is 96,426 weekday daily trips, 6,883 weekday AM peak hour trips and 8,598 weekday PM peak hour trips. Figure 6 illustrates the location of the Near Term Projects and their combined trip assignment to the study intersections under the Near Term plus Project Traffic Conditions scenario.

Traffic Signal Warrants

Warrant 3 was prepared for the unsignalized intersections under the Near Term plus Project Traffic Conditions scenario. These warrants are contained in Appendix J. Under this scenario, the intersections of Fowler Avenue at Hamilton Avenue, Armstrong Avenue at Hamilton Avenue, Temperance Avenue at Hamilton Avenue, Temperance Avenue at California Avenue and Armstrong Avenue at Church Avenue are projected to satisfy Warrant 3 during one or both peak periods. Based on the traffic signal warrants, operational analysis and engineering judgment, it is recommended that the intersections of Temperance Avenue at Hamilton Avenue and Armstrong Avenue at Church Avenue be signalized.

Roadway Network

The Near Term plus Project Traffic Conditions scenario assumes that the Existing plus Project Traffic Conditions roadway geometrics and traffic controls will remain in place. Figure 7 illustrates the assumed intersection geometrics and traffic controls for these intersections under this scenario.

Results of Near Term plus Project Level of Service Analysis

Figure 7 illustrates the Near Term plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Near Term plus Project Traffic Conditions scenario are provided in Appendix H. Table VIII presents a summary of the Near Term plus Project peak hour LOS at the study intersections. Table IV presents a summary of the Near Term plus Project peak hour LOS at the study segment.

Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during the AM peak period. It is recommended that the following improvements be considered for implementation to improve the LOS at these intersections.

- Temperance Avenue / Hamilton Avenue
  - Open the southbound left-turn lane to allow southbound to northbound U-turns; and
  - Signalize the intersection with protective left-turn phasing in all directions.
- Armstrong Avenue / Church Avenue
  - Add an eastbound left-turn lane;
  - Modify the eastbound left-through-right lane to a through lane;
  - Add an eastbound right-turn lane;
  - Add a westbound left-turn lane;
  - Modify the westbound left-through-right lane to a through-right lane;
  - Add a northbound left-turn lane;
  - Modify the northbound left-through-right lane to a though-right lane;
  - Add a southbound left-turn lane;
  - Modify the southbound left-through-right lane to a through-right lane; and
  - Signalize the intersection with protective left-turn phasing in all directions.

It is important to note that Synchro has a three-lane limitation on all-way stop intersections. Therefore, the intersection of Armstrong Avenue at Hamilton Avenue is coded with three lanes on legs that currently contain four lanes. These legs include the north and south legs of the intersection of Armstrong Avenue at Hamilton Avenue.

Table VIII: Near Term plus Project Intersection LOS Results

ID	Intersection	Intersection Control	AM (7 - 9) Peak Hour		PM (4 - 6) Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Fowler Avenue / Hamilton Avenue	One-Way Stop	22.3	C	20.5	C
2	Armstrong Avenue / Hamilton Avenue	All-Way Stop	14.0	B	11.4	B
3	Temperance Avenue / Hamilton Avenue	All-Way Stop	**38.7**	**E**	15.1	C
		Traffic Signal (Improved)	12.8	B	9.3	A
4	Armstrong Avenue / California Avenue	Two-Way Stop	18.3	C	12.7	B
5	Temperance Avenue / California Avenue	One-Way Stop	23.8	C	15.3	C
6	Fowler Avenue / Church Avenue	Traffic Signal	29.8	C	24.2	C
7	Armstrong Avenue / Church Avenue	All-Way Stop	**>120.0**	**F**	10.0	A
		Traffic Signal (Improved)	48.2	D	16.0	B

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

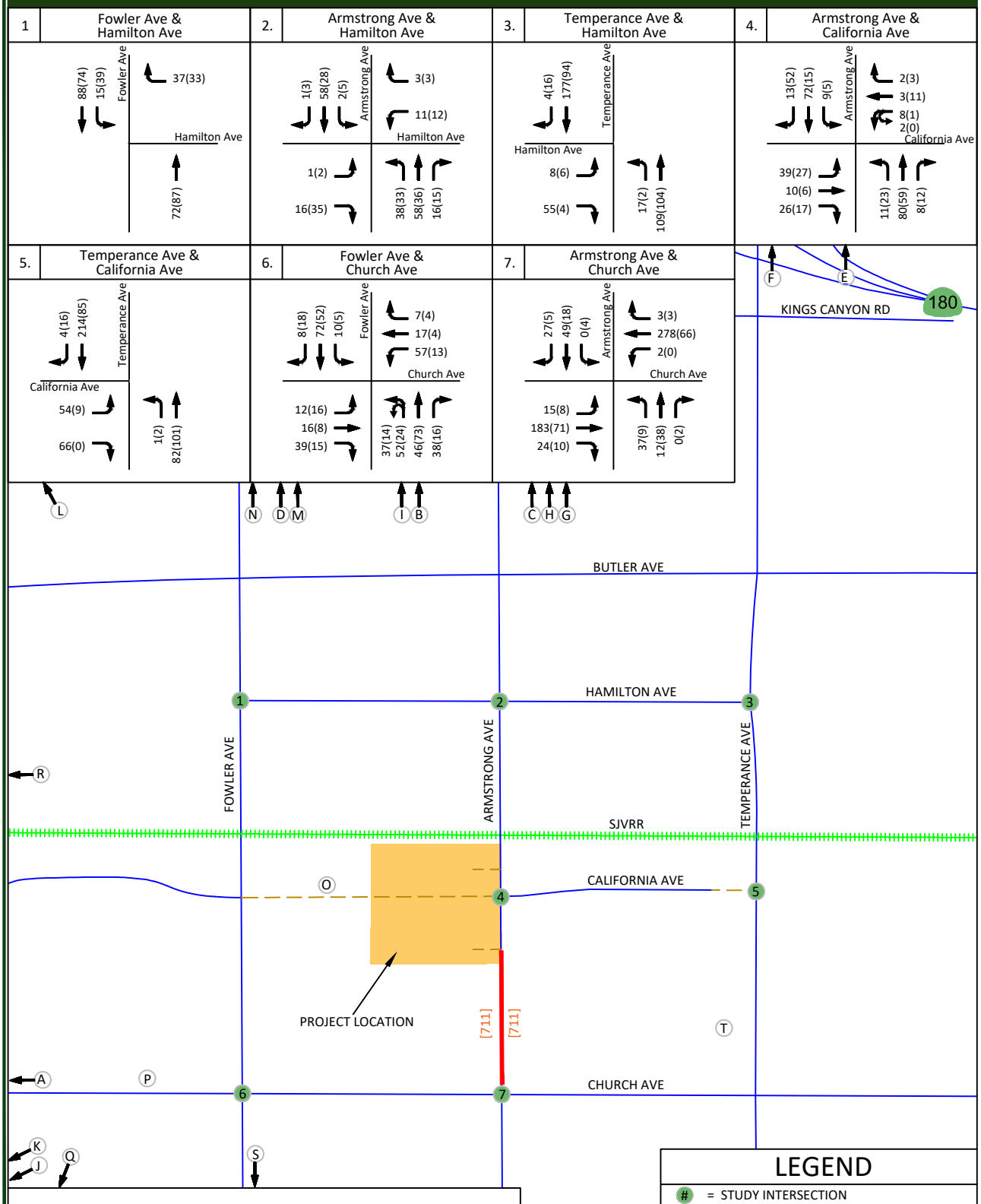
Table IX: Near Term plus Project Segment LOS Results

ID	Segment	Limits	Lanes	24-hour Volume	AM Peak Volume	AM LOS	PM Peak Volume	PM LOS
1	Armstrong Avenue	Geary Avenue and Church Avenue	2	5,560	682	C	351	A

Note: LOS = Level of Service per HCM 6th Edition methodologies in HCS7 software

Tract 6376 - City of Fresno
Near Term Trip Distribution

Figure 6



LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- = STUDY SEGMENT
- XX = AM NEAR TERM TRIPS
- (XX) = PM NEAR TERM TRIPS
- [XX] = DAILY TRIPS
- (X) = NEAR TERM PROJECT LOCATION

N

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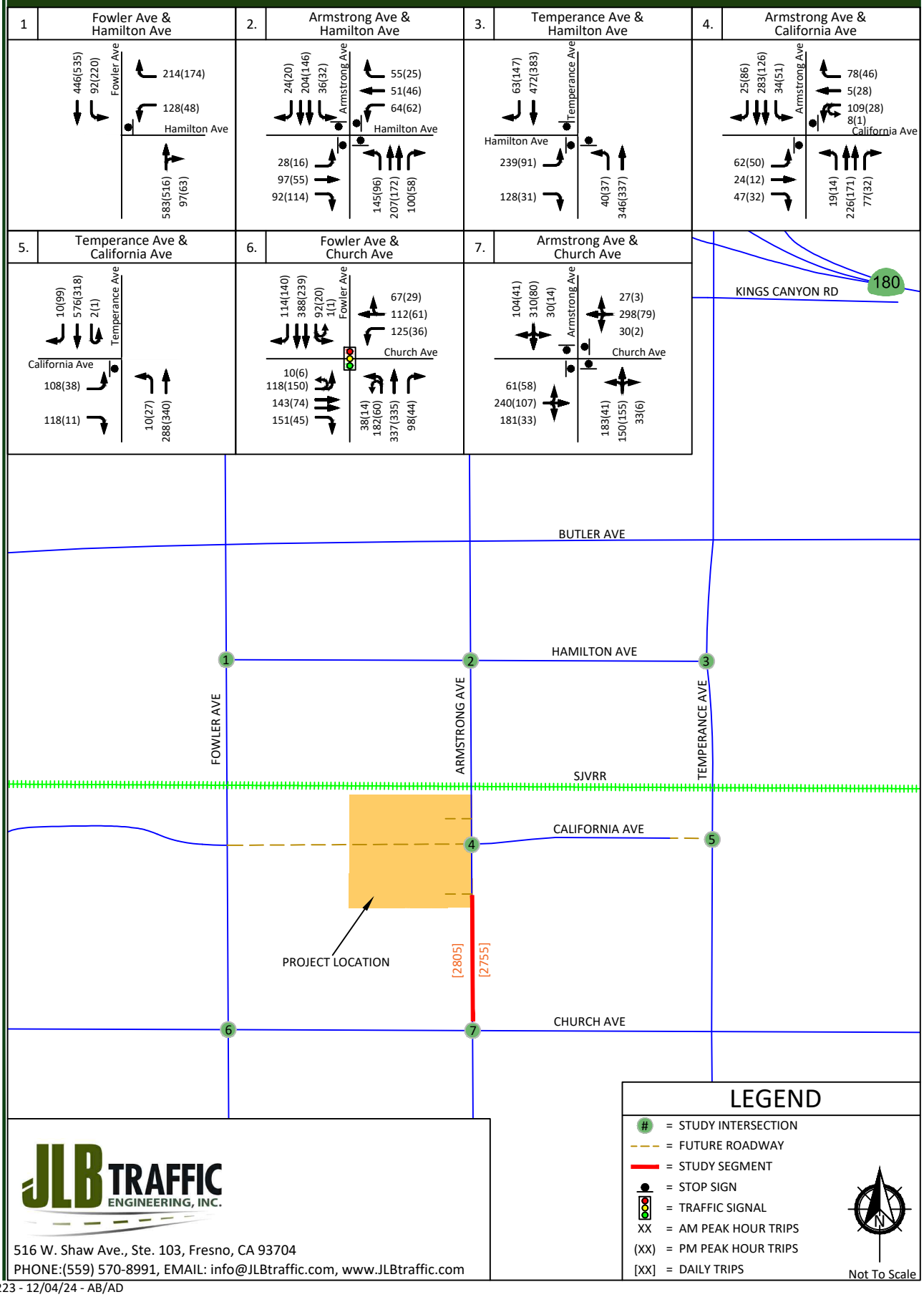
Tract 6376 - City of Fresno
Near Term plus Project - Traffic Volumes, Geometrics and Controls

Figure 7



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Cumulative Year 2046 plus Project Traffic Conditions

Roadway Network

The Cumulative Year 2046 plus Project Traffic Conditions scenario assumes that the Near Term plus Project roadway geometrics and traffic controls will remain in place except for an extension of California Avenue. It is anticipated that California Avenue will be extended to connect to Temperance Avenue. This roadway network change results in a modification of existing traffic patterns. Figure 8 illustrates the 2046 Project Only Trips at the study intersections.

Traffic Signal Warrants

Warrant 3 was prepared for the unsignalized intersections under the Cumulative Year 2046 plus Project Traffic Conditions scenario. These warrants are contained in Appendix J. Under this scenario, the intersections of Fowler Avenue at Hamilton Avenue, Armstrong Avenue at Hamilton Avenue, Temperance Avenue at Hamilton Avenue, Armstrong Avenue at California Avenue, Temperance Avenue at California Avenue and Armstrong Avenue at Church Avenue are projected to satisfy Warrant 3 during one or both peak periods. Based on the traffic signal warrants, operational analysis and engineering judgment, it is recommended that the intersections of Temperance Avenue at Hamilton Avenue, Temperance Avenue at California Avenue and Armstrong Avenue at Church Avenue be signalized.

Results of Cumulative Year 2046 plus Project Level of Service Analysis

Figure 9 illustrates the Cumulative Year 2046 plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Cumulative Year 2046 plus Project Traffic Conditions scenario are provided in Appendix I. Table X presents a summary of the Cumulative Year 2046 plus Project peak hour LOS at the study intersections. Table XI presents a summary of the Cumulative Year 2046 plus Project peak hour LOS at the study segment.

Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue, Temperance Avenue at California Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during one or both peak periods. It is recommended that the following improvements be considered for implementation to improve the LOS at these intersections.

- Temperance Avenue / Hamilton Avenue
  - Open the southbound left-turn lane to allow southbound to northbound U-turns;
  - Add a second southbound through lane with a receiving lane south of Hamilton Avenue;
  - Modify the southbound trap right-turn lane to a typical right-turn lane; and
  - Signalize the intersection with protective left-turn phasing in all directions.
- Temperance Avenue / California Avenue
  - Add a second southbound through lane with a receiving lane south of California Avenue; and
  - Signalize the intersection with protective left-turn phasing in all directions.

- Armstrong Avenue / Church Avenue
  - Add an eastbound left-turn lane;
  - Modify the eastbound left-through-right lane to a through lane;
  - Add an eastbound right-turn lane;
  - Add a westbound left-turn lane;
  - Modify the westbound left-through-right lane to a through-right lane;
  - Add a northbound left-turn lane;
  - Modify the northbound left-through-right lane to a though-right lane;
  - Add a southbound left-turn lane;
  - Modify the southbound left-through-right lane to a through-right lane; and
  - Signalize the intersection with protective left-turn phasing in all directions.

It is important to note that Synchro has a three-lane limitation on all-way stop intersections. Therefore, the intersection of Armstrong Avenue at Hamilton Avenue is coded with three lanes on legs that currently contain four lanes. These legs include the north and south legs of the intersection of Armstrong Avenue at Hamilton Avenue.

Table X: Cumulative Year 2046 plus Project Intersection LOS Results

ID	*Intersection*	*Intersection Control*	*AM (7 - 9) Peak Hour*		*PM (4 - 6) Peak Hour*	
			Average Delay (sec/veh)	*LOS*	*Average Delay (sec/veh)*	*LOS*
1	Fowler Avenue / Hamilton Avenue	One-Way Stop	29.3	D	20.5	C
2	Armstrong Avenue / Hamilton Avenue	All-Way Stop	12.6	B	10.9	B
3	Temperance Avenue / Hamilton Avenue	All-Way Stop	**>120.0**	**F**	**>120.0**	**F**
		Traffic Signal (Improved)	29.9	C	12.3	B
4	Armstrong Avenue / California Avenue	Two-Way Stop	20.6	C	14.0	B
5	Temperance Avenue / California Avenue	One-Way Stop	**>120.0**	**F**	**>120.0**	**F**
		Traffic Signal (Improved)	12.2	B	7.5	A
6	Fowler Avenue / Church Avenue	Traffic Signal	30.5	C	22.9	C
7	Armstrong Avenue / Church Avenue	All-Way Stop	**>120.0**	**F**	10.0	A
		Traffic Signal (Improved)	48.6	D	16.1	B

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls.
LOS for two-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

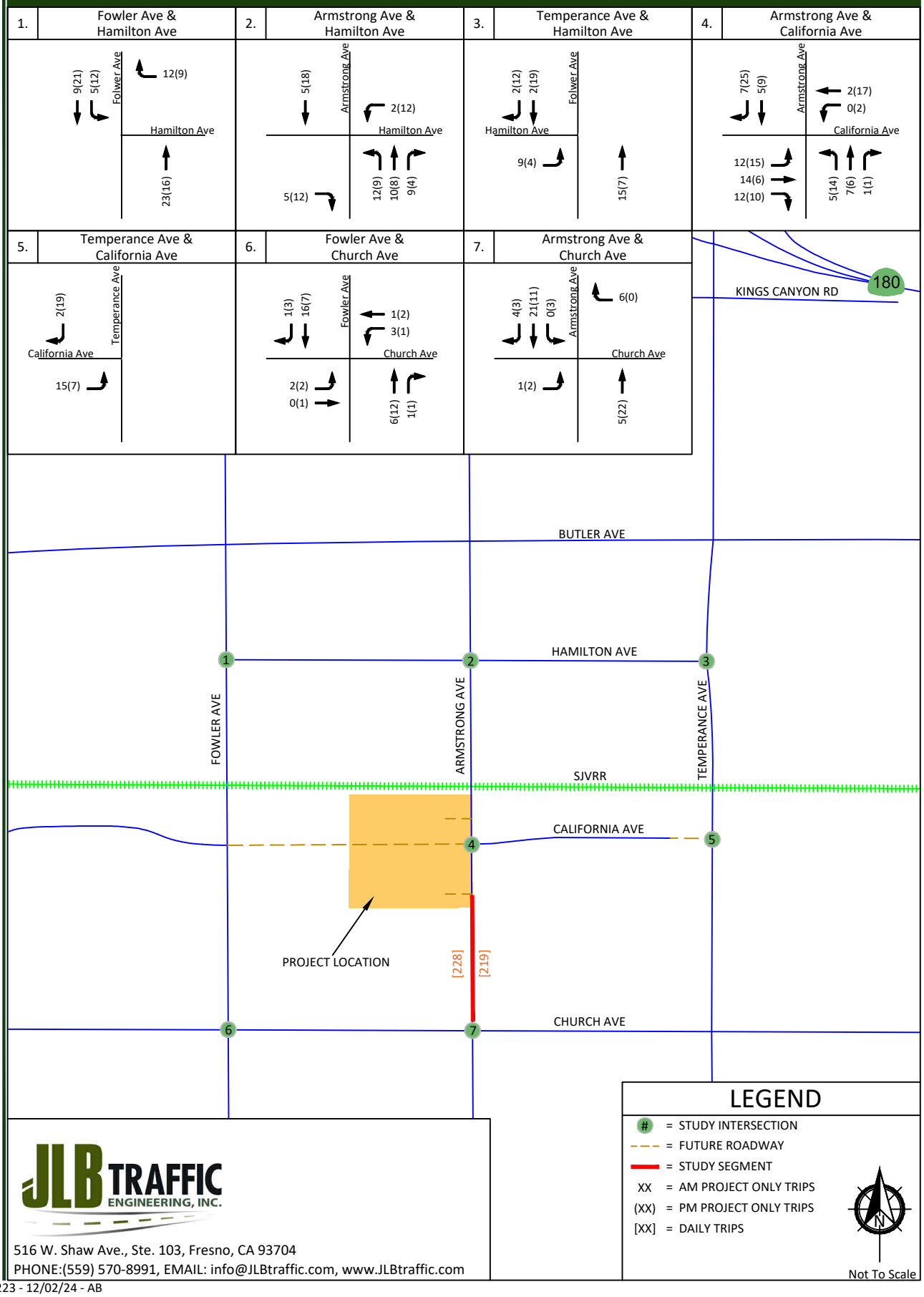
Table XI: Cumulative Year 2046 plus Project Segment LOS Results

ID	*Segment*	*Limits*	*Lanes*	*24-hour Volume*	*AM Peak Volume*	*AM LOS*	*PM Peak Volume*	*PM LOS*
1	Armstrong Avenue	Geary Avenue and Church Avenue	2	5,439	672	C	336	A

Note: LOS = Level of Service per HCM 6th Edition methodologies in HCS7 software

Tract 6376 - City of Fresno
2046 Project Only Trips

Figure 8



LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- = STUDY SEGMENT
- XX = AM PROJECT ONLY TRIPS
- (XX) = PM PROJECT ONLY TRIPS
- [XX] = DAILY TRIPS

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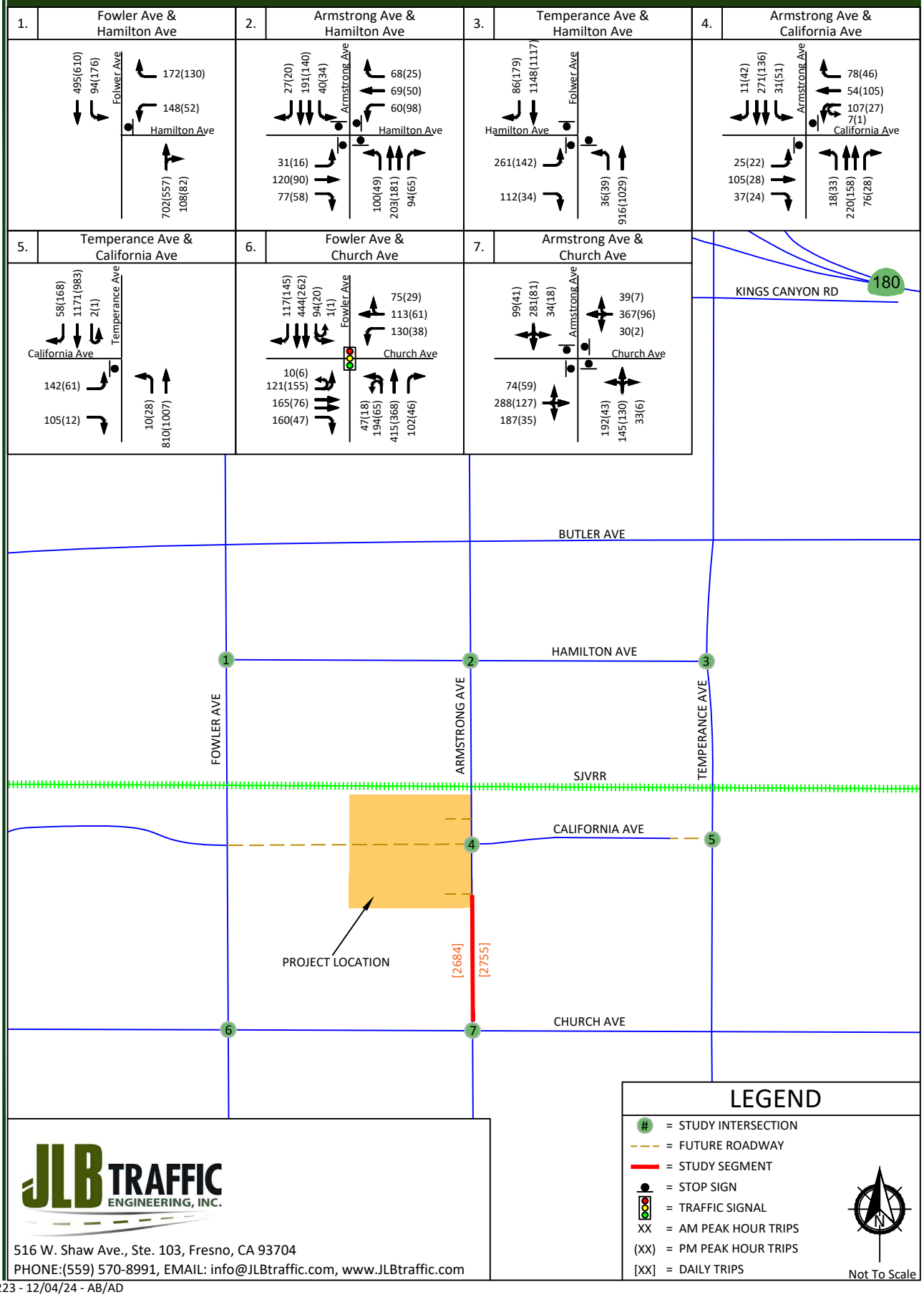
Tract 6376 - City of Fresno
Cumulative Year 2046 plus Project - Traffic Volumes, Geometrics and Controls

Figure 9



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Queuing Analysis

Table XII provides a queue length summary for left-turn and right-turn lanes at the study intersections under all study scenarios. The queuing analyses for the study intersections are contained in the LOS worksheets for the respective scenarios. Appendix D contains the methodologies used to evaluate these intersections. Queuing analyses were completed using SimTraffic output information. Synchro provides both 50th and 95th percentile maximum queue lengths (in feet). According to the Synchro manual, "the 50th percentile maximum queue is the maximum back of queue on a typical cycle and the 95th percentile queue is the maximum back of queue with 95th percentile volumes" (Cubic ITS, Inc., 2023). The queues shown in Table XII are the 95th percentile queue lengths for the respective lane movements.

The *California Highway Design Manual* (CA HDM) provides guidance for determining deceleration lengths for the left-turn and right-turn lanes based on design speeds. According to the CA HDM, tapers for right-turn lanes are "usually unnecessary since main line traffic need not be shifted laterally to provide space for the right-turn lane. If, in some rare instances, a lateral shift were needed, the approach taper would use the same formula as for a left-turn lane" (Caltrans, 2021). Therefore, a bay taper length pursuant to the CA HDM would need to be added, as necessary, to the recommended storage lengths presented in Table XII.

The storage capacity for the Cumulative Year 2046 plus Project Traffic Conditions shall be based on the SimTraffic output files and engineering judgment. The values in bold presented in Table XII are the projected queue lengths that will likely need to be accommodated by the Cumulative Year 2046 plus Project Traffic Conditions scenario. At the remaining approaches of the study intersections, the existing storage capacity will be sufficient to accommodate the maximum queue.

Table XII: Queuing Analysis

ID	Intersection	Existing Queue Storage Length (ft.)		Existing		Existing plus Project		Near Term plus Project		Cumulative Year 2046 plus Project	
				AM	PM	AM	PM	AM	PM	AM	PM
1	Fowler Avenue / Hamilton Avenue	Westbound Left	>500	127	66	172	58	427	76	320	91
		Westbound Right	100	87	65	141	87	236	73	**198**	86
		Northbound Through-Right	>500	10	0	23	22	15	22	19	24
		Southbound Left	250	48	77	71	75	72	92	**62**	76
		Southbound Through	>500	0	0	0	0	0	0	0	10
2	Armstrong Avenue / Hamilton Avenue	Eastbound Left	175	39	22	42	28	42	30	39	39
		Eastbound Through	>500	68	44	63	46	64	57	70	58
		Eastbound Right	175	47	42	52	45	55	54	47	52
		Westbound Left	200	44	47	37	41	44	44	58	51
		Westbound Through	>500	50	42	55	49	43	44	54	35
		Westbound Right	200	25	30	38	25	42	34	44	33
		Northbound Left	150	53	44	49	41	58	40	77	47
		Northbound Through	>500	55	52	74	56	94	68	81	66
		Northbound Right	150	59	38	40	27	50	36	50	49
		Southbound Left	200	38	38	34	34	46	32	45	32
		Southbound Through	>500	51	58	57	45	75	47	62	62
		Southbound Right	100	32	16	39	20	28	25	29	30
3	Temperance Avenue / Hamilton Avenue	Eastbound Left	190	85	28	83	35	140	84	**248**	130
		Eastbound Right	>500	50	19	33	24	61	16	170	43
		Northbound Left	200	42	48	37	43	50	53	61	123
		Northbound Through	>500	73	81	80	83	138	139	382	476
		Southbound Through	>500	112	61	102	93	193	165	270	272
		Southbound Through	*	*	*	*	*	*	*	262	248
		Southbound Right	>300	39	63	54	63	39	59	49	50

Note: * = Does not exist or is not projected to exist

Table XII: Queuing Analysis (continued)

ID	Intersection	Existing Queue Storage Length (ft.)		Existing		Existing plus Project		Near Term plus Project		Cumulative Year 2046 plus Project	
				AM	PM	AM	PM	AM	PM	AM	PM
4	Armstrong Avenue / California Avenue	Eastbound Left	*	*	*	41	37	61	51	**42**	40
		Eastbound Through	*	*	*	25	16	39	30	65	33
		Eastbound Right	*	*	*	38	24	43	32	**39**	34
		Westbound Left	>500	82	38	54	34	56	37	78	29
		Westbound Through	*	*	*	6	25	23	43	36	76
		Westbound Right	>500	54	25	35	25	33	25	37	25
		Northbound Left	*	*	*	19	14	25	25	15	**30**
		Northbound Through	>500	0	0	0	0	0	0	0	0
		Northbound Through	>500	0	0	0	0	0	0	0	0
		Northbound Right	150	0	0	0	0	0	0	0	0
		Southbound Left	230	23	37	24	22	30	33	21	24
		Southbound Through	>500	0	0	0	0	0	0	0	0
		Southbound Through	>500	0	0	0	0	0	0	0	0
		Southbound Right	*	*	*	0	4	0	7	0	**4**
5	Temperance Avenue / California Avenue	Eastbound Left	*	*	*	38	27	76	48	165	59
		Eastbound Right	*	*	*	32	19	83	20	81	14
		Northbound Left	*	*	*	12	21	16	40	24	**75**
		Northbound Through	*	*	*	0	0	0	0	278	408
		Southbound Left	*	*	*	0	0	0	9	**14**	8
		Southbound Through	*	*	*	*	*	*	0	184	221
		Southbound Through	*	*	*	0	0	0	0	199	242
		Southbound Right	*	*	*	0	0	0	0	38	**48**

Note: * = Does not exist or is not projected to exist

Table XII: Queuing Analysis (continued)

ID	Intersection	Existing Queue Storage Length (ft.)		Existing		Existing plus Project		Near Term plus Project		Cumulative Year 2046 plus Project	
				AM	PM	AM	PM	AM	PM	AM	PM
6	Fowler Avenue / Church Avenue	Eastbound Left	215	76	67	124	118	147	133	159	156
		Eastbound Through	>500	71	43	90	56	110	59	135	80
		Eastbound Through	*	*	*	49	8	34	13	66	14
		Eastbound Right	>300	56	44	42	30	69	40	59	32
		Westbound Left	*	*	*	94	40	147	48	**157**	58
		Westbound Left-Through-Right	>500	101	55	*	*	*	*	*	*
		Westbound Through-Right	*	*	*	114	69	176	76	140	95
		Northbound Left	240	71	33	141	45	198	91	**244**	76
		Northbound Through	*	*	*	267	148	248	161	306	199
		Northbound Through-Right	>500	148	82	*	*	*	*	*	*
		Northbound Right	*	*	*	44	20	41	21	36	22
		Southbound Left	240	64	29	135	39	136	60	142	36
		Southbound Through	>500	115	73	134	103	186	110	201	140
		Southbound Through	>500	90	81	114	35	155	70	166	115
		Southbound Right	170	0	0	54	67	64	51	82	73
7	Armstrong Avenue / Church Avenue	Eastbound Left	*	*	*	*	*	106	67	**101**	74
		Eastbound Through	*	*	*	*	*	206	80	193	58
		Eastbound Left-Through-Right	>500	77	41	104	62	*	*	*	*
		Eastbound Right	*	*	*	*	*	100	56	**98**	42
		Westbound Left	*	*	*	*	*	69	15	**47**	19
		Westbound Left-Through-Right	>500	49	28	49	36	*	*	*	*
		Westbound Through-Right	*	*	*	*	*	265	67	236	76
		Northbound Left	*	*	*	*	*	231	42	**185**	47
		Northbound Left-Through-Right	>500	93	60	94	47	*	*	*	*
		Northbound Through-Right	*	*	*	*	*	195	93	126	84
		Southbound Left	*	*	*	*	*	61	34	50	**53**
		Southbound Left-Through-Right	>500	107	56	112	43	*	*	*	*
		Southbound Through-Right	*	*	*	*	*	284	73	244	88

Note: * = Does not exist or is not projected to exist

Conclusions and Recommendations

Conclusions and recommendations regarding the proposed Project are presented below.

Existing Traffic Conditions

- JLB conducted a search of the Statewide Integrated Traffic Records System (SWITRS) to obtain collision reports for the most recent five-year period. Based on a review of the collision reports, a total of twenty-three (23) collisions were reported within the influence zone of the study intersections. Based on the number of correctable collisions, JLB does not recommended changes to the existing traffic controls at any of these intersections as a result of collision activity.
- At present, all study intersections operate at an acceptable LOS.
- At present, the study segment operates at an acceptable LOS.

Existing plus Project Traffic Conditions

- JLB analyzed the location of the existing and proposed roadways and access points. This review revealed that all access points are located at points that minimize traffic operational impacts to existing and future roadway networks.
- At buildout, the proposed Project is estimated to generate a maximum of 1,905 daily trips, 141 AM peak hour trips and 190 PM peak hour trips.
- It is recommended that left-turn pockets with a storage capacity of 150 feet be included as part of the design of California Avenue at its intersections with Burgan Avenue and Cypress Avenue.
- It is recommended that the Project implement a Class II Bikeways along its frontages to Armstrong Avenue and California Avenue.
- It is recommended that the Project implement ADA compliant pedestrian sidewalks along internal streets connecting all uses to external sidewalks and along its frontages to Armstrong Avenue and California Avenue.
- It is recommended that the Project and SUSD look into funding sources to enhance the walkways for Middle and High School students for and from the Sanger West High School and Middle School.
- Under this scenario, all study intersections are projected to continue operating at an acceptable LOS.
- Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

Near Term plus Project Traffic Conditions

- The total trip generation for the Near Term Projects is 96,426 weekday daily trips, 6,883 weekday AM peak hour trips and 8,598 weekday PM peak hour trips.
- Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during AM peak period. It is recommended that the following improvements be considered for implementation to improve the LOS at these intersections.
  - Temperance Avenue / Hamilton Avenue
    - Open the southbound left-turn lane to allow southbound to northbound U-turns; and
    - Signalize the intersection with protective left-turn phasing in all directions.
  - Armstrong Avenue / Church Avenue
    - Add an eastbound left-turn lane;
    - Modify the eastbound left-through-right lane to a through lane;

    - Add an eastbound right-turn lane;
    - Add a westbound left-turn lane;
    - Modify the westbound left-through-right lane to a through-right lane;
    - Add a northbound left-turn lane;
    - Modify the northbound left-through-right lane to a though-right lane;
    - Add a southbound left-turn lane;
    - Modify the southbound left-through-right lane to a through-right lane; and
    - Signalize the intersection with protective left-turn phasing in all directions.
- Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

Cumulative Year 2046 plus Project Traffic Conditions

- Under this scenario, the intersections of Temperance Avenue at Hamilton Avenue, Temperance Avenue at California Avenue and Armstrong Avenue at Church Avenue are projected to exceed their LOS threshold during one or both peak periods. It is recommended that the following improvements be considered for implementation to improve the LOS at these intersections.
    - Temperance Avenue / Hamilton Avenue
        - Open the southbound left-turn lane to allow southbound to northbound U-turns;
        - Add a second southbound through lane with a receiving lane south of Hamilton Avenue;
        - Modify the southbound trap right-turn lane to a typical right-turn lane; and
        - Signalize the intersection with protective left-turn phasing in all directions.
    - Temperance Avenue / California Avenue
        - Add a second southbound through lane with a receiving lane south of California Avenue; and
        - Signalize the intersection with protective left-turn phasing in all directions.
    - Armstrong Avenue / Church Avenue
        - Add an eastbound left-turn lane;
        - Modify the eastbound left-through-right lane to a through lane;
        - Add an eastbound right-turn lane;
        - Add a westbound left-turn lane;
        - Modify the westbound left-through-right lane to a through-right lane;
        - Add a northbound left-turn lane;
        - Modify the northbound left-through-right lane to a though-right lane;
        - Add a southbound left-turn lane;
        - Modify the southbound left-through-right lane to a through-right lane; and
        - Signalize the intersection with protective left-turn phasing in all directions.
- Under this scenario, the study segment is projected to continue operating at an acceptable LOS.

Study Participants

JLB Traffic Engineering, Inc. Personnel:

Jose Luis Benavides, PE, TE	Project Manager
Matthew Arndt, EIT	Engineer I/II
Adrian Benavides	Engineer I/II
Christian Sanchez, EIT	Engineer I/II
Arjun Dhillon	Engineering Aide
Diana Cortes	Engineering Aide

Persons Consulted:

John Bonadelle	Bonadelle Neighborhoods
Trent Walker	Bonadelle Neighborhoods
Jill Gormley, TE	City of Fresno
Sophia Pagoulatos	City of Fresno
Hector Luna	Fresno County
Mike Aronson, PE	Kittelson & Associates

References

Caltrans. 2019. "Highway Design Manual". Sacramento: State of California.

Caltrans. 2020. “Vehicle Miles Traveled-Focused Transportation Impact Study Guide”. Sacramento: State of California.

Caltrans. 2021. "California Manual on Uniform Traffic Control Devices". Sacramento: State of California.

City of Fresno. 2009. "Traffic Impact Study Guidelines". Fresno: City of Fresno.

City of Fresno. 2014. "Fresno General Plan". Fresno: City of Fresno.

City of Fresno. 2016. "City of Fresno Active Transportation Plan". Fresno: City of Fresno.

County of Fresno. 2000. “Fresno County General Plan”. Fresno: Fresno County.

County of Fresno. 2014. "Guidelines for The Preparation of Traffic Impact Studies Within the County of Fresno". Fresno: County of Fresno.

Cubic ITS, Inc. 2023. “ Synchro Studio 12 User Guide”. Sugar land: Traffic Ware, LLC.

"Department of Transportation | FAX". 2021. Fresno.Gov. https://www.fresno.gov/transportation/fax/.

Institute of Transportation Engineers. 2021. "Trip Generation Manual 11th Edition". Washington: Institute of Transportation Engineers.

Transportation Research Board. 2016. "Highway Capacity Manual". Washington: The National Academy of Sciences.

Appendix A: Scope of Work

September 20, 2024

Mr. Jill Gormley, T.E.
City of Fresno
2600 Fresno Street
Fresno, CA 93721-3616

Via Email Only: Jill.Gormley@fresno.gov

Subject: ***Proposed Scope of Work for the Preparation of a Traffic Impact Analysis for Residential Development in the City of Fresno (JLB Project 004-223)***

Dear Mr. Gormley,

JLB Traffic Engineering, Inc. (JLB) hereby submits this Draft Scope of Work for the preparation of a Traffic Impact Analysis (TIA) for the proposed Residential Development (Project) located on the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad in the City of Fresno. The Project proposes to construct 212 single-family housing units. Based on information provided to JLB, the proposed Project is consistent with the City of Fresno General Plan. An aerial of the Project vicinity and Project Site Plan are shown in Exhibits A and B, respectively.

The purpose of the TIA is to evaluate the potential on-site and off-site traffic impacts, identify short-term roadway and circulation needs, determine potential mitigation measures and identify any critical traffic issues that should be addressed in the on-going planning process. To evaluate the on-site and off-site traffic impacts of the proposed Project, JLB proposes the following Scope of Work.

Scope of Work

- JLB will obtain recent (less than 12 months) or schedule conduct new traffic counts at the study facility(ies) when schools in the vicinity are in session. These counts will include pedestrians and vehicles.
- JLB will request a Fresno Council of Governments (Fresno COG) traffic forecast model run for the Project (Select Zone Analysis) which will include the Project and the streets to be analyzed. The Fresno COG traffic forecasting model will be used to forecast traffic volumes for the Base Year 2019 and Cumulative Year 2046 scenarios.
- JLB will perform a site visit to observe existing traffic conditions, especially during the AM and PM peak hours. Existing roadway conditions including speed limits, lane geometrics, turn prohibitions and traffic controls will be verified.
- JLB will conduct a qualitative safe routes to school evaluation from the Project site to the K-12 school(s) which would most likely serve the Project on opening day.
- JLB will evaluate on-site circulation and provide recommendations as necessary to improve circulation to and within the Project site.
- JLB will qualitatively analyze existing and planned transit routes in the vicinity of the Project.
- JLB will qualitatively analyze existing and planned walkways in the vicinity of the Project.

- JLB will qualitatively analyze existing and planned bikeways in the vicinity of the Project.
- JLB will prepare California Manual on Uniform Traffic Control Devices (CA MUTCD) Warrant 1 "8-hour" and Warrant 2 "4-hour" for existing unsignalized study intersections under the Existing scenario.
- JLB will prepare CA MUTCD Warrant 3 "Peak Hour" for unsignalized study intersections under all study scenarios.
- JLB will forecast trip distribution based on turn count information and knowledge of the existing and planned circulation network in the vicinity of the Project. Exhibit C displays a trip distribution for the proposed Project.
- JLB will evaluate existing and forecasted levels of service (LOS) at the study intersection(s). JLB will use HCM 6th Edition or HCM 2000 methodologies (as appropriate) within Synchro to perform this analysis for the AM and PM peak hours. JLB will identify the causes of poor LOS.
- JLB will prepare a five-year collision analysis based on the Statewide Integrated Traffic Reporting System (SWITRS) database for all existing study facilities.

Study Scenarios

1. Existing Traffic Conditions with needed improvements (if any);
2. Existing plus Project Traffic Conditions with proposed improvements (if any);
3. Near Term plus Project Traffic Conditions with proposed improvements (if any); and
4. Cumulative Year 2046 plus Project Traffic Conditions with proposed improvements (if any).

Weekday peak hours to be analyzed (Tuesday, Wednesday or Thursday only)

1. 7 - 9 AM peak hour
2. 4 - 6 PM peak hour

Study Intersections

1. Fowler Avenue / Hamilton Avenue
2. Armstrong Avenue / Hamilton Avenue
3. Temperance Avenue / Hamilton Avenue
4. Armstrong Avenue / California Avenue
5. Temperance Avenue / California Avenue (future intersection)
6. Fowler Avenue / Church Avenue
7. Armstrong Avenue / Church Avenue

Queuing analysis is included in the proposed Scope of Work for the study intersection(s) listed above under all study scenarios. This analysis will be utilized to recommend minimum storage lengths for left-turn and right-turn lanes at all study intersections.

Study Segments

1. None

Project Only Trip Assignment to State Facilities

1. None

Project Trip Generation

Trip generation rates for the proposed Project land use were obtained from the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table I presents the trip generation for the proposed Project with trip generation rates for 212 Single-Family Detached Housing units. At buildout, the proposed Project is estimated to generate approiximately 1,999 daily trips, 148 AM peak hour trips and 199 PM peak hour trips.

Table I: Project Trip Generation

Land Use (ITE Code)	*Size*	*Unit*	*Daily*		*AM (7-9) Peak Hour*						*PM (4-6) Peak Hour*					
			Rate	*Total*	*Trip Rate*	*In*	*Out*	*In*	*Out*	*Total*	*Trip Rate*	*In*	*Out*	*In*	*Out*	*Total*
						%						*%*				
Single-Family Detached Housing (210)	212	d.u.	9.43	1,999	0.70	26	74	39	109	148	0.94	63	37	125	74	199
Total Project Trips				**1,999**				**39**	**109**	**148**				**125**	**74**	**199**

Note: d.u. = Dwelling Units

Access to the Project

Access to and from the Project site will be from six (6) access points. Four (4) access points are located along future California Avenue west of Armstrong Avenue. The Project proposes to construct California Avenue west of Armstrong Avenue within the Project site for approximately 1,300 feet. The fifth access point is proposed along the west side of Armstrong Avenue approximately 350 feet north of California Avenue. The sixth access point is proposed along the west side of Armstrong Avenue approximately 550 feet south of California Avenue. All six (6) access points are proposed to allow full access. The City of Fresno General Plan planned California Avenue between Fowler Avenue and Armstrong Avenue as a four-lane collector.

Near Term Projects to be Included

Based on our local knowledge of the study area and consultation with City of Fresno Planning & Development staff, JLB will include Near Term Projects in the vicinity of the proposed Project under the Near Term plus Project Traffic Conditions scenario. The Near Term Projects proposed to be included in the Near Term plus Project Traffic Conditions scenario are:

Project Name	General Location
1. TT 5498	NEC Peach Avenue and Church Avenue
2. TT 5638	NWC Armstrong Avenue and Church Avenue
3. TT 5717 (portion of)	NEQ Fowler Avenue and Clinton Avenue
4. TT 6201 (portion of)	NEQ Armstrong Avenue and Floradora Avenue
5. TT 6214 (portion of)	SEQ Fowler Avenue and Clinton Avenue
6. TT 6219 (portion of)	NWC Locan Avenue alignment and McKinley Avenue
7. TT 6224 (portion of)	SEC Temperance Avenue and Shields Avenue
8. TT 6298	NEQ Armstrong Avenue and Belmont Avenue
9. TT 6299	SEC Armstrong Avenue and Belmont Avenue
10. 7-Eleven and Fuel Station	NWC Clovis Avenue and Jensen Avenue
11. BDM Builders	NEC Maple Avenue and Jensen Avenue
12. Fancher Creek (portion of)	East of Clovis Avenue and Tulare Avenue
13. Hale Property	NEQ Fowler Avenue and Church Avenue

14. Lennar Heirloom Homes	NWC Fowler Avenue and Church Avenue
15. Malaga Industrial	SEC Minnewawa Avenue at North Avenue
16. Fowler-McKinley Elementary School	NEC Fowler Avenue and McKinley Avenue alignment
17. Mixed-Use Development (portion of)	SEC Fowler Avenue and Shields Avenue
18. SUSD Educational Center (portion of)	NEQ Fowler Avenue and Jensen Avenue

Other Near Term Projects the City, County or Caltrans has knowledge and for which it is anticipated that said project(s) is/are projected to be whole or partially built by the Near Term Project Year 2026, City, County and Caltrans, as appropriate, would provide JLB with project details such as a project description, location, proposed land uses with breakdowns and type of residential units and number of square footages for non-residential uses.

The Scope of Work is based on our understanding of this Project and our experience with similar Reports. We kindly ask that all responsible agencies submit any comments by October 11, 2024. If you have any questions or require additional information, please contact me by phone at (559) 317-6243, or via email at marndt@jlbtraffic.com.

Sincerely,

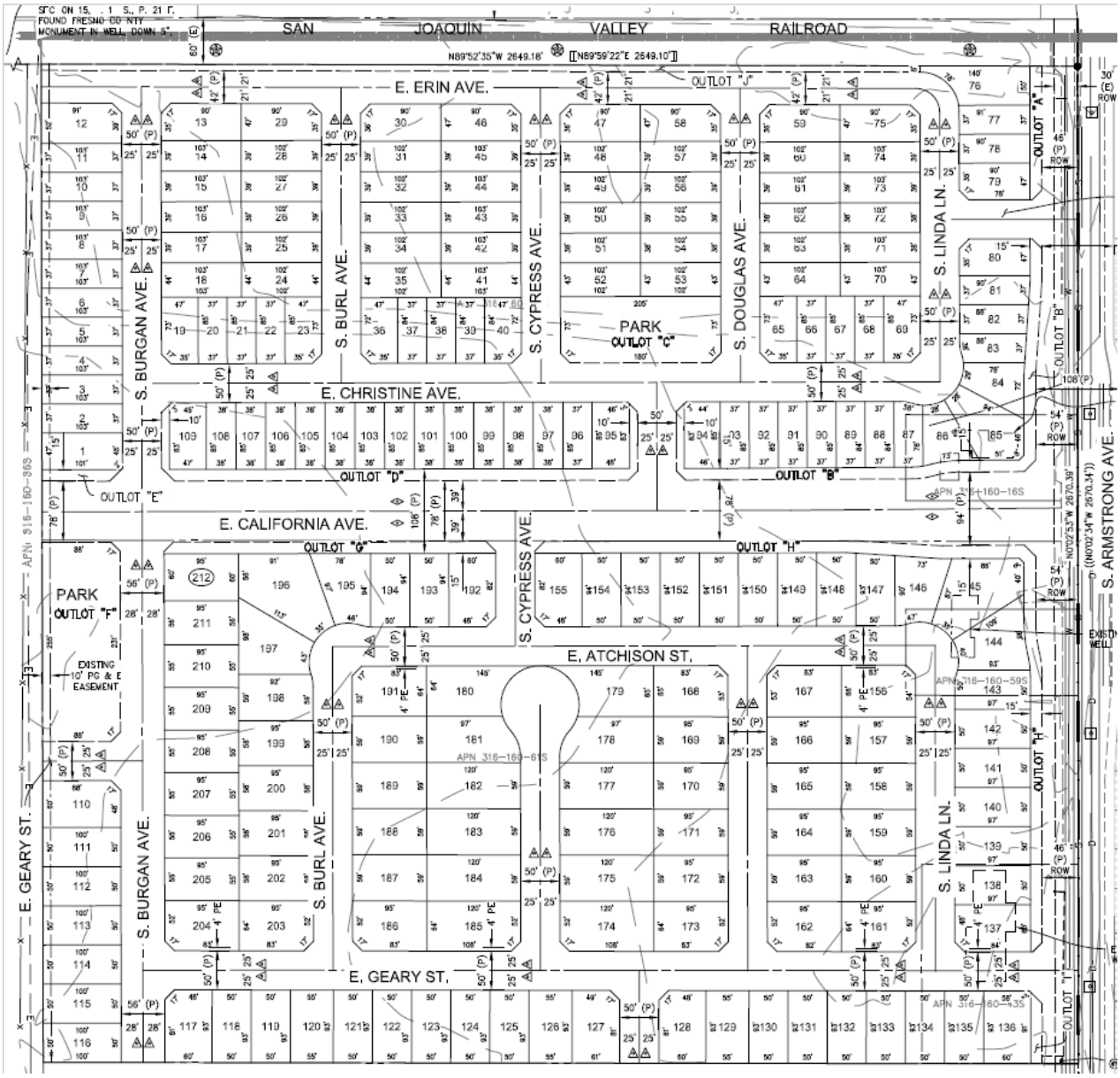
Matthew Arndt, EIT
JLB Traffic Engineering, Inc.

cc: Jose Luis Benavides, JLB Traffic Engineering, Inc.

JLB TRAFFIC ENGINEERING, INC.
www.JLBtraffic.com
info@JLBtraffic.com
516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
(559) 570-8991

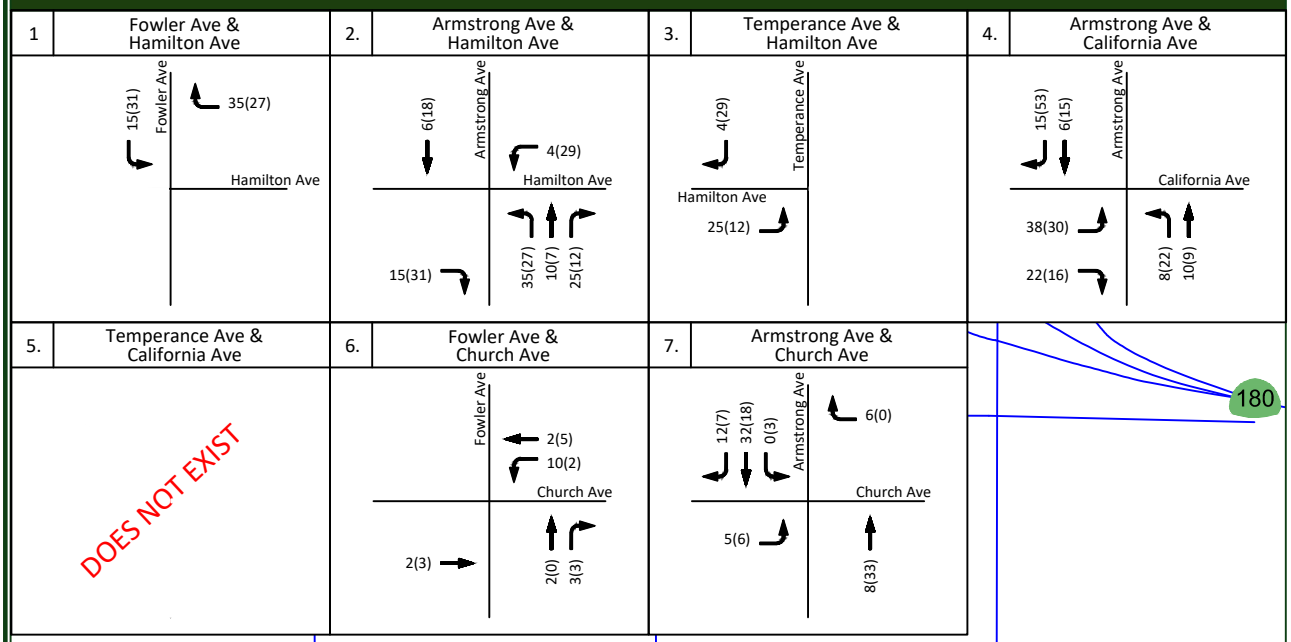
Exhibit A – Project Site Aerial

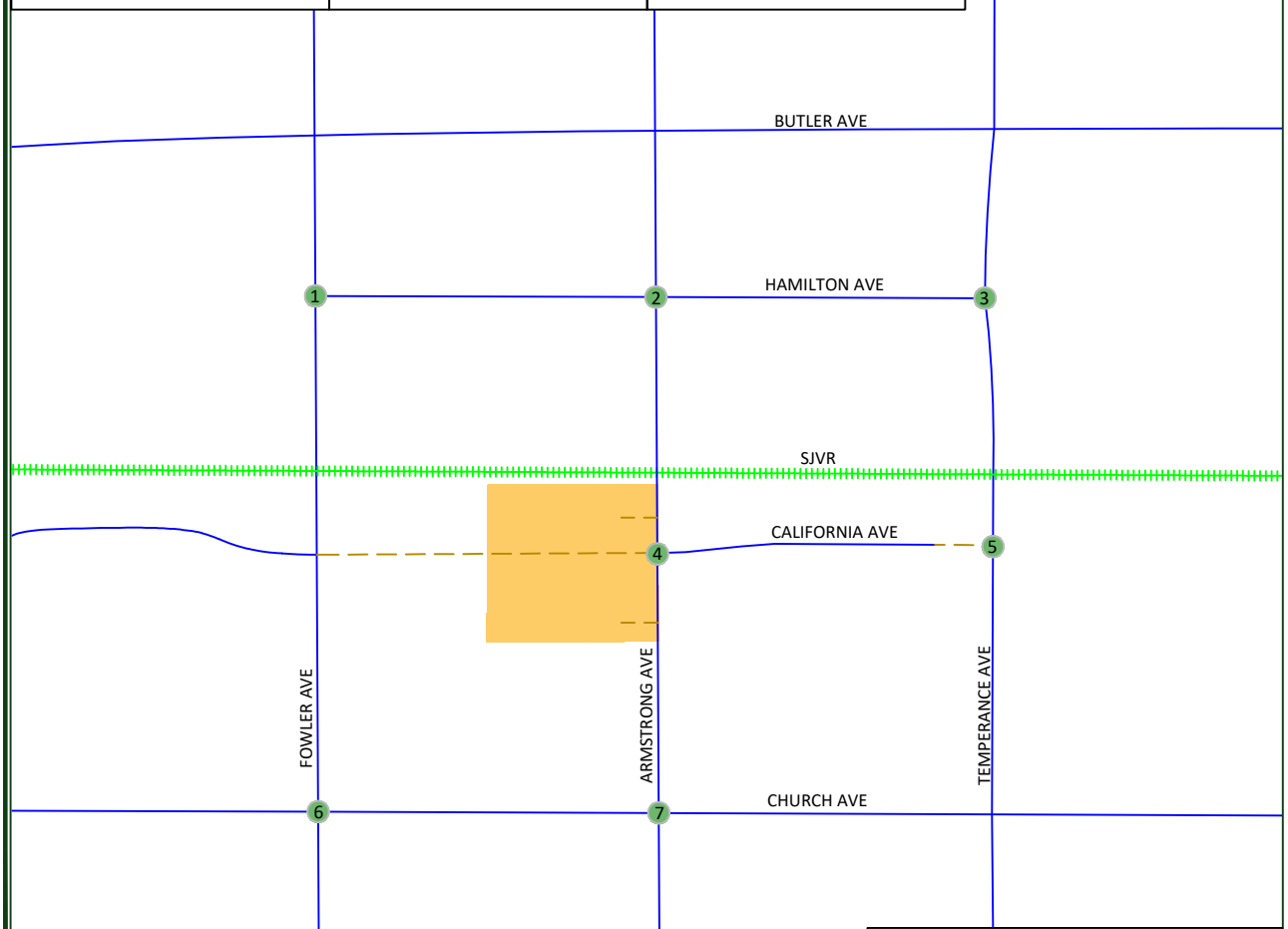
Exhibit B – Project Site Plan



Simonian TIA - City of Fresno
Project Trip Distribution

Exhibit C





LEGEND

- # = STUDY INTERSECTION
- = FUTURE ROADWAY
- XX = AM PROJECT ONLY TRIPS
- (XX) = PM PROJECT ONLY TRIPS

Not To Scale

JLB TRAFFIC ENGINEERING, INC.
516 W. Shaw Ave., Ste. 103, Fresno, CA 93704
PHONE:(559) 570-8991, EMAIL: info@JLBtraffic.com, www.JLBtraffic.com

Matt Arndt

From: Jill Gormley <Jill.Gormley@fresno.gov>
Sent: Thursday, August 15, 2024 5:34 PM
To: Matt Arndt
Cc: Jose Benavides
Subject: RE: Simonian TIA Draft Scope of Work

Hi Matt,

Please add Fowler/Hamilton to the list of study locations. With that addition I'll have no more comments.

Jill Gormley, TE
Assistant Director
Traffic & Engineering Services, Public Works Department
2600 Fresno Street, 4th Floor
Fresno, CA 93721-3623
Direct: (559) 621-8792
Main: (559) 621-8800
www.fresno.gov
Building a Better Fresno

From: Matt Arndt <marndt@jlbtraffic.com>
Sent: Tuesday, August 6, 2024 5:33 PM
To: Jill Gormley <Jill.Gormley@fresno.gov>
Cc: Jose Benavides <jbenavides@jlbtraffic.com>
Subject: RE: Simonian TIA Draft Scope of Work

External Email: Use caution with links and attachments

Hello Jill,

Attached is the prior model run for 172 dwelling units (TAZ A and TAZ B are a part of the 172 dwelling units). We are still waiting on the updated model run to be completed. I also reattached the draft scope of work as this trip distribution in this letter takes the prior model distribution and prorates it up to 212 dwelling units.

Let me know if you have any further questions.

Sincerely,

Matthew Arndt

Traffic Engineering, Transportation Planning and Parking Solutions
Certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE)

516 W. Shaw Ave., Ste. 103
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Direct: (559) 317-6243
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www.JLBtraffic.com

From: Jill Gormley <Jill.Gormley@fresno.gov>
Sent: Tuesday, August 6, 2024 5:24 PM
To: Matt Arndt <marndt@jlbtraffic.com>
Cc: Jose Benavides <jbenavides@jlbtraffic.com>
Subject: RE: Simonian TIA Draft Scope of Work

Hi Matt,

Can you provide the select zone model run.

Jill

From: Matt Arndt <marndt@jlbtraffic.com>
Sent: Tuesday, August 6, 2024 4:20 PM
To: Jill Gormley <Jill.Gormley@fresno.gov>
Cc: Jose Benavides <jbenavides@jlbtraffic.com>
Subject: RE: Simonian TIA Draft Scope of Work

External Email: Use caution with links and attachments

Hello Jill,

Just following up with the call I placed to your office to see if you had any thoughts on my email below. Please let me know if you have any questions or concerns. Look forward to hearing from you.

Sincerely,

Matthew Arndt

Traffic Engineering, Transportation Planning and Parking Solutions
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From: Matt Arndt
Sent: Thursday, July 25, 2024 3:46 PM
To: Jill Gormley <Jill.Gormley@fresno.gov>
Cc: Jose Benavides <jbenavides@jlbtraffic.com>
Subject: Simonian TIA Draft Scope of Work

Hello Jill,

Attached is the Draft Scope of Work for the Simonian TIA in the City of Fresno. This Project was originally analyzed in late 2021/early 2022. The items within this scope of work contains all items that were approved or requested to be included in 2021 by the City of Fresno, County of Fresno and Caltrans. Since then, the Project has increased from 172 dwelling units to 212 dwelling units. Let me know if you will allow us to use the Draft Scope of Work that includes all items in the previously approved scope or if you prefer that we go through the scoping process again and share this Draft Scope of Work with all responsible agencies again.

If you have any questions or require any additional information, please let us know.

Sincerely,

Matthew Arndt

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Matt Arndt

From: Hines, Brody <bhines@fresnocountyca.gov>
Sent: Monday, September 30, 2024 1:22 PM
To: Matt Arndt; Luna, Hector
Subject: RE: Simonian TIA Draft Scope of Work

Good afternoon Matt,

The county would like to request that the segment of Armstrong between Church and Geary be included in the scope of work for analysis.

Thank you,

Brody Hines| **Planner**
Department of Public Works and Planning |
Water and Natural Resources Division |
Transportation Planning Unit
2220 Tulare St. 8th Floor Fresno, CA 93721
Main Office: (559) 600-4292 | Direct: (559) 600-2184
Email: bhines@FresnoCountyCa.gov
Your input matters! Customer Service Survey

From: Matt Arndt <marndt@jlbtraffic.com>
Sent: Monday, September 30, 2024 12:07 PM
To: Luna, Hector <HLuna@fresnocountyca.gov>
Cc: Hines, Brody <bhines@fresnocountyca.gov>
Subject: RE: Simonian TIA Draft Scope of Work

Hello Hector,

Just wanted to follow up this week to see if the County was still on track to give comments this week? Thanks.

Sincerely,

Matthew Arndt

Traffic Engineering, Transportation Planning and Parking Solutions
Certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE)

516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Office: (559) 570-8991
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Cell: (559) 360-1886

www.JLBtraffic.com

From: Luna, Hector <HLuna@fresnocountyca.gov>
Sent: Thursday, September 26, 2024 11:53 AM
To: Matt Arndt <marndt@jlbtraffic.com>
Cc: Hines, Brody <bhines@fresnocountyca.gov>
Subject: RE: Simonian TIA Draft Scope of Work

Hello Matt,

The scope was received, comments should be available by next week.
For future reference, please include Brody Hines (cc'd) in all future transportation requests/inquiries.

Regards,

Hector E. Luna | **Senior Planner**
Department of Public Works and Planning |
Water and Natural Resources Division
2220 Tulare St. 6th Floor Fresno, CA 93721
Main Office: (559) 600-4292 | Direct: (559) 600-9672
Email: hluna@FresnoCountyCa.gov
Your input matters! Customer Service Survey

From: Matt Arndt <marndt@jlbtraffic.com>
Sent: Thursday, September 26, 2024 11:50 AM
To: Luna, Hector <HLuna@fresnocountyca.gov>
Subject: RE: Simonian TIA Draft Scope of Work

Hello Hector,

Just following up to ensure you received this Draft Scope of Work. Please let me know if you have any questions.

Sincerely,

Matthew Arndt

Traffic Engineering, Transportation Planning and Parking Solutions
Certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE)

516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Office: (559) 570-8991
Direct: (559) 317-6243
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From: Matt Arndt
Sent: Friday, September 20, 2024 3:35 PM
To: Luna, Hector <HLuna@fresnocountyca.gov>
Subject: Simonian TIA Draft Scope of Work

Hello Hector,

Attached to this email is the Draft Scope of Work for the Simonian Subdivision TIA. This Project is located on the southwest corner of Armstrong Avenue and the San Joaquin Valley Railroad in the City of Fresno. A previous version of this project had an approved Draft Scope of Work from all responsible agencies back in July of 2021. This Draft Scope of Work includes all of the items requested in the prior Draft Scope of Work plus the intersection of Fowler Avenue at Hamilton Avenue.

We kindly ask that you take a moment to review and comment on the proposed Draft Scope of Work. If you have any questions or require additional information, please contact me by phone at (559)317-6243 or by responding to this email. We appreciate your time and attention to this matter and look forward to hearing from you soon.

Sincerely,

Matthew Arndt

Traffic Engineering, Transportation Planning and Parking Solutions
Certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE)

516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
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www.JLBtraffic.com

Appendix B: Traffic Counts

JLB Traffic Engineering, Inc.

516 West Shaw Avenue, Suite 103
Fresno, CA, 93704
Traffic Engineering, Transportation, & Parking Solutions
www.JLBtraffic.com

File Name : 01 Fowler at Hamilton
Site Code : 00000000
Start Date : 8/29/2024
Page No : 1

Groups Printed- Unshifted

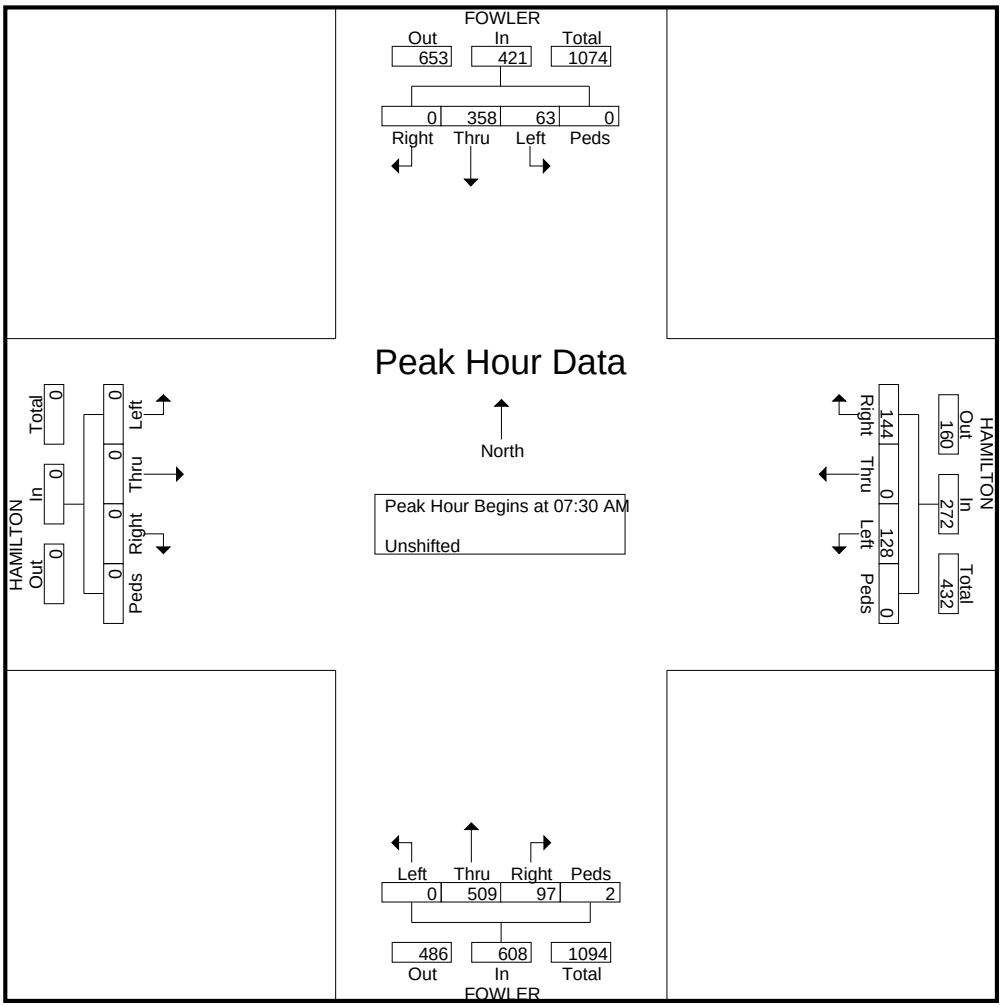
	FOWLER From North				HAMILTON From East				FOWLER From South				HAMILTON From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	68	12	0	37	0	17	0	12	82	0	0	0	0	0	0	228
07:15 AM	0	83	15	0	30	0	14	0	27	125	0	0	0	0	0	0	294
07:30 AM	0	93	12	0	39	0	25	0	21	133	0	0	0	0	0	0	323
07:45 AM	0	102	11	0	46	0	51	0	14	110	0	0	0	0	0	0	334
Total	0	346	50	0	152	0	107	0	74	450	0	0	0	0	0	0	1179
08:00 AM	0	90	19	0	24	0	28	0	27	145	0	1	0	0	0	0	334
08:15 AM	0	73	21	0	35	0	24	0	35	121	0	1	0	0	0	0	310
08:30 AM	0	47	18	0	20	0	14	0	21	110	0	0	0	0	0	0	230
08:45 AM	0	33	14	0	24	0	11	0	5	50	0	0	0	0	0	0	137
Total	0	243	72	0	103	0	77	0	88	426	0	2	0	0	0	0	1011
*** BREAK ***																	
04:00 PM	0	103	46	0	30	0	18	0	23	95	0	0	0	0	0	0	315
04:15 PM	0	123	40	0	30	0	13	0	21	92	0	0	0	0	0	0	319
04:30 PM	0	100	37	0	28	0	16	0	16	103	0	0	0	0	0	0	300
04:45 PM	0	116	32	0	20	0	6	1	11	99	0	0	0	0	0	0	285
Total	0	442	155	0	108	0	53	1	71	389	0	0	0	0	0	0	1219
05:00 PM	0	99	33	0	25	0	10	1	16	92	0	0	0	0	0	0	276
05:15 PM	0	136	38	0	30	0	8	0	10	102	0	0	0	0	0	0	324
05:30 PM	0	119	38	0	27	0	15	0	24	128	0	0	0	0	0	0	351
05:45 PM	0	107	39	0	34	0	15	0	13	107	0	0	0	0	0	0	315
Total	0	461	148	0	116	0	48	1	63	429	0	0	0	0	0	0	1266
Grand Total	0	1492	425	0	479	0	285	2	296	1694	0	2	0	0	0	0	4675
Apprch %	0	77.8	22.2	0	62.5	0	37.2	0.3	14.9	85	0	0.1	0	0	0	0	
Total %	0	31.9	9.1	0	10.2	0	6.1	0	6.3	36.2	0	0	0	0	0	0	

JLB Traffic Engineering, Inc.

516 West Shaw Avenue, Suite 103
Fresno, CA, 93704
Traffic Engineering, Transportation, & Parking Solutions
www.JLBtraffic.com

File Name : 01 Fowler at Hamilton
Site Code : 00000000
Start Date : 8/29/2024
Page No : 2

	FOWLER From North					HAMILTON From East					FOWLER From South					HAMILTON From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	93	12	0	105	39	0	25	0	64	21	133	0	0	154	0	0	0	0	0	323
07:45 AM	0	**102**	11	0	**113**	**46**	0	**51**	0	**97**	14	110	0	0	124	0	0	0	0	0	**334**
08:00 AM	0	90	19	0	109	24	0	28	0	52	27	**145**	0	**1**	**173**	0	0	0	0	0	334
08:15 AM	0	73	**21**	0	94	35	0	24	0	59	**35**	121	0	1	157	0	0	0	0	0	310
Total Volume	0	358	63	0	421	144	0	128	0	272	97	509	0	2	608	0	0	0	0	0	1301
% App. Total	0	85	15	0		52.9	0	47.1	0		16	83.7	0	0.3		0	0	0	0		
PHF	.000	.877	.750	.000	.931	.783	.000	.627	.000	.701	.693	.878	.000	.500	.879	.000	.000	.000	.000	.000	.974



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File Name : 01 Fowler at Hamilton
Site Code : 00000000
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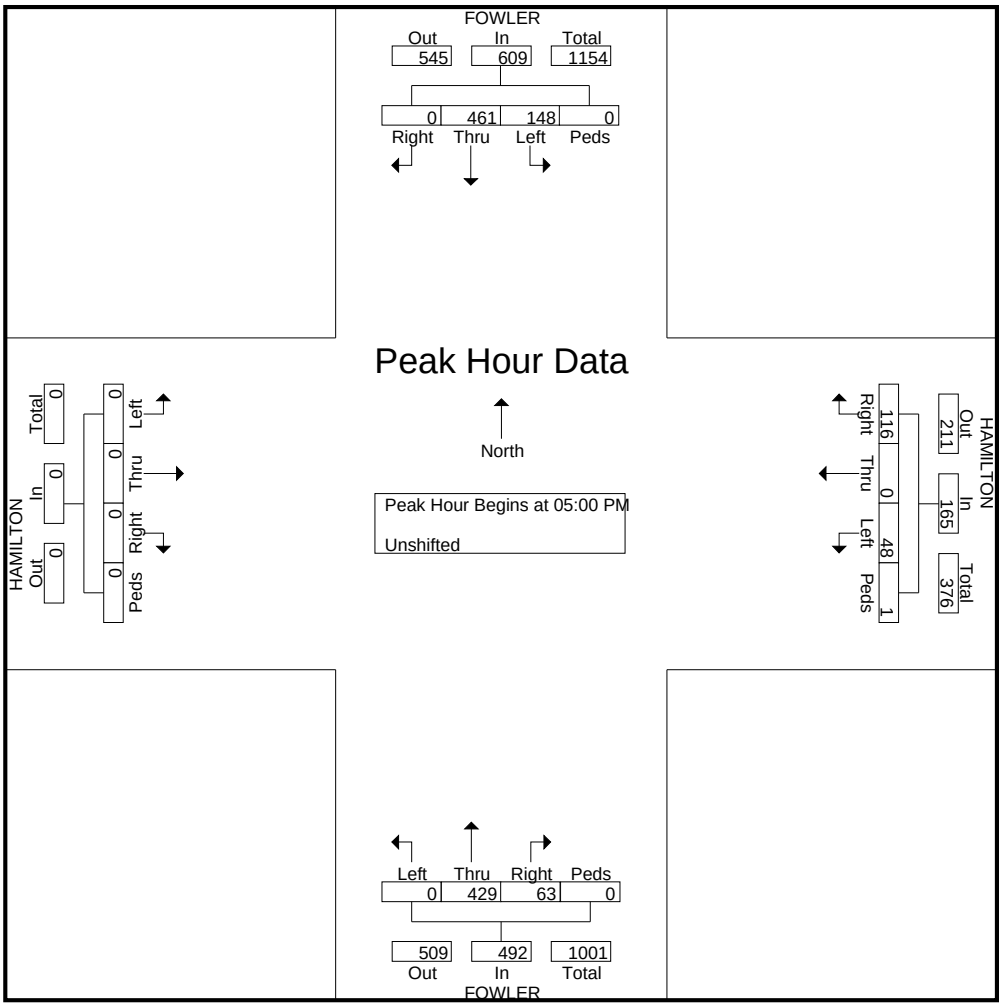
Page No : 3

	FOWLER From North					HAMILTON From East					FOWLER From South					HAMILTON From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	99	33	0	132	25	0	10	**1**	36	16	92	0	0	108	0	0	0	0	0	276
05:15 PM	0	**136**	38	0	**174**	30	0	8	0	38	10	102	0	0	112	0	0	0	0	0	324
05:30 PM	0	119	38	0	157	27	0	**15**	0	42	**24**	**128**	0	0	**152**	0	0	0	0	0	**351**
05:45 PM	0	107	**39**	0	146	**34**	0	15	0	**49**	13	107	0	0	120	0	0	0	0	0	315
Total Volume	0	461	148	0	609	116	0	48	1	165	63	429	0	0	492	0	0	0	0	0	1266
% App. Total	0	75.7	24.3	0		70.3	0	29.1	0.6		12.8	87.2	0	0		0	0	0	0		
PHF	.000	.847	.949	.000	.875	.853	.000	.800	.250	.842	.656	.838	.000	.000	.809	.000	.000	.000	.000	.000	.902



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File Name : 01 Fowler at Hamilton
Site Code : 00000000
Start Date : 8/29/2024
Page No : 1

Groups Printed- Bank 2

	FOWLER From North				HAMILTON From East				FOWLER From South				HAMILTON From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
*** BREAK ***																	
05:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

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Start Date : 8/29/2024
Page No : 2

	FOWLER From North					HAMILTON From East					FOWLER From South					HAMILTON From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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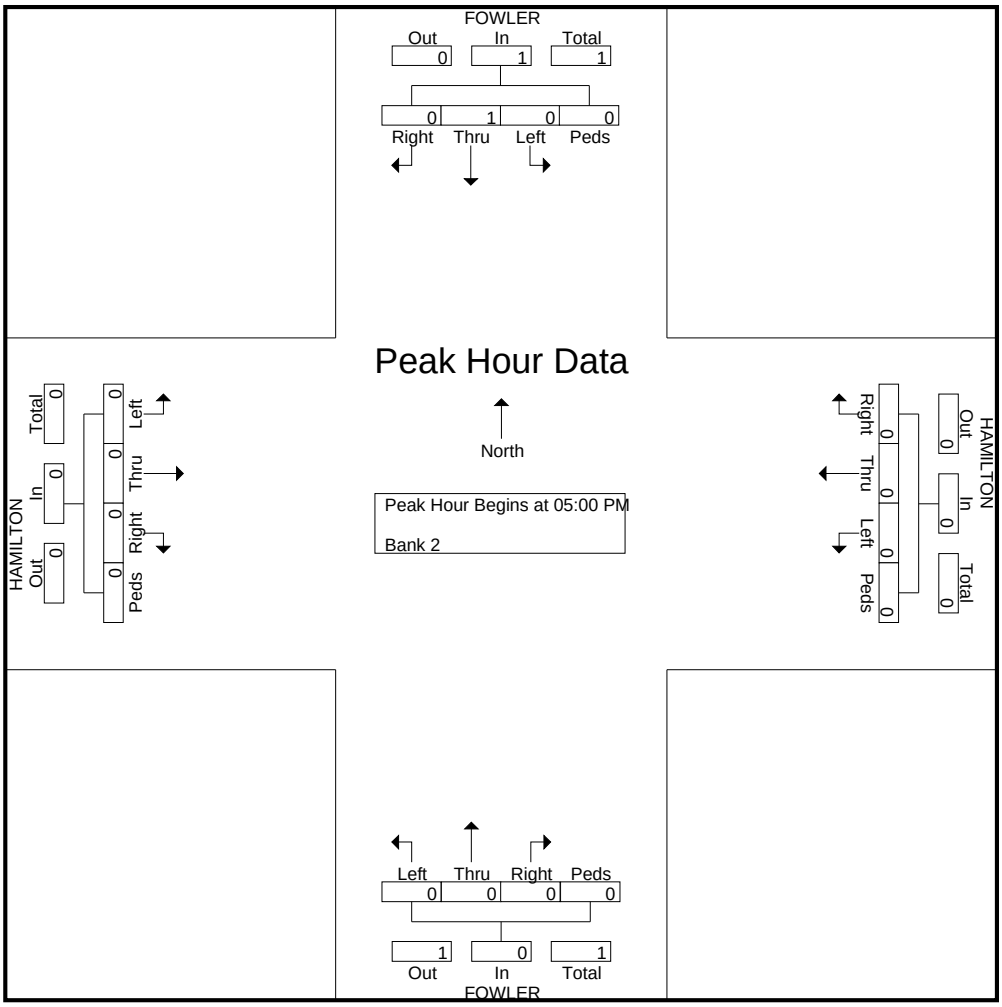
	FOWLER From North					HAMILTON From East					FOWLER From South					HAMILTON From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total Volume	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

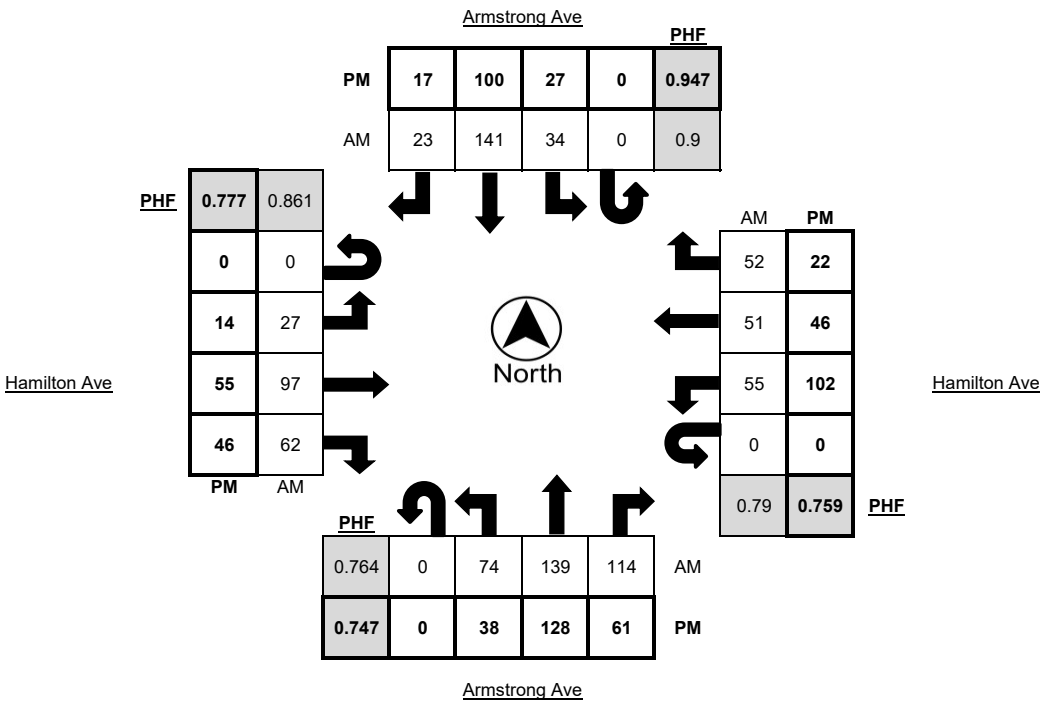
LOCATION Armstrong Ave @ Hamilton Ave
LATITUDE 36.7258
COUNTY Fresno
LONGITUDE -119.6731
COLLECTION DATE Tuesday, June 4, 2024
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	1	8	20	20	1	0	2	23	3	1	0	4	23	6	1	0	4	4	8	0
7:15 AM - 7:30 AM	0	19	45	29	1	0	2	16	3	0	0	2	16	3	1	0	11	9	9	0
7:30 AM - 7:45 AM	0	19	46	42	4	0	6	33	5	0	0	6	33	15	0	0	7	20	23	1
7:45 AM - 8:00 AM	0	21	48	20	1	0	14	31	10	3	0	13	26	13	1	0	15	17	17	2
8:00 AM - 8:15 AM	0	18	21	31	0	0	10	40	5	1	0	7	18	20	1	0	17	8	8	0
8:15 AM - 8:30 AM	0	16	24	21	1	0	4	37	3	0	0	1	20	14	1	0	16	6	4	0
8:30 AM - 8:45 AM	0	9	28	13	0	0	1	21	3	1	0	3	18	8	0	0	11	8	1	0
8:45 AM - 9:00 AM	0	11	16	11	0	0	3	12	1	0	0	0	14	8	0	0	4	11	5	0
TOTAL	**1**	**121**	**248**	**187**	**8**	**0**	**42**	**213**	**33**	**6**	**0**	**36**	**168**	**87**	**5**	**0**	**85**	**83**	**75**	**3**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	11	39	26	1	0	9	26	3	0	0	6	10	12	1	0	30	19	7	2
4:15 PM - 4:30 PM	0	4	25	10	0	0	6	27	5	0	0	2	18	17	0	0	24	8	7	0
4:30 PM - 4:45 PM	0	12	34	11	0	0	4	29	5	0	0	3	11	11	0	0	26	11	5	1
4:45 PM - 5:00 PM	0	11	30	14	1	0	8	18	4	0	0	3	16	6	1	0	22	8	3	1
5:00 PM - 5:15 PM	0	7	26	17	0	0	4	23	1	0	0	0	15	18	1	0	19	14	4	0
5:15 PM - 5:30 PM	0	12	19	7	0	0	10	18	3	0	0	3	12	15	0	0	40	9	3	0
5:30 PM - 5:45 PM	0	15	31	14	0	0	10	31	3	0	0	1	17	9	0	0	22	16	2	1
5:45 PM - 6:00 PM	0	10	23	13	1	0	3	36	3	0	0	2	15	17	0	0	17	7	4	0
TOTAL	**0**	**82**	**227**	**112**	**3**	**0**	**54**	**208**	**27**	**0**	**0**	**20**	**114**	**105**	**3**	**0**	**200**	**92**	**35**	**5**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	0	74	139	114	6	0	34	141	23	4	0	27	97	62	3	0	55	51	52	3
4:00 PM - 5:00 PM	0	38	128	61	2	0	27	100	17	0	0	14	55	46	2	0	102	46	22	4

	PHF	Trucks
AM	0.852	1.8%
PM	0.828	1.2%



Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

LOCATION Armstrong Ave @ Hamilton Ave

LATITUDE 36.7258

COUNTY Fresno

LONGITUDE -119.6731

COLLECTION DATE Tuesday, June 4, 2024

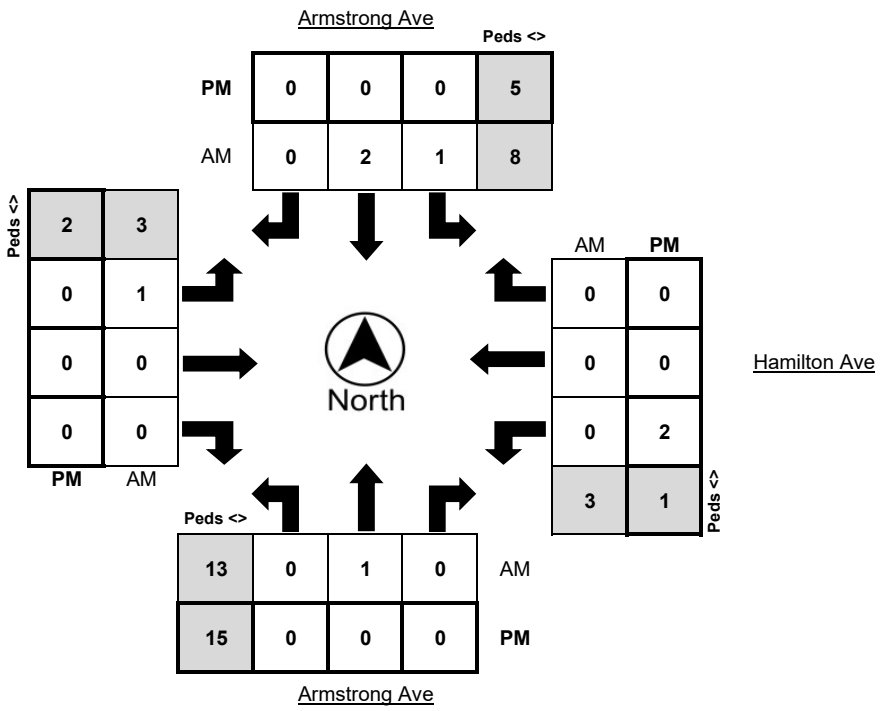
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
7:30 AM - 7:45 AM	0	1	0	6	0	1	0	1	1	0	0	1	0	0	0	1
7:45 AM - 8:00 AM	0	0	0	0	0	1	0	9	0	0	0	1	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	1	0	0	3	0	0	0	1	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM - 8:45 AM	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
TOTAL	**0**	**1**	**0**	**12**	**1**	**2**	**0**	**18**	**1**	**0**	**0**	**9**	**0**	**0**	**0**	**4**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	0	5	0	0	0	14	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	1
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
5:15 PM - 5:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0	2
TOTAL	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**2**	**2**	**0**	**5**	**4**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:30 AM - 8:30 AM	0	1	0	8	1	2	0	13	1	0	0	3	0	0	0	3
4:00 PM - 5:00 PM	0	0	0	5	0	0	0	15	0	0	0	1	2	0	0	2

	Bikes	Peds
AM Peak Total	5	27
PM Peak Total	**2**	**23**



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Prepared For:

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Fresno, CA 93704

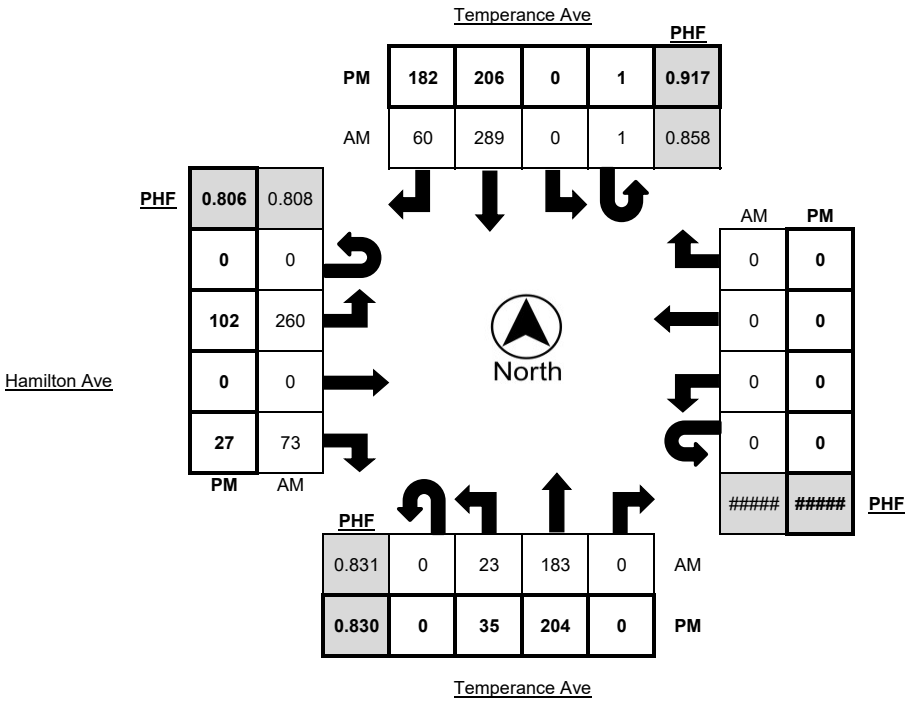
LOCATION Temperance Ave @ Hamilton Ave
LATITUDE 36.7258
COUNTY Fresno
LONGITUDE -119.6644
COLLECTION DATE Tuesday, June 4, 2024
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	5	32	0	2	0	0	53	12	3	0	68	0	12	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	5	45	0	1	1	0	85	16	1	0	86	0	11	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	7	55	0	4	0	0	65	13	4	0	80	0	23	1	0	0	0	0	0
7:45 AM - 8:00 AM	0	3	52	0	2	0	0	75	12	7	0	47	0	19	1	0	0	0	0	0
8:00 AM - 8:15 AM	0	8	31	0	1	0	0	64	19	2	0	47	0	20	4	0	0	0	0	0
8:15 AM - 8:30 AM	0	6	38	0	0	0	0	52	19	3	0	43	0	8	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	13	31	0	0	0	0	44	14	1	0	31	0	4	1	0	0	0	0	0
8:45 AM - 9:00 AM	0	9	23	0	1	1	0	34	12	0	0	30	0	5	0	0	0	0	0	0
TOTAL	**0**	**56**	**307**	**0**	**11**	**2**	**0**	**472**	**117**	**21**	**0**	**432**	**0**	**102**	**7**	**0**	**0**	**0**	**0**	**0**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	12	60	0	2	0	0	53	45	7	0	31	0	9	2	0	0	0	0	0
4:15 PM - 4:30 PM	0	5	53	0	3	0	0	64	42	1	0	24	0	3	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	11	53	0	1	1	0	39	49	3	0	24	0	4	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	7	38	0	0	0	0	50	46	1	0	23	0	11	1	0	0	0	0	0
5:00 PM - 5:15 PM	0	6	50	0	3	3	0	49	50	1	0	24	0	6	1	0	0	0	0	0
5:15 PM - 5:30 PM	0	4	51	0	1	0	0	40	69	3	0	20	0	4	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	5	42	0	1	1	0	42	39	3	1	37	0	8	1	0	0	0	0	0
5:45 PM - 6:00 PM	0	3	40	0	0	0	0	46	36	0	0	29	0	4	0	0	0	0	0	0
TOTAL	**0**	**53**	**387**	**0**	**11**	**5**	**0**	**383**	**376**	**19**	**1**	**212**	**0**	**49**	**5**	**0**	**0**	**0**	**0**	**0**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:15 AM - 8:15 AM	0	23	183	0	8	1	0	289	60	14	0	260	0	73	6	0	0	0	0	0
4:00 PM - 5:00 PM	0	35	204	0	6	1	0	206	182	12	0	102	0	27	3	0	0	0	0	0

	PHF	Trucks
AM	0.893	3.1%
PM	0.901	2.8%



Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

LOCATION Temperance Ave @ Hamilton Ave

LATITUDE 36.7258

COUNTY Fresno

LONGITUDE -119.6644

COLLECTION DATE Tuesday, June 4, 2024

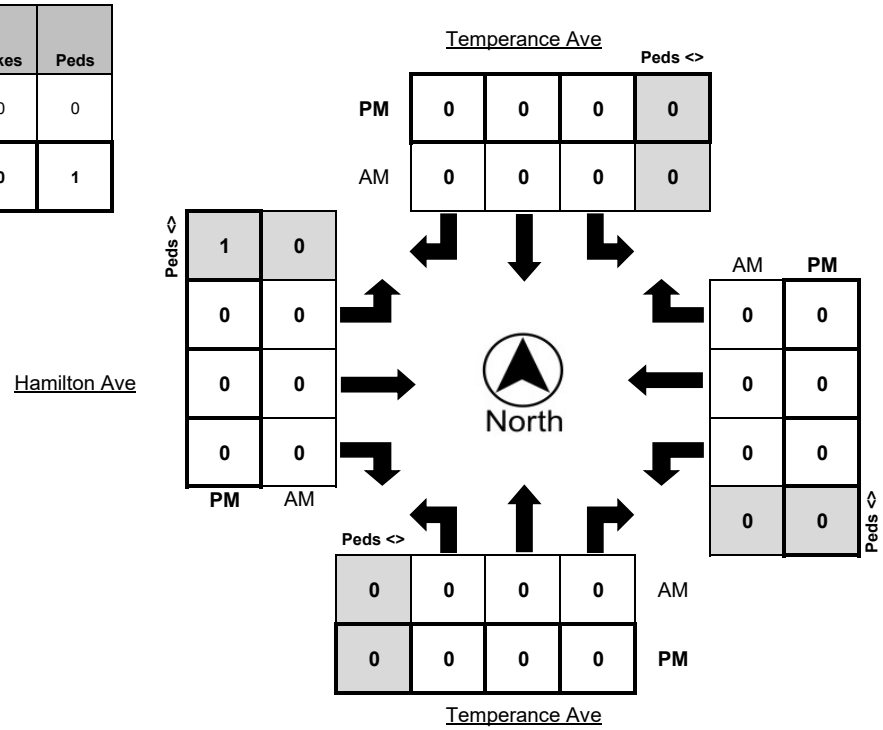
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

	Bikes	Peds
AM Peak Total	0	0
PM Peak Total	**0**	**1**



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Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

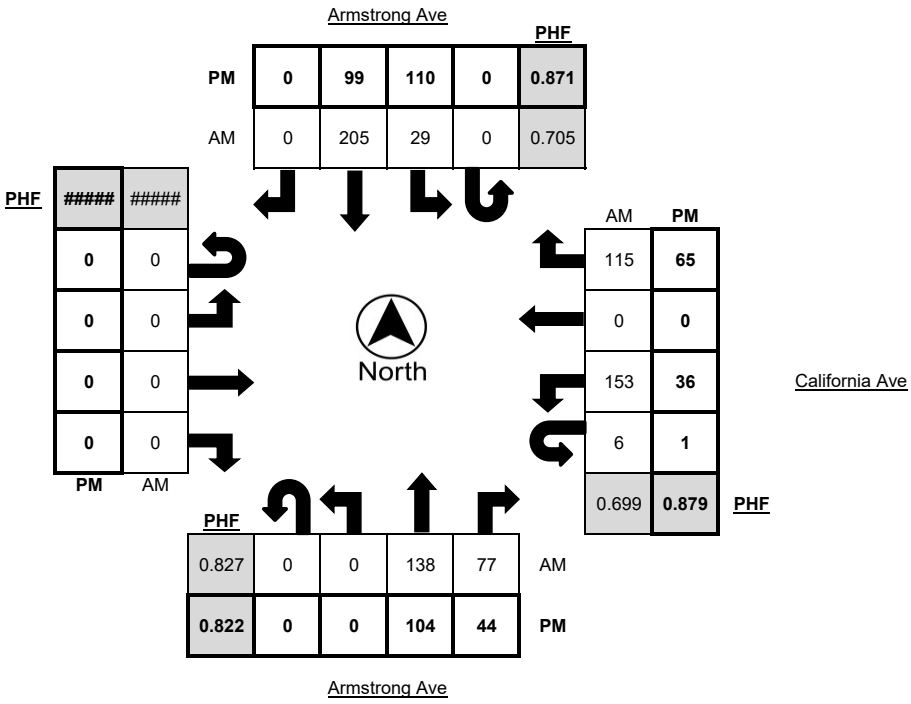
LOCATION Armstrong Ave @ California Ave
LATITUDE 36.7204
COUNTY Fresno
LONGITUDE -119.6730
COLLECTION DATE Tuesday, June 4, 2024
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	0	19	1	1	0	10	25	0	0	0	0	0	0	0	0	13	0	25	0
7:15 AM - 7:30 AM	0	0	34	15	2	0	8	32	0	0	0	0	0	0	0	4	33	0	31	1
7:30 AM - 7:45 AM	0	0	40	25	3	0	7	49	0	0	0	0	0	0	0	0	66	0	32	1
7:45 AM - 8:00 AM	0	0	34	29	0	0	6	49	0	3	0	0	0	0	0	2	37	0	19	2
8:00 AM - 8:15 AM	0	0	30	8	1	0	8	75	0	0	0	0	0	0	0	0	17	0	33	0
8:15 AM - 8:30 AM	0	0	3	13	1	0	10	59	0	1	0	0	0	0	0	2	19	0	22	0
8:30 AM - 8:45 AM	0	0	25	7	0	0	5	31	0	1	0	0	0	0	0	1	4	0	17	0
8:45 AM - 9:00 AM	0	0	22	3	0	0	3	15	0	0	0	0	0	0	0	0	8	0	19	0
TOTAL	**0**	**0**	**207**	**101**	**8**	**0**	**57**	**335**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**9**	**197**	**0**	**198**	**4**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	0	42	13	0	0	24	24	0	1	0	0	0	0	0	1	2	0	14	0
4:15 PM - 4:30 PM	0	0	29	11	0	0	24	26	0	1	0	0	0	0	0	0	5	0	10	0
4:30 PM - 4:45 PM	0	0	39	9	1	0	27	27	0	1	0	0	0	0	0	0	5	0	14	0
4:45 PM - 5:00 PM	0	0	25	9	1	0	14	25	0	0	0	0	0	0	0	0	6	0	21	0
5:00 PM - 5:15 PM	0	0	27	11	1	0	22	22	0	2	0	0	0	0	0	1	10	0	18	0
5:15 PM - 5:30 PM	0	0	18	10	0	0	39	21	0	0	0	0	0	0	0	0	11	0	13	0
5:30 PM - 5:45 PM	0	0	31	14	0	0	21	24	0	0	0	0	0	0	0	0	11	0	17	1
5:45 PM - 6:00 PM	0	0	28	9	1	0	28	32	0	0	0	0	0	0	0	0	4	0	17	0
TOTAL	**0**	**0**	**239**	**86**	**4**	**0**	**199**	**201**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**2**	**54**	**0**	**124**	**1**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:15 AM - 8:15 AM	0	0	138	77	6	0	29	205	0	3	0	0	0	0	0	6	153	0	115	4
5:00 PM - 6:00 PM	0	0	104	44	2	0	110	99	0	2	0	0	0	0	0	1	36	0	65	1

	PHF	Trucks
AM	0.825	1.8%
PM	0.972	1.1%



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Turning Movement Report

Prepared For:

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516 W. Shaw Ave, Suite 103
Fresno, CA 93704

LOCATION Armstrong Ave @ California Ave

LATITUDE 36.7204

COUNTY Fresno

LONGITUDE -119.6730

COLLECTION DATE Tuesday, June 4, 2024

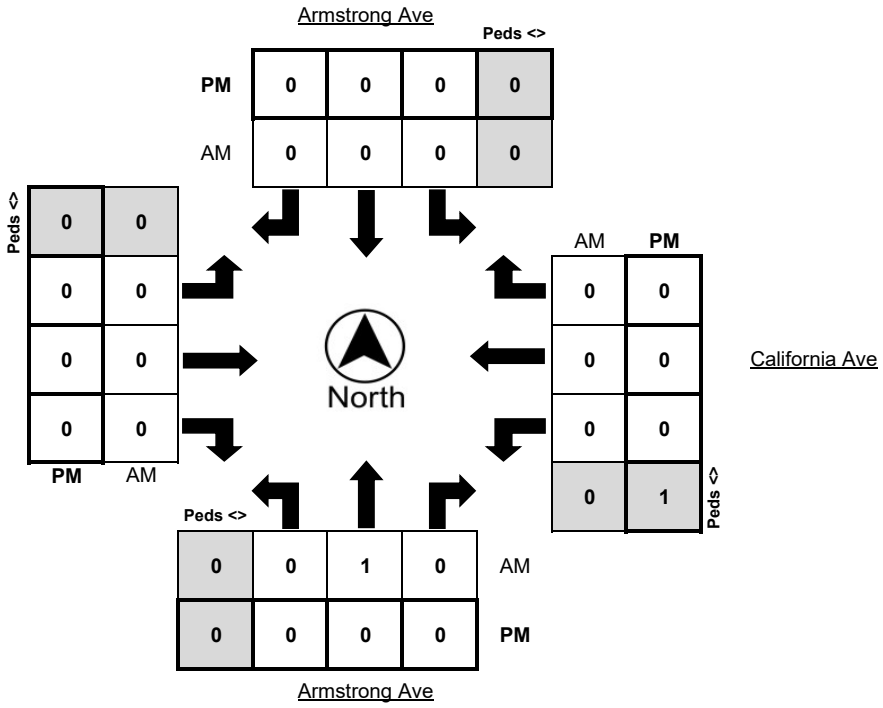
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
TOTAL	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:15 AM - 8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

	Bikes	Peds
AM Peak Total	1	0
PM Peak Total	**0**	**1**



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516 W. Shaw Ave, Suite 103
Fresno, CA 93704

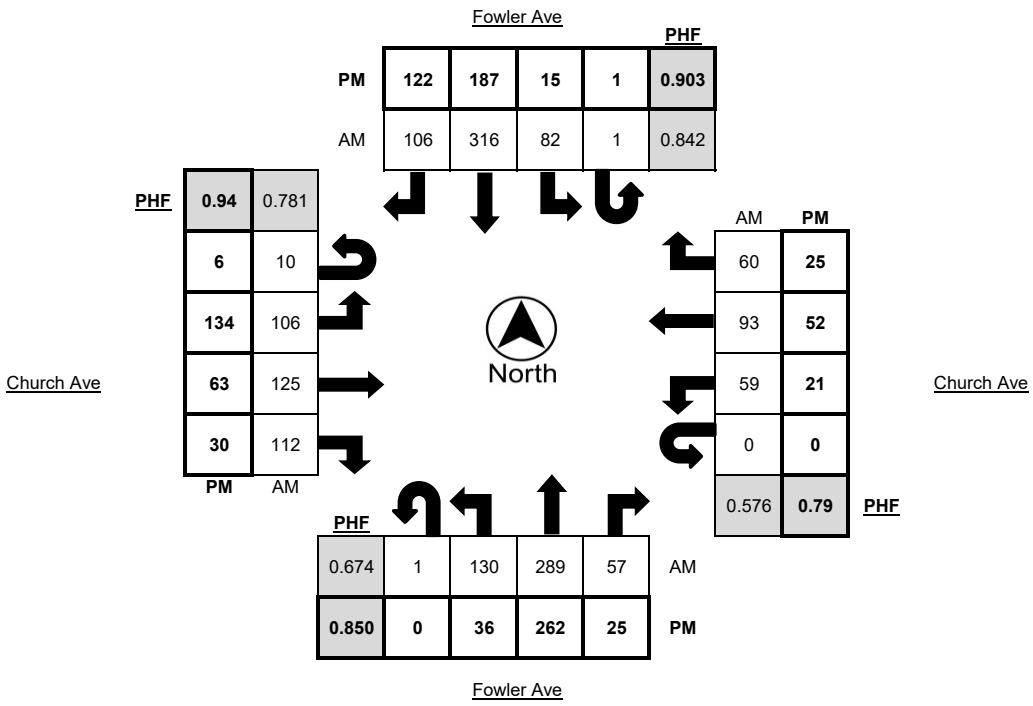
LOCATION Fowler Ave @ Church Ave
LATITUDE 36.7148
COUNTY Fresno
LONGITUDE -119.6821
COLLECTION DATE Tuesday, June 4, 2024
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	8	17	2	2	0	6	56	13	1	0	40	17	5	0	0	4	7	0	0
7:15 AM - 7:30 AM	0	5	29	2	1	0	14	65	22	4	3	41	46	11	4	0	2	23	7	0
7:30 AM - 7:45 AM	0	8	41	6	1	1	31	78	20	1	5	35	50	23	2	0	19	29	17	1
7:45 AM - 8:00 AM	0	25	72	6	2	0	25	83	42	3	3	29	29	17	0	0	22	39	31	3
8:00 AM - 8:15 AM	0	35	83	24	1	0	14	82	24	4	2	24	14	38	1	0	8	14	9	0
8:15 AM - 8:30 AM	1	62	93	21	1	0	12	73	20	2	0	18	32	34	4	0	10	11	3	0
8:30 AM - 8:45 AM	0	21	76	12	1	0	1	37	10	0	2	26	3	7	1	0	1	10	3	1
8:45 AM - 9:00 AM	0	9	25	3	0	0	2	23	10	0	2	14	12	5	1	0	2	9	4	0
TOTAL	**1**	**173**	**436**	**76**	**9**	**1**	**105**	**497**	**161**	**15**	**17**	**227**	**203**	**140**	**13**	**0**	**68**	**142**	**74**	**5**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	9	66	11	0	1	3	42	32	1	1	36	17	6	2	0	4	15	12	0
4:15 PM - 4:30 PM	0	5	53	2	0	0	8	42	34	2	5	28	20	9	0	0	5	15	4	0
4:30 PM - 4:45 PM	0	11	65	6	0	0	2	47	24	1	0	41	11	8	0	0	5	12	5	1
4:45 PM - 5:00 PM	0	11	78	6	0	0	2	56	32	1	0	29	15	7	0	0	7	10	4	0
5:00 PM - 5:15 PM	0	10	50	2	0	0	6	33	34	1	0	30	9	11	0	0	3	14	4	0
5:15 PM - 5:30 PM	0	9	65	1	0	1	7	48	45	1	0	32	16	4	0	0	0	12	3	1
5:30 PM - 5:45 PM	0	7	49	1	0	0	6	53	32	2	0	39	12	7	0	0	0	13	4	0
5:45 PM - 6:00 PM	0	6	56	6	0	1	1	44	30	0	1	27	7	6	0	0	4	18	2	0
TOTAL	**0**	**68**	**482**	**35**	**0**	**3**	**35**	**365**	**263**	**9**	**7**	**262**	**107**	**58**	**2**	**0**	**28**	**109**	**38**	**2**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	1	130	289	57	5	1	82	316	106	10	10	106	125	112	7	0	59	93	60	4
4:00 PM - 5:00 PM	0	36	262	25	0	1	15	187	122	5	6	134	63	30	2	0	21	52	25	1

	PHF	Trucks
AM	0.914	1.7%
PM	0.952	0.8%



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LATITUDE 36.7148

COUNTY Fresno

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COLLECTION DATE Tuesday, June 4, 2024

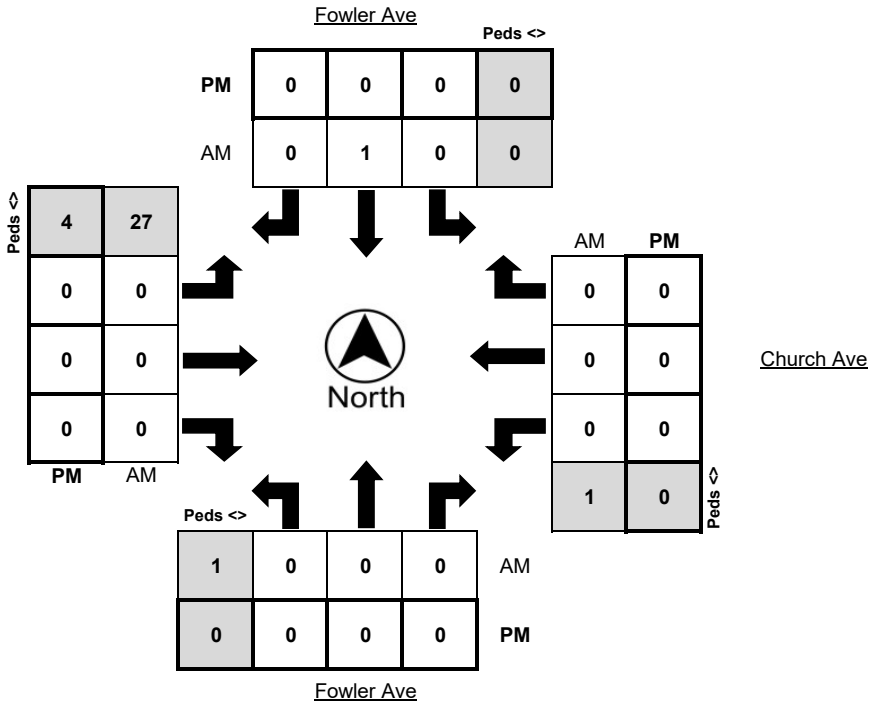
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45 AM - 8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	9
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**32**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**9**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:30 AM - 8:30 AM	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	27
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4

	Bikes	Peds
AM Peak Total	1	29
PM Peak Total	**0**	**4**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

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Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

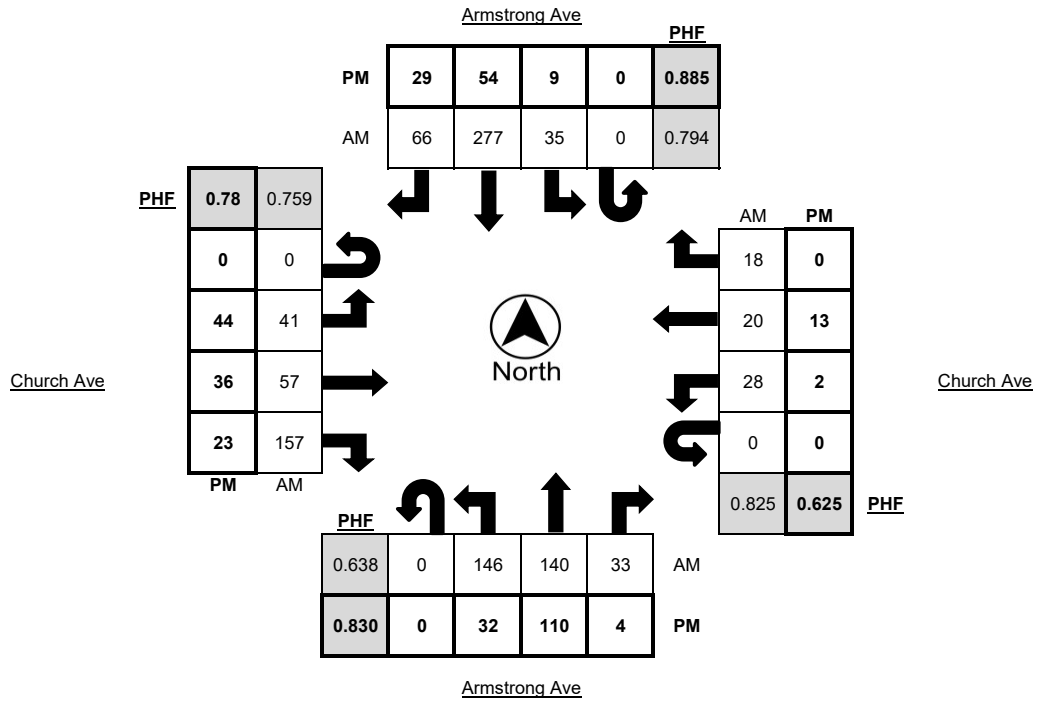
LOCATION Armstrong Ave @ Church Ave
LATITUDE 36.7147
COUNTY Fresno
LONGITUDE -119.6731
COLLECTION DATE Tuesday, June 4, 2024
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	0	6	0	1	0	5	28	4	0	0	10	8	7	0	0	9	6	0	1
7:15 AM - 7:30 AM	0	22	27	7	2	0	5	57	7	1	0	7	14	40	4	0	12	5	3	0
7:30 AM - 7:45 AM	0	49	54	12	4	0	12	90	17	0	0	8	16	60	2	0	5	2	6	0
7:45 AM - 8:00 AM	0	65	49	11	0	0	15	65	22	3	0	9	9	42	0	0	8	9	2	2
8:00 AM - 8:15 AM	0	10	10	3	0	0	3	65	20	0	0	17	18	15	0	0	3	4	7	1
8:15 AM - 8:30 AM	0	2	13	2	0	0	4	64	25	1	0	31	12	15	1	0	4	3	4	1
8:30 AM - 8:45 AM	0	0	14	1	0	0	1	24	7	1	0	12	2	4	0	0	1	5	2	0
8:45 AM - 9:00 AM	0	1	11	1	0	0	3	14	6	0	0	9	6	0	0	0	1	6	2	1
TOTAL	**0**	**149**	**184**	**37**	**7**	**0**	**48**	**407**	**108**	**6**	**0**	**103**	**85**	**183**	**7**	**0**	**43**	**40**	**26**	**6**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	5	37	2	0	0	3	10	6	2	0	16	8	9	0	0	1	4	0	0
4:15 PM - 4:30 PM	0	12	17	1	0	0	1	16	8	1	0	11	13	7	0	0	0	6	0	0
4:30 PM - 4:45 PM	0	11	32	0	1	0	3	13	6	1	0	10	6	2	0	0	1	2	0	0
4:45 PM - 5:00 PM	0	4	24	1	1	0	2	15	9	0	0	7	9	5	0	0	0	1	0	0
5:00 PM - 5:15 PM	0	4	22	0	0	0	4	15	10	1	0	11	6	4	2	0	1	4	0	0
5:15 PM - 5:30 PM	0	8	20	0	0	0	1	18	5	0	0	7	11	3	0	0	0	3	0	0
5:30 PM - 5:45 PM	0	2	29	0	0	0	3	22	4	0	0	11	6	3	1	0	1	0	0	0
5:45 PM - 6:00 PM	0	4	25	1	1	0	1	19	11	0	0	8	6	1	0	0	1	1	0	0
TOTAL	**0**	**50**	**206**	**5**	**3**	**0**	**18**	**128**	**59**	**5**	**0**	**81**	**65**	**34**	**3**	**0**	**5**	**21**	**0**	**0**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:15 AM - 8:15 AM	0	146	140	33	6	0	35	277	66	4	0	41	57	157	6	0	28	20	18	3
4:00 PM - 5:00 PM	0	32	110	4	2	0	9	54	29	4	0	44	36	23	0	0	2	13	0	0

	PHF	Trucks
AM	0.769	1.9%
PM	0.881	1.7%



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Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

LOCATION Armstrong Ave @ Church Ave

LATITUDE 36.7147

COUNTY Fresno

LONGITUDE -119.6731

COLLECTION DATE Tuesday, June 4, 2024

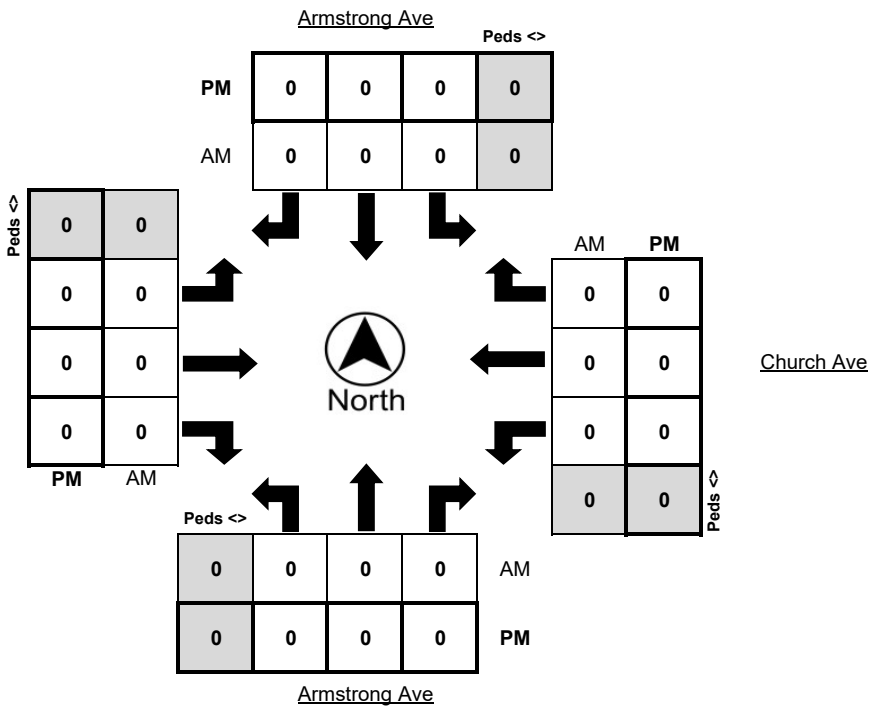
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	0	0
PM Peak Total	**0**	**0**



Metro Traffic Data Inc.
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Hanford, CA 93230

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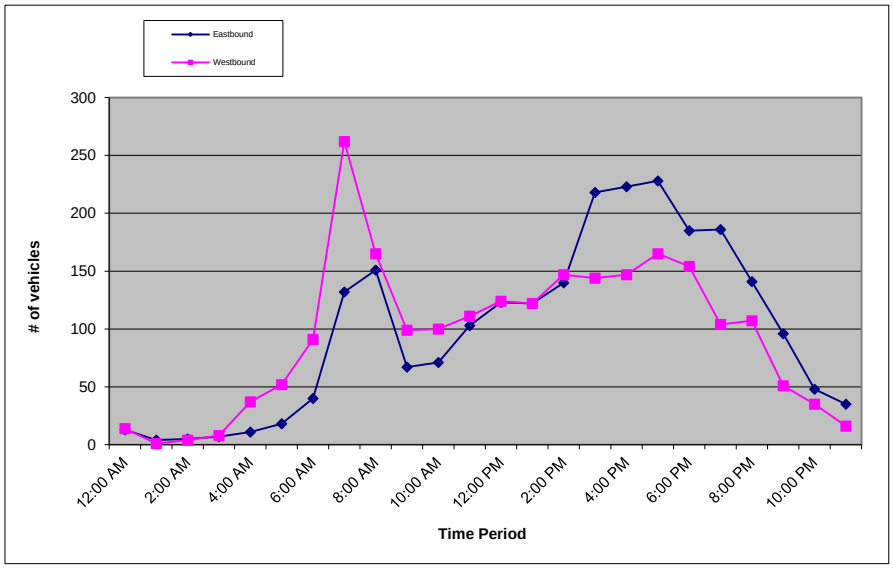
24 Hour Count Report

Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET E Hamilton Ave
LATITUDE 36.7259008
SEGMENT East of Fowler Ave
LONGITUDE -119.6819428
COLLECTION DATE Tuesday, September 17, 2024
WEATHER Clear
NUMBER OF LANES 3

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	9	1	1	2	**13**	11	0	1	2	**14**	**27**
1:00 AM	3	0	0	1	**4**	0	1	0	0	**1**	**5**
2:00 AM	3	1	0	1	**5**	1	1	2	0	**4**	**9**
3:00 AM	1	2	1	3	**7**	1	3	4	0	**8**	**15**
4:00 AM	2	1	2	6	**11**	1	6	10	20	**37**	**48**
5:00 AM	3	4	4	7	**18**	8	10	15	19	**52**	**70**
6:00 AM	3	8	11	18	**40**	15	14	30	32	**91**	**131**
7:00 AM	27	35	41	29	**132**	45	60	80	77	**262**	**394**
8:00 AM	55	44	35	17	**151**	64	35	39	27	**165**	**316**
9:00 AM	16	18	17	16	**67**	22	23	29	25	**99**	**166**
10:00 AM	24	15	17	15	**71**	20	27	21	32	**100**	**171**
11:00 AM	19	27	30	27	**103**	29	28	33	21	**111**	**214**
12:00 PM	40	30	28	25	**123**	35	32	27	30	**124**	**247**
1:00 PM	28	35	17	42	**122**	29	27	43	23	**122**	**244**
2:00 PM	28	32	43	37	**140**	23	26	60	38	**147**	**287**
3:00 PM	49	42	63	64	**218**	32	31	44	37	**144**	**362**
4:00 PM	63	54	53	53	**223**	43	31	43	30	**147**	**370**
5:00 PM	53	64	48	63	**228**	31	42	52	40	**165**	**393**
6:00 PM	46	47	42	50	**185**	40	38	34	42	**154**	**339**
7:00 PM	42	48	54	42	**186**	31	28	26	19	**104**	**290**
8:00 PM	38	44	29	30	**141**	30	28	19	30	**107**	**248**
9:00 PM	29	28	24	15	**96**	19	9	11	12	**51**	**147**
10:00 PM	10	11	13	14	**48**	12	8	7	8	**35**	**83**
11:00 PM	11	10	10	4	**35**	7	5	0	4	**16**	**51**
Total	**51.2%**				**2367**	**48.8%**				**2260**	
	4627										

AM%	**33.8%**	**AM Peak**	**441**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.91**
PM%	**66.2%**	**PM Peak**	**395**	**5:15 pm to 6:15 pm**	**PM P.H.F.**	**0.93**



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24 Hour Count Report

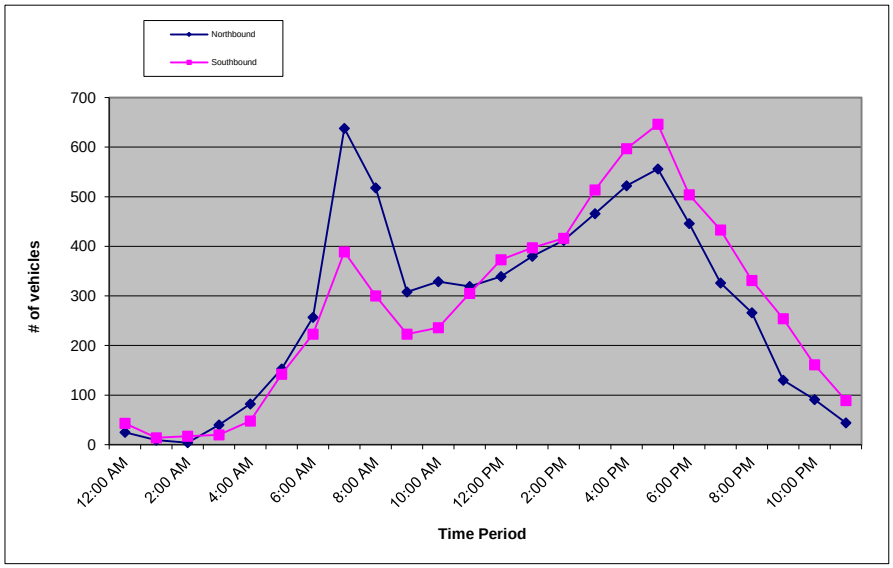
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Fowler Ave
SEGMENT North of Hamilton Ave
COLLECTION DATE Tuesday, September 17, 2024
NUMBER OF LANES 2

LATITUDE 36.7260276
LONGITUDE -119.6820903
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	11	4	4	6	**25**	17	11	8	7	**43**	**68**
1:00 AM	3	2	2	2	**9**	5	3	2	4	**14**	**23**
2:00 AM	1	1	1	1	**4**	6	4	3	4	**17**	**21**
3:00 AM	1	6	19	14	**40**	0	5	7	8	**20**	**60**
4:00 AM	12	19	17	34	**82**	5	10	11	22	**48**	**130**
5:00 AM	30	37	45	41	**153**	27	32	41	42	**142**	**295**
6:00 AM	42	45	84	86	**257**	48	56	57	62	**223**	**480**
7:00 AM	150	142	192	154	**638**	76	94	102	117	**389**	**1027**
8:00 AM	154	163	128	73	**518**	103	82	65	50	**300**	**818**
9:00 AM	64	69	97	78	**308**	60	50	63	50	**223**	**531**
10:00 AM	71	75	86	97	**329**	60	62	54	60	**236**	**565**
11:00 AM	79	70	90	80	**319**	75	81	75	74	**305**	**624**
12:00 PM	97	74	91	77	**339**	98	86	86	103	**373**	**712**
1:00 PM	85	94	119	82	**380**	88	132	84	93	**397**	**777**
2:00 PM	77	104	117	114	**412**	96	109	109	102	**416**	**828**
3:00 PM	94	99	121	152	**466**	127	122	143	122	**514**	**980**
4:00 PM	130	130	147	115	**522**	160	153	135	149	**597**	**1119**
5:00 PM	128	129	153	146	**556**	162	173	161	150	**646**	**1202**
6:00 PM	116	119	101	110	**446**	134	129	126	115	**504**	**950**
7:00 PM	110	83	72	61	**326**	109	106	125	93	**433**	**759**
8:00 PM	67	79	61	59	**266**	88	83	88	72	**331**	**597**
9:00 PM	31	40	30	29	**130**	70	65	71	48	**254**	**384**
10:00 PM	33	21	18	19	**91**	44	41	35	41	**161**	**252**
11:00 PM	18	15	4	7	**44**	27	25	18	19	**89**	**133**
Total	**49.9%**				**6660**	**50.1%**				**6675**	
	13335										

AM%	**34.8%**	**AM Peak**	**1067**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.91**
PM%	**65.2%**	**PM Peak**	**1202**	**5:00 pm to 6:00 pm**	**PM P.H.F.**	**0.96**



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24 Hour Count Report

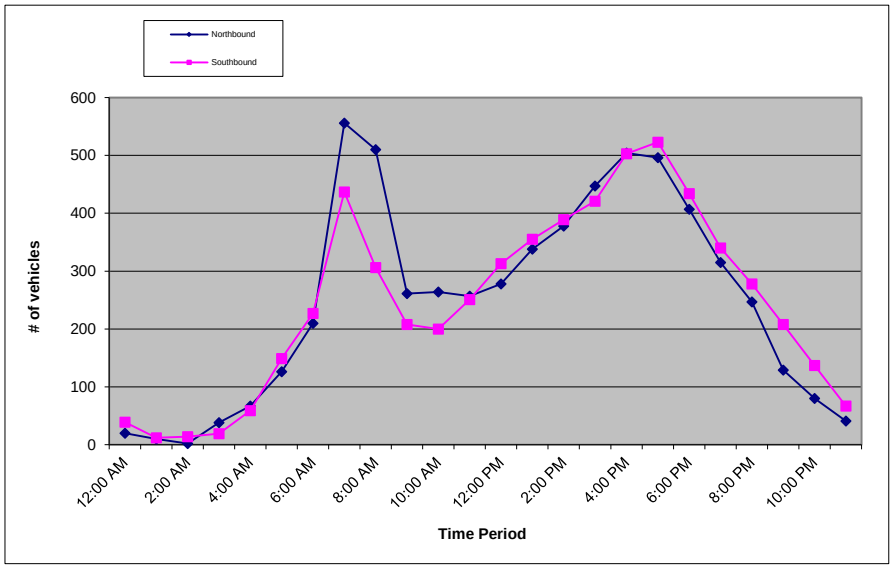
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Fowler Ave
SEGMENT South of Hamilton Ave
COLLECTION DATE Tuesday, September 17, 2024
NUMBER OF LANES 2

LATITUDE 36.725761
LONGITUDE -119.6820917
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	7	4	3	6	**20**	15	10	7	7	**39**	**59**
1:00 AM	5	1	2	2	**10**	4	3	2	3	**12**	**22**
2:00 AM	1	0	0	1	**2**	4	3	4	3	**14**	**16**
3:00 AM	2	5	16	15	**38**	1	5	7	6	**19**	**57**
4:00 AM	12	16	15	24	**67**	4	12	17	26	**59**	**126**
5:00 AM	26	31	35	34	**126**	28	32	42	47	**149**	**275**
6:00 AM	30	40	64	76	**210**	48	57	56	66	**227**	**437**
7:00 AM	135	125	161	135	**556**	79	102	110	146	**437**	**993**
8:00 AM	162	172	115	61	**510**	120	82	56	48	**306**	**816**
9:00 AM	52	56	83	70	**261**	54	42	61	51	**208**	**469**
10:00 AM	62	54	72	76	**264**	47	53	44	56	**200**	**464**
11:00 AM	60	52	76	69	**257**	66	64	64	57	**251**	**508**
12:00 PM	75	64	78	61	**278**	71	78	72	92	**313**	**591**
1:00 PM	76	90	95	77	**338**	80	120	86	69	**355**	**693**
2:00 PM	68	97	104	109	**378**	82	96	113	98	**389**	**767**
3:00 PM	78	89	112	168	**447**	94	101	115	111	**421**	**868**
4:00 PM	131	123	141	109	**504**	141	123	119	120	**503**	**1007**
5:00 PM	117	121	125	133	**496**	129	143	137	114	**523**	**1019**
6:00 PM	113	108	92	94	**407**	125	109	109	91	**434**	**841**
7:00 PM	100	83	72	60	**315**	88	86	97	69	**340**	**655**
8:00 PM	59	86	56	46	**247**	72	74	73	59	**278**	**525**
9:00 PM	32	41	28	28	**129**	61	47	56	44	**208**	**337**
10:00 PM	27	19	16	18	**80**	40	36	27	34	**137**	**217**
11:00 PM	17	15	5	4	**41**	22	20	9	16	**67**	**108**
Total	**50.4%**				**5981**	**49.6%**				**5889**	
	11870										

AM%	**35.7%**	**AM Peak**	**1088**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.96**
PM%	**64.3%**	**PM Peak**	**1019**	**5:00 pm to 6:00 pm**	**PM P.H.F.**	**0.96**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

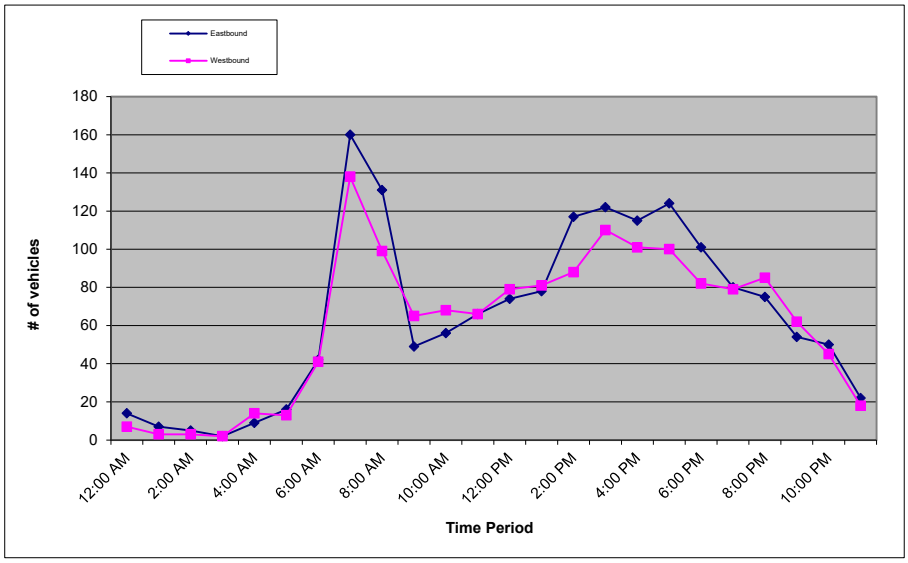
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Hamilton Ave
SEGMENT btwn Douglas/Armstrong
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 3

LATITUDE 36.7258464
LONGITUDE -119.6734342
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	5	4	2	3	**14**	4	2	1	0	**7**	**21**
1:00 AM	1	3	2	1	**7**	1	0	1	1	**3**	**10**
2:00 AM	1	2	1	1	**5**	1	2	0	0	**3**	**8**
3:00 AM	1	0	0	1	**2**	1	0	0	1	**2**	**4**
4:00 AM	1	3	2	3	**9**	2	1	5	6	**14**	**23**
5:00 AM	3	4	4	5	**16**	3	5	2	3	**13**	**29**
6:00 AM	6	4	17	15	**42**	6	3	14	18	**41**	**83**
7:00 AM	33	21	54	52	**160**	15	31	44	48	**138**	**298**
8:00 AM	45	35	29	22	**131**	31	25	20	23	**99**	**230**
9:00 AM	14	14	9	12	**49**	15	14	24	12	**65**	**114**
10:00 AM	15	13	17	11	**56**	17	14	11	26	**68**	**124**
11:00 AM	15	16	10	25	**66**	12	14	18	22	**66**	**132**
12:00 PM	18	13	23	20	**74**	14	22	19	24	**79**	**153**
1:00 PM	18	20	16	24	**78**	26	12	24	19	**81**	**159**
2:00 PM	17	23	38	39	**117**	16	14	30	28	**88**	**205**
3:00 PM	31	27	33	31	**122**	25	18	24	43	**110**	**232**
4:00 PM	28	37	25	25	**115**	33	17	28	23	**101**	**216**
5:00 PM	33	30	27	34	**124**	22	24	34	20	**100**	**224**
6:00 PM	30	24	24	23	**101**	21	22	23	16	**82**	**183**
7:00 PM	16	14	19	31	**80**	18	20	18	23	**79**	**159**
8:00 PM	23	19	15	18	**75**	9	23	31	22	**85**	**160**
9:00 PM	14	18	12	10	**54**	20	15	16	11	**62**	**116**
10:00 PM	13	13	10	14	**50**	18	10	8	9	**45**	**95**
11:00 PM	6	8	7	1	**22**	3	5	4	6	**18**	**40**
Total	**52.0%**				**1569**	**48.0%**				**1449**	
	3018										

AM%	**35.7%**	**AM Peak**	**334**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.84**
PM%	**64.3%**	**PM Peak**	**246**	**3:30 pm to 4:30 pm**	**PM P.H.F.**	**0.83**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

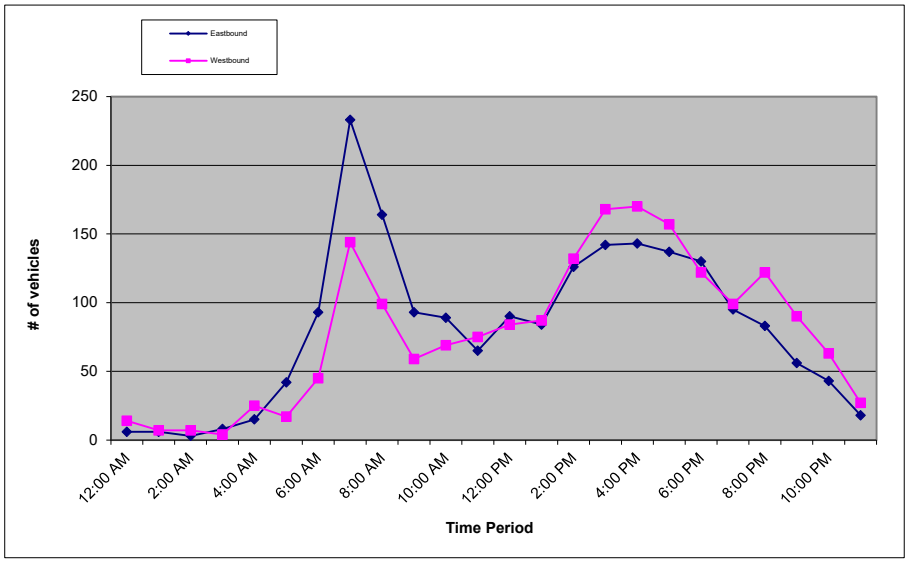
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Hamilton Ave
SEGMENT btwn Armstrong/Pearwood
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 3

LATITUDE 36.72584039
LONGITUDE -119.6726181
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	1	2	1	2	**6**	5	3	3	3	**14**	**20**
1:00 AM	1	2	1	2	**6**	0	2	3	2	**7**	**13**
2:00 AM	0	2	0	1	**3**	2	1	2	2	**7**	**10**
3:00 AM	1	2	2	3	**8**	1	0	2	1	**4**	**12**
4:00 AM	1	5	3	6	**15**	4	6	7	8	**25**	**40**
5:00 AM	6	11	11	14	**42**	3	7	2	5	**17**	**59**
6:00 AM	16	17	27	33	**93**	7	6	8	24	**45**	**138**
7:00 AM	45	47	81	60	**233**	16	29	50	49	**144**	**377**
8:00 AM	59	45	32	28	**164**	33	26	20	20	**99**	**263**
9:00 AM	32	20	15	26	**93**	12	15	18	14	**59**	**152**
10:00 AM	32	19	17	21	**89**	13	13	20	23	**69**	**158**
11:00 AM	15	14	21	15	**65**	26	22	11	16	**75**	**140**
12:00 PM	23	16	23	28	**90**	15	25	27	17	**84**	**174**
1:00 PM	22	22	22	18	**84**	23	20	16	28	**87**	**171**
2:00 PM	15	26	37	48	**126**	22	28	34	48	**132**	**258**
3:00 PM	27	26	46	43	**142**	34	36	47	51	**168**	**310**
4:00 PM	45	34	26	38	**143**	56	39	42	33	**170**	**313**
5:00 PM	36	29	41	31	**137**	37	52	40	28	**157**	**294**
6:00 PM	44	28	27	31	**130**	27	35	29	31	**122**	**252**
7:00 PM	26	20	27	22	**95**	18	29	24	28	**99**	**194**
8:00 PM	25	23	17	18	**83**	25	28	39	30	**122**	**205**
9:00 PM	11	17	12	16	**56**	31	19	25	15	**90**	**146**
10:00 PM	13	11	11	8	**43**	15	13	13	22	**63**	**106**
11:00 PM	4	8	2	4	**18**	4	4	12	7	**27**	**45**
Total	**51.0%**				**1964**	**49.0%**				**1886**	
	3850										

AM%	**35.9%**	**AM Peak**	**408**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.78**
PM%	**64.1%**	**PM Peak**	**361**	**3:30 pm to 4:30 pm**	**PM P.H.F.**	**0.89**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

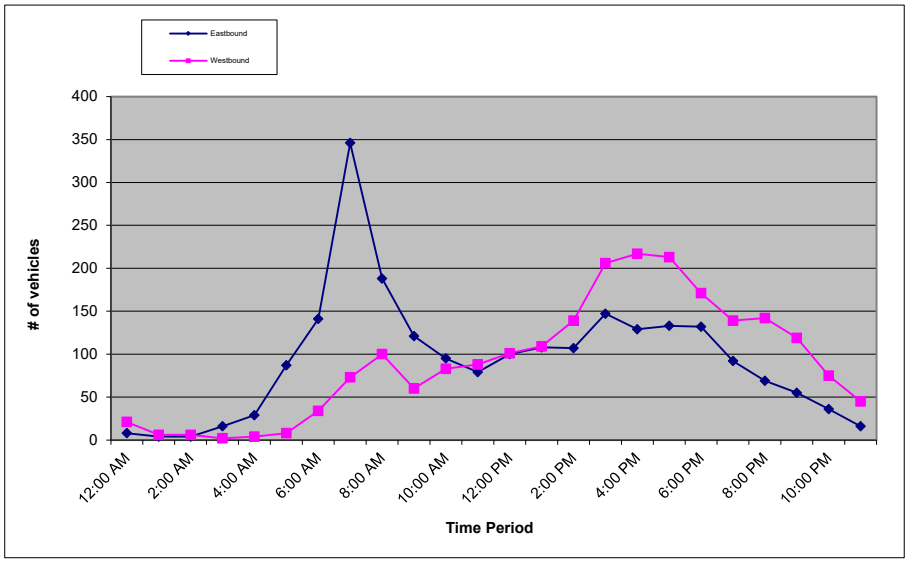
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Hamilton Ave
SEGMENT btwn Arroyo/Temperance
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 2

LATITUDE 36.72587236
LONGITUDE -119.6648005
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	3	0	4	1	**8**	7	3	6	5	**21**	**29**
1:00 AM	0	1	1	2	**4**	1	0	3	2	**6**	**10**
2:00 AM	1	1	1	1	**4**	0	1	3	2	**6**	**10**
3:00 AM	1	6	2	7	**16**	0	1	1	0	**2**	**18**
4:00 AM	4	9	8	8	**29**	0	0	4	0	**4**	**33**
5:00 AM	10	22	26	29	**87**	3	0	1	4	**8**	**95**
6:00 AM	20	27	41	53	**141**	11	1	8	14	**34**	**175**
7:00 AM	80	97	103	66	**346**	17	21	20	15	**73**	**419**
8:00 AM	67	51	35	35	**188**	27	25	27	21	**100**	**288**
9:00 AM	35	29	32	25	**121**	12	15	20	13	**60**	**181**
10:00 AM	30	27	21	17	**95**	19	14	24	26	**83**	**178**
11:00 AM	17	18	23	21	**79**	32	17	13	26	**88**	**167**
12:00 PM	17	25	18	40	**100**	28	21	30	22	**101**	**201**
1:00 PM	27	26	31	24	**108**	29	21	31	28	**109**	**217**
2:00 PM	18	23	28	38	**107**	24	35	28	52	**139**	**246**
3:00 PM	34	37	43	33	**147**	43	44	56	63	**206**	**353**
4:00 PM	40	27	28	34	**129**	57	47	60	53	**217**	**346**
5:00 PM	30	24	46	33	**133**	56	73	45	39	**213**	**346**
6:00 PM	39	29	31	33	**132**	48	46	41	36	**171**	**303**
7:00 PM	24	25	24	19	**92**	32	41	29	37	**139**	**231**
8:00 PM	19	19	19	12	**69**	34	34	39	35	**142**	**211**
9:00 PM	11	15	17	12	**55**	38	34	29	18	**119**	**174**
10:00 PM	9	11	9	7	**36**	16	22	13	24	**75**	**111**
11:00 PM	5	5	4	2	**16**	8	8	21	8	**45**	**61**
Total	**50.9%**				**2242**	**49.1%**				**2161**	
	4403										

AM%	**36.4%**	**AM Peak**	**419**	**7:00 am to 8:00 am**	**AM P.H.F.**	**0.85**
PM%	**63.6%**	**PM Peak**	**373**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.94**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

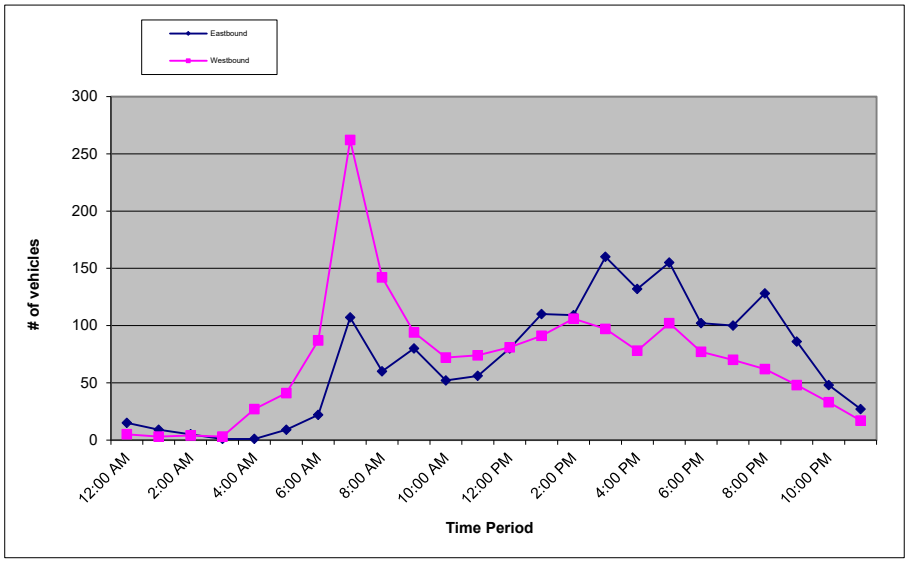
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET California Ave
SEGMENT btwn Armstrong/Filbert
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 4

LATITUDE 36.72045898
LONGITUDE -119.6725434
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	3	6	2	4	**15**	1	2	1	1	**5**	**20**
1:00 AM	0	3	5	1	**9**	0	1	1	1	**3**	**12**
2:00 AM	1	0	1	3	**5**	0	0	0	4	**4**	**9**
3:00 AM	0	0	1	0	**1**	0	1	1	1	**3**	**4**
4:00 AM	0	0	0	1	**1**	3	6	6	12	**27**	**28**
5:00 AM	2	1	1	5	**9**	8	7	15	11	**41**	**50**
6:00 AM	1	3	7	11	**22**	18	11	30	28	**87**	**109**
7:00 AM	11	27	32	37	**107**	38	68	98	58	**262**	**369**
8:00 AM	16	25	13	6	**60**	50	43	22	27	**142**	**202**
9:00 AM	12	14	36	18	**80**	26	25	21	22	**94**	**174**
10:00 AM	17	12	12	11	**52**	25	16	10	21	**72**	**124**
11:00 AM	18	21	5	12	**56**	11	13	19	31	**74**	**130**
12:00 PM	20	17	20	23	**80**	13	17	19	32	**81**	**161**
1:00 PM	38	21	15	36	**110**	23	20	27	21	**91**	**201**
2:00 PM	10	24	42	33	**109**	22	31	21	32	**106**	**215**
3:00 PM	34	32	41	53	**160**	22	23	30	22	**97**	**257**
4:00 PM	38	35	36	23	**132**	17	15	19	27	**78**	**210**
5:00 PM	34	49	35	37	**155**	29	24	28	21	**102**	**257**
6:00 PM	20	29	27	26	**102**	23	21	11	22	**77**	**179**
7:00 PM	23	29	24	24	**100**	27	15	13	15	**70**	**170**
8:00 PM	35	32	30	31	**128**	15	13	26	8	**62**	**190**
9:00 PM	23	26	21	16	**86**	8	16	11	13	**48**	**134**
10:00 PM	9	13	14	12	**48**	14	5	7	7	**33**	**81**
11:00 PM	10	7	7	3	**27**	3	6	0	8	**17**	**44**
Total	**49.7%**				**1654**	**50.3%**				**1676**	
	3330										

AM%	**37.0%**	**AM Peak**	**386**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.74**
PM%	**63.0%**	**PM Peak**	**257**	**3:00 pm to 4:00 pm**	**PM P.H.F.**	**0.86**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
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24 Hour Count Report

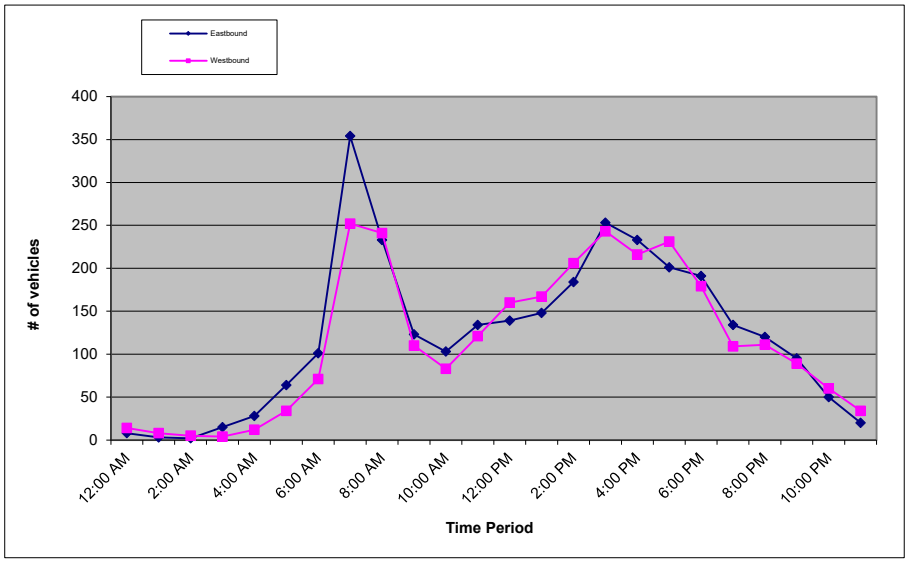
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Church Ave
SEGMENT btwn Via Certosa/Fowler
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 3

LATITUDE 36.71482509
LONGITUDE -119.682587
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	1	3	2	2	**8**	6	4	1	3	**14**	**22**
1:00 AM	2	0	0	1	**3**	3	2	0	3	**8**	**11**
2:00 AM	1	0	0	1	**2**	2	2	0	1	**5**	**7**
3:00 AM	2	3	3	7	**15**	2	0	1	1	**4**	**19**
4:00 AM	5	3	11	9	**28**	2	3	2	5	**12**	**40**
5:00 AM	18	8	19	19	**64**	4	4	13	13	**34**	**98**
6:00 AM	16	23	30	32	**101**	9	15	22	25	**71**	**172**
7:00 AM	62	101	113	78	**354**	28	53	62	109	**252**	**606**
8:00 AM	78	84	38	33	**233**	75	93	43	30	**241**	**474**
9:00 AM	27	21	36	39	**123**	17	31	40	22	**110**	**233**
10:00 AM	26	30	27	20	**103**	25	11	18	29	**83**	**186**
11:00 AM	27	27	38	42	**134**	18	28	38	37	**121**	**255**
12:00 PM	27	39	34	39	**139**	39	50	37	34	**160**	**299**
1:00 PM	38	45	24	41	**148**	51	36	42	38	**167**	**315**
2:00 PM	40	53	45	46	**184**	32	37	72	65	**206**	**390**
3:00 PM	40	71	74	68	**253**	41	44	67	91	**243**	**496**
4:00 PM	60	62	60	51	**233**	57	59	47	53	**216**	**449**
5:00 PM	50	52	58	41	**201**	58	66	52	55	**231**	**432**
6:00 PM	56	61	40	34	**191**	49	42	38	50	**179**	**370**
7:00 PM	36	25	32	41	**134**	24	25	30	30	**109**	**243**
8:00 PM	35	27	30	28	**120**	30	30	18	33	**111**	**231**
9:00 PM	22	29	23	21	**95**	30	15	24	20	**89**	**184**
10:00 PM	14	17	10	9	**50**	18	16	10	16	**60**	**110**
11:00 PM	10	6	2	2	**20**	17	7	4	6	**34**	**54**
Total	**51.5%**				**2936**	**48.5%**				**2760**	
	5696										

AM%	**37.3%**	**AM Peak**	**692**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.93**
PM%	**62.7%**	**PM Peak**	**538**	**3:30 pm to 4:30 pm**	**PM P.H.F.**	**0.85**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

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24 Hour Count Report

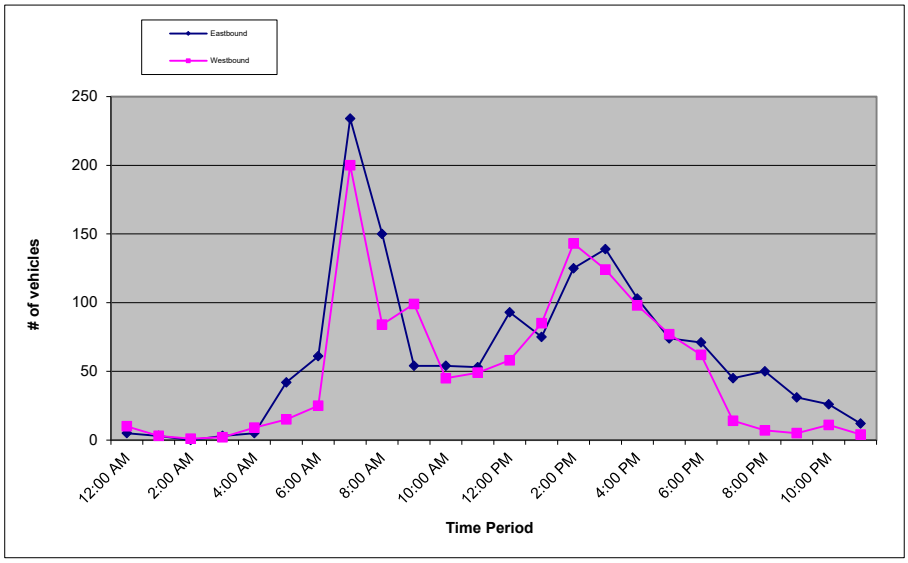
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Church Ave
SEGMENT east of Fowler
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 2

LATITUDE 36.71483399
LONGITUDE -119.6814951
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	0	3	1	1	**5**	4	3	1	2	**10**	**15**
1:00 AM	0	2	0	1	**3**	1	1	1	0	**3**	**6**
2:00 AM	0	0	0	0	**0**	1	0	0	0	**1**	**1**
3:00 AM	1	1	0	1	**3**	1	0	1	0	**2**	**5**
4:00 AM	0	1	2	2	**5**	1	3	2	3	**9**	**14**
5:00 AM	4	9	10	19	**42**	2	1	8	4	**15**	**57**
6:00 AM	11	14	12	24	**61**	3	2	13	7	**25**	**86**
7:00 AM	25	62	87	60	**234**	11	32	65	92	**200**	**434**
8:00 AM	52	65	16	17	**150**	31	24	14	15	**84**	**234**
9:00 AM	10	10	15	19	**54**	9	22	46	22	**99**	**153**
10:00 AM	11	12	18	13	**54**	11	9	10	15	**45**	**99**
11:00 AM	8	9	23	13	**53**	6	14	17	12	**49**	**102**
12:00 PM	11	19	36	27	**93**	16	11	15	16	**58**	**151**
1:00 PM	21	16	17	21	**75**	38	19	14	14	**85**	**160**
2:00 PM	20	39	37	29	**125**	26	16	66	35	**143**	**268**
3:00 PM	24	36	34	45	**139**	19	29	37	39	**124**	**263**
4:00 PM	31	30	19	23	**103**	31	24	22	21	**98**	**201**
5:00 PM	17	24	19	14	**74**	21	15	17	24	**77**	**151**
6:00 PM	15	23	23	10	**71**	15	18	9	20	**62**	**133**
7:00 PM	8	10	12	15	**45**	4	3	5	2	**14**	**59**
8:00 PM	15	13	9	13	**50**	4	3	0	0	**7**	**57**
9:00 PM	4	7	12	8	**31**	2	0	2	1	**5**	**36**
10:00 PM	9	8	5	4	**26**	4	4	0	3	**11**	**37**
11:00 PM	8	2	1	1	**12**	1	3	0	0	**4**	**16**
Total	**55.1%**				**1508**	**44.9%**				**1230**	
	2738										

AM%	**44.0%**	**AM Peak**	**481**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.79**
PM%	**56.0%**	**PM Peak**	**275**	**2:30 pm to 3:30 pm**	**PM P.H.F.**	**0.67**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

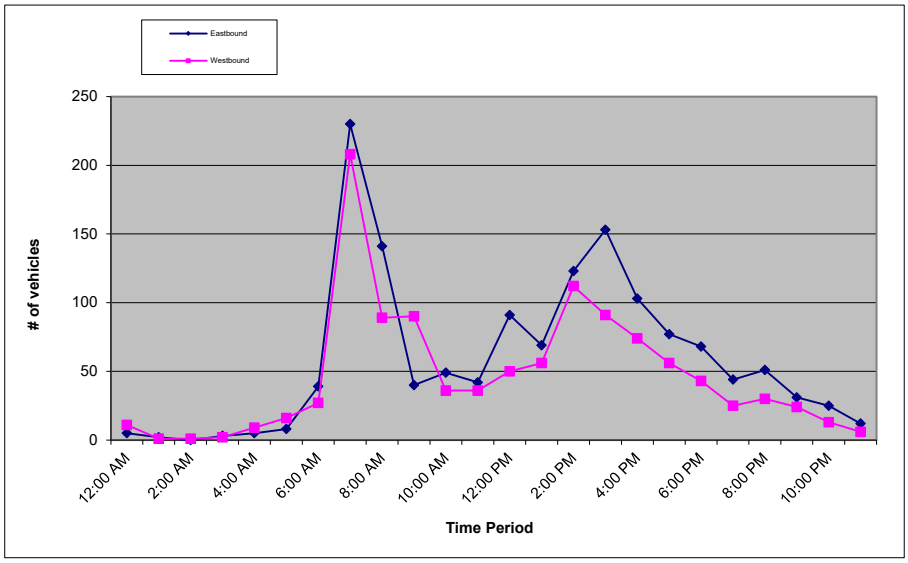
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Church Ave
SEGMENT west of Armstrong
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 2

LATITUDE 36.71484446
LONGITUDE -119.6734764
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	0	3	1	1	**5**	4	4	1	2	**11**	**16**
1:00 AM	0	1	0	1	**2**	0	1	0	0	**1**	**3**
2:00 AM	0	0	0	0	**0**	1	0	0	0	**1**	**1**
3:00 AM	1	1	0	1	**3**	1	1	0	0	**2**	**5**
4:00 AM	0	1	2	2	**5**	1	3	2	3	**9**	**14**
5:00 AM	3	0	4	1	**8**	2	1	9	4	**16**	**24**
6:00 AM	3	6	11	19	**39**	2	3	13	9	**27**	**66**
7:00 AM	25	61	84	60	**230**	10	34	68	96	**208**	**438**
8:00 AM	50	58	18	15	**141**	34	30	12	13	**89**	**230**
9:00 AM	5	10	12	13	**40**	7	27	39	17	**90**	**130**
10:00 AM	11	11	14	13	**49**	8	8	5	15	**36**	**85**
11:00 AM	6	7	20	9	**42**	3	9	12	12	**36**	**78**
12:00 PM	10	15	38	28	**91**	10	18	15	7	**50**	**141**
1:00 PM	21	16	16	16	**69**	8	36	5	7	**56**	**125**
2:00 PM	20	33	40	30	**123**	11	9	13	79	**112**	**235**
3:00 PM	19	27	53	54	**153**	21	29	17	24	**91**	**244**
4:00 PM	33	31	18	21	**103**	15	26	19	14	**74**	**177**
5:00 PM	21	21	20	15	**77**	18	16	6	16	**56**	**133**
6:00 PM	14	23	21	10	**68**	13	15	7	8	**43**	**111**
7:00 PM	9	8	14	13	**44**	6	5	7	7	**25**	**69**
8:00 PM	15	15	8	13	**51**	11	5	10	4	**30**	**81**
9:00 PM	5	7	11	8	**31**	7	10	4	3	**24**	**55**
10:00 PM	7	9	6	3	**25**	4	1	0	8	**13**	**38**
11:00 PM	7	3	1	1	**12**	1	3	1	1	**6**	**18**
Total	**56.1%**				**1411**	**43.9%**				**1106**	
	2517										

AM%	**43.3%**	**AM Peak**	**487**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.78**
PM%	**56.7%**	**PM Peak**	**275**	**2:45 pm to 3:45 pm**	**PM P.H.F.**	**0.63**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

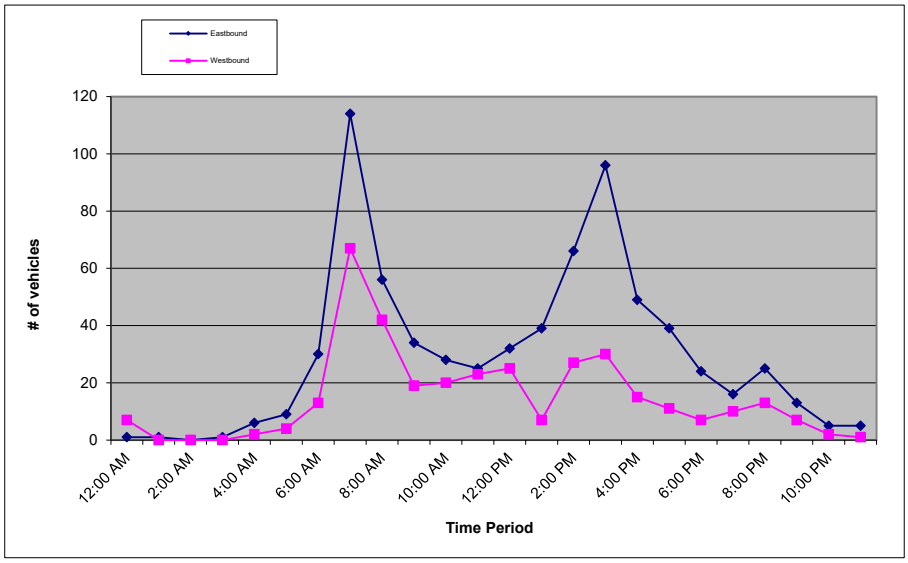
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Church Ave
SEGMENT btwn Armstrong/Temperance
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 2

LATITUDE 36.71485108
LONGITUDE -119.6727449
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	0	0	1	0	**1**	2	2	1	2	**7**	**8**
1:00 AM	0	0	0	1	**1**	0	0	0	0	**0**	**1**
2:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**
3:00 AM	1	0	0	0	**1**	0	0	0	0	**0**	**1**
4:00 AM	0	1	2	3	**6**	0	0	0	2	**2**	**8**
5:00 AM	2	0	5	2	**9**	0	1	2	1	**4**	**13**
6:00 AM	5	5	9	11	**30**	2	1	5	5	**13**	**43**
7:00 AM	13	26	40	35	**114**	15	20	13	19	**67**	**181**
8:00 AM	24	18	4	10	**56**	14	11	8	9	**42**	**98**
9:00 AM	7	9	9	9	**34**	6	5	3	5	**19**	**53**
10:00 AM	8	5	6	9	**28**	4	4	7	5	**20**	**48**
11:00 AM	7	4	9	5	**25**	4	8	7	4	**23**	**48**
12:00 PM	7	7	9	9	**32**	5	7	6	7	**25**	**57**
1:00 PM	15	12	6	6	**39**	2	4	0	1	**7**	**46**
2:00 PM	9	12	29	16	**66**	5	11	8	3	**27**	**93**
3:00 PM	20	20	37	19	**96**	4	4	13	9	**30**	**126**
4:00 PM	13	15	9	12	**49**	5	6	3	1	**15**	**64**
5:00 PM	10	12	9	8	**39**	5	3	1	2	**11**	**50**
6:00 PM	10	9	3	2	**24**	2	4	1	0	**7**	**31**
7:00 PM	3	4	2	7	**16**	3	2	2	3	**10**	**26**
8:00 PM	7	8	9	1	**25**	4	3	4	2	**13**	**38**
9:00 PM	4	2	4	3	**13**	3	4	0	0	**7**	**20**
10:00 PM	2	1	2	0	**5**	1	0	0	1	**2**	**7**
11:00 PM	3	0	2	0	**5**	0	0	0	1	**1**	**6**
Total	**67.0%**				**714**	**33.0%**				**352**	
	1066										

AM%	**47.1%**	**AM Peak**	**191**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.88**
PM%	**52.9%**	**PM Peak**	**126**	**3:00 pm to 4:00 pm**	**PM P.H.F.**	**0.63**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

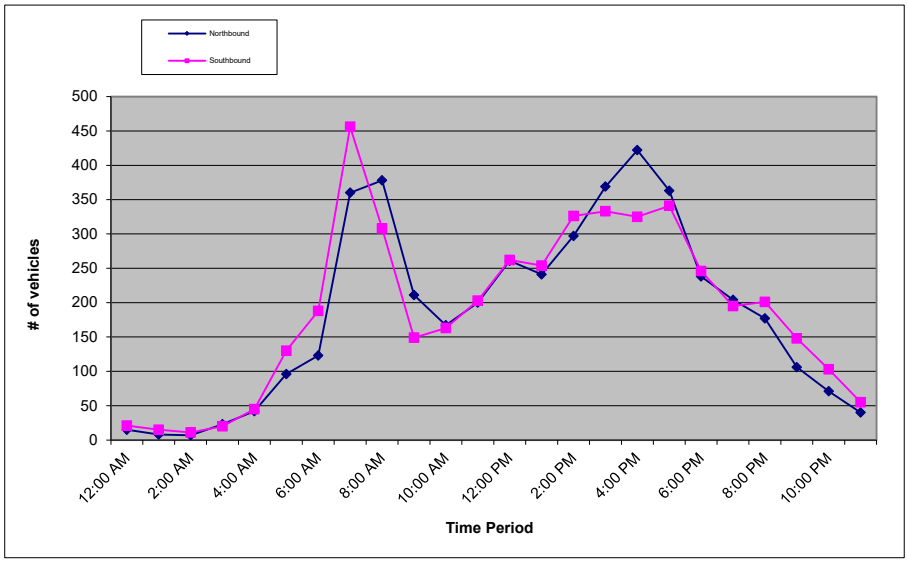
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Fowler Ave
SEGMENT north of Church
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 3

LATITUDE 36.71522655
LONGITUDE -119.682138
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	5	1	6	3	**15**	15	1	3	2	**21**	**36**
1:00 AM	3	2	2	1	**8**	3	6	1	5	**15**	**23**
2:00 AM	0	2	1	4	**7**	5	6	0	0	**11**	**18**
3:00 AM	1	3	10	9	**23**	6	2	4	8	**20**	**43**
4:00 AM	10	6	12	14	**42**	6	9	14	16	**45**	**87**
5:00 AM	29	14	25	28	**96**	23	26	35	46	**130**	**226**
6:00 AM	22	29	37	35	**123**	31	49	49	59	**188**	**311**
7:00 AM	57	77	94	132	**360**	75	101	130	150	**456**	**816**
8:00 AM	116	114	105	43	**378**	120	105	48	35	**308**	**686**
9:00 AM	44	58	58	51	**211**	33	37	43	36	**149**	**360**
10:00 AM	41	50	39	37	**167**	35	35	49	44	**163**	**330**
11:00 AM	52	43	52	53	**200**	37	49	63	54	**203**	**403**
12:00 PM	57	76	68	60	**261**	69	65	56	72	**262**	**523**
1:00 PM	71	57	71	42	**241**	59	68	68	59	**254**	**495**
2:00 PM	61	68	70	98	**297**	68	74	80	104	**326**	**623**
3:00 PM	76	70	88	135	**369**	74	83	96	80	**333**	**702**
4:00 PM	115	85	111	111	**422**	78	84	73	90	**325**	**747**
5:00 PM	84	101	92	86	**363**	73	101	91	76	**341**	**704**
6:00 PM	80	70	46	42	**238**	67	69	57	53	**246**	**484**
7:00 PM	53	48	57	46	**204**	48	49	52	46	**195**	**399**
8:00 PM	48	45	40	44	**177**	50	54	44	53	**201**	**378**
9:00 PM	32	35	13	26	**106**	49	36	34	29	**148**	**254**
10:00 PM	17	19	17	18	**71**	32	25	22	24	**103**	**174**
11:00 PM	19	12	6	3	**40**	28	11	7	9	**55**	**95**
Total	**49.6%**				**4419**	**50.4%**				**4498**	
	8917										

AM%	**37.4%**	**AM Peak**	**961**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.85**
PM%	**62.6%**	**PM Peak**	**761**	**3:45 pm to 4:45 pm**	**PM P.H.F.**	**0.88**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

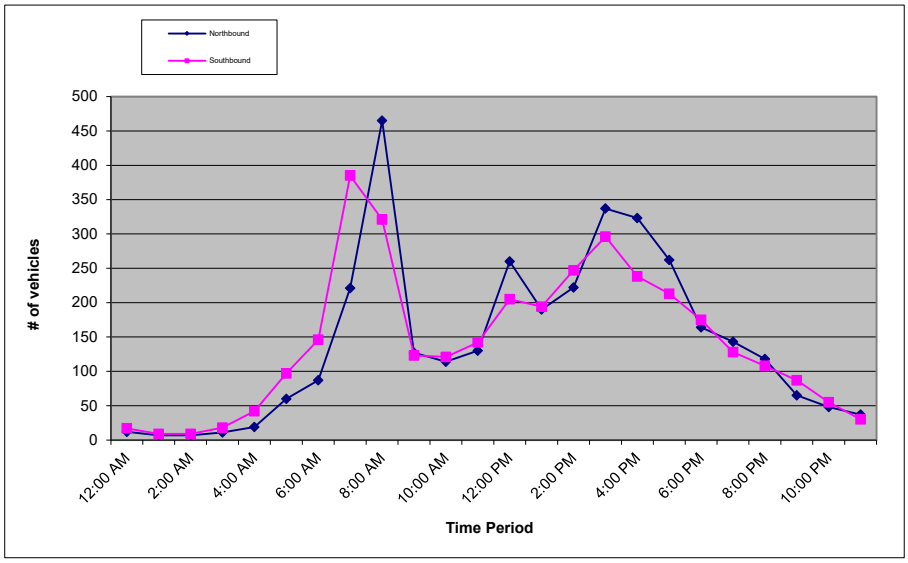
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Fowler Ave
SEGMENT south of Church
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 3

LATITUDE 36.71437648
LONGITUDE -119.6821341
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	4	1	5	2	**12**	13	0	3	1	**17**	**29**
1:00 AM	3	3	1	0	**7**	3	4	1	1	**9**	**16**
2:00 AM	0	2	1	4	**7**	5	4	0	0	**9**	**16**
3:00 AM	0	1	7	3	**11**	5	2	4	7	**18**	**29**
4:00 AM	5	4	2	8	**19**	5	9	13	15	**42**	**61**
5:00 AM	13	10	17	20	**60**	19	18	31	29	**97**	**157**
6:00 AM	14	17	23	33	**87**	22	33	44	47	**146**	**233**
7:00 AM	27	36	55	103	**221**	65	78	120	122	**385**	**606**
8:00 AM	142	177	109	37	**465**	128	118	45	30	**321**	**786**
9:00 AM	29	43	24	31	**127**	27	24	36	36	**123**	**250**
10:00 AM	27	32	24	31	**114**	22	33	35	31	**121**	**235**
11:00 AM	34	27	31	38	**130**	26	37	36	43	**142**	**272**
12:00 PM	42	76	89	53	**260**	47	46	53	59	**205**	**465**
1:00 PM	54	39	66	31	**190**	46	62	42	44	**194**	**384**
2:00 PM	36	52	57	77	**222**	57	51	69	70	**247**	**469**
3:00 PM	61	52	86	138	**337**	53	85	104	54	**296**	**633**
4:00 PM	86	60	82	95	**323**	52	56	60	70	**238**	**561**
5:00 PM	62	75	57	68	**262**	47	52	60	54	**213**	**475**
6:00 PM	60	48	40	16	**164**	54	61	39	21	**175**	**339**
7:00 PM	31	37	46	29	**143**	34	31	36	27	**128**	**271**
8:00 PM	30	31	23	34	**118**	26	27	30	25	**108**	**226**
9:00 PM	20	20	10	15	**65**	27	28	20	12	**87**	**152**
10:00 PM	14	7	14	13	**48**	20	10	14	11	**55**	**103**
11:00 PM	17	11	5	4	**37**	12	10	3	5	**30**	**67**
Total	**50.2%**				**3429**	**49.8%**				**3406**	
	6835										

AM%	**39.4%**	**AM Peak**	**965**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.82**
PM%	**60.6%**	**PM Peak**	**657**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.86**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

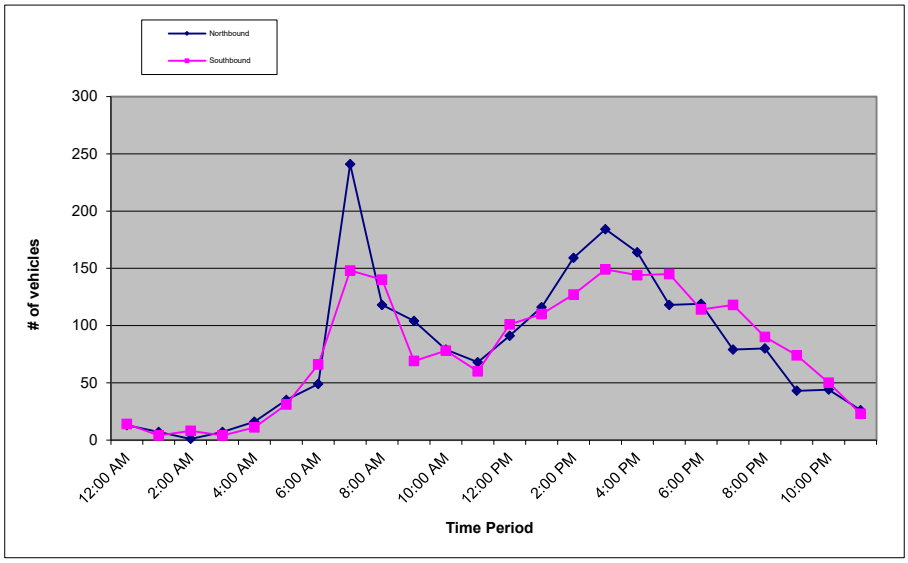
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Armstrong Ave
SEGMENT btwn Orleans/Hamilton
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 4

LATITUDE 36.72626366
LONGITUDE -119.6730269
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	5	2	3	3	**13**	2	6	3	3	**14**	**27**
1:00 AM	1	5	1	0	**7**	1	2	1	0	**4**	**11**
2:00 AM	0	1	0	0	**1**	2	3	1	2	**8**	**9**
3:00 AM	2	1	1	3	**7**	1	1	2	0	**4**	**11**
4:00 AM	2	6	3	5	**16**	3	2	5	1	**11**	**27**
5:00 AM	9	9	6	11	**35**	1	5	11	14	**31**	**66**
6:00 AM	6	6	17	20	**49**	11	17	17	21	**66**	**115**
7:00 AM	32	56	75	78	**241**	28	21	44	55	**148**	**389**
8:00 AM	36	29	32	21	**118**	55	44	25	16	**140**	**258**
9:00 AM	32	21	21	30	**104**	17	19	12	21	**69**	**173**
10:00 AM	20	18	12	29	**79**	27	11	25	15	**78**	**157**
11:00 AM	14	14	15	25	**68**	19	12	13	16	**60**	**128**
12:00 PM	18	19	25	29	**91**	16	21	29	35	**101**	**192**
1:00 PM	34	22	24	36	**116**	33	30	19	28	**110**	**226**
2:00 PM	23	36	66	34	**159**	23	26	33	45	**127**	**286**
3:00 PM	28	30	55	71	**184**	43	41	37	28	**149**	**333**
4:00 PM	52	34	42	36	**164**	38	38	38	30	**144**	**308**
5:00 PM	30	25	34	29	**118**	28	31	44	42	**145**	**263**
6:00 PM	32	36	27	24	**119**	36	25	29	24	**114**	**233**
7:00 PM	21	22	16	20	**79**	29	33	32	24	**118**	**197**
8:00 PM	27	13	21	19	**80**	26	23	23	18	**90**	**170**
9:00 PM	10	10	12	11	**43**	19	19	21	15	**74**	**117**
10:00 PM	13	10	14	7	**44**	18	11	7	14	**50**	**94**
11:00 PM	7	8	4	7	**26**	7	8	2	6	**23**	**49**
Total	**51.1%**				**1961**	**48.9%**				**1878**	
	3839										

AM%	**35.7%**	**AM Peak**	**420**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.79**
PM%	**64.3%**	**PM Peak**	**353**	**3:30 pm to 4:30 pm**	**PM P.H.F.**	**0.89**



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Hanford, CA 93230

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24 Hour Count Report

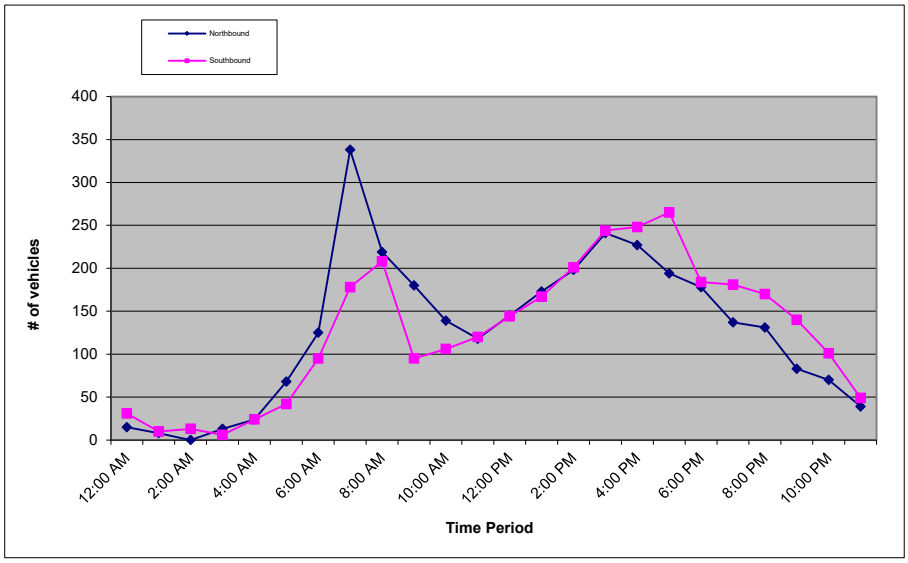
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Armstrong Ave
SEGMENT btwn Hamilton/Brayly
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 4

LATITUDE 36.72543865
LONGITUDE -119.6730847
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	7	4	1	3	**15**	9	11	4	7	**31**	**46**
1:00 AM	1	3	3	1	**8**	0	3	6	1	**10**	**18**
2:00 AM	0	0	0	0	**0**	4	1	4	4	**13**	**13**
3:00 AM	2	2	3	6	**13**	1	0	4	1	**6**	**19**
4:00 AM	2	6	7	9	**24**	5	5	10	4	**24**	**48**
5:00 AM	15	17	15	21	**68**	4	8	13	17	**42**	**110**
6:00 AM	19	20	44	42	**125**	15	21	28	31	**95**	**220**
7:00 AM	49	93	107	89	**338**	34	30	55	59	**178**	**516**
8:00 AM	70	61	50	38	**219**	77	67	40	24	**208**	**427**
9:00 AM	52	34	43	51	**180**	16	27	22	30	**95**	**275**
10:00 AM	41	34	18	46	**139**	27	20	40	19	**106**	**245**
11:00 AM	16	23	37	42	**118**	35	31	17	37	**120**	**238**
12:00 PM	34	27	33	51	**145**	28	29	45	42	**144**	**289**
1:00 PM	53	35	47	38	**173**	45	49	28	45	**167**	**340**
2:00 PM	30	46	73	49	**198**	38	47	45	71	**201**	**399**
3:00 PM	29	41	73	98	**241**	57	71	65	51	**244**	**485**
4:00 PM	76	39	57	55	**227**	68	68	66	46	**248**	**475**
5:00 PM	50	38	60	46	**194**	60	73	62	70	**265**	**459**
6:00 PM	53	48	36	41	**178**	49	46	41	48	**184**	**362**
7:00 PM	40	34	31	32	**137**	38	48	45	50	**181**	**318**
8:00 PM	30	35	34	32	**131**	43	46	42	39	**170**	**301**
9:00 PM	17	25	18	23	**83**	40	39	36	25	**140**	**223**
10:00 PM	24	15	21	10	**70**	26	21	18	36	**101**	**171**
11:00 PM	10	15	5	9	**39**	13	14	16	6	**49**	**88**
Total	**50.3%**				**3063**	**49.7%**				**3022**	
	6085										

AM%	**35.7%**	**AM Peak**	**585**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.90**
PM%	**64.3%**	**PM Peak**	**543**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.91**



Metro Traffic Data Inc.
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24 Hour Count Report

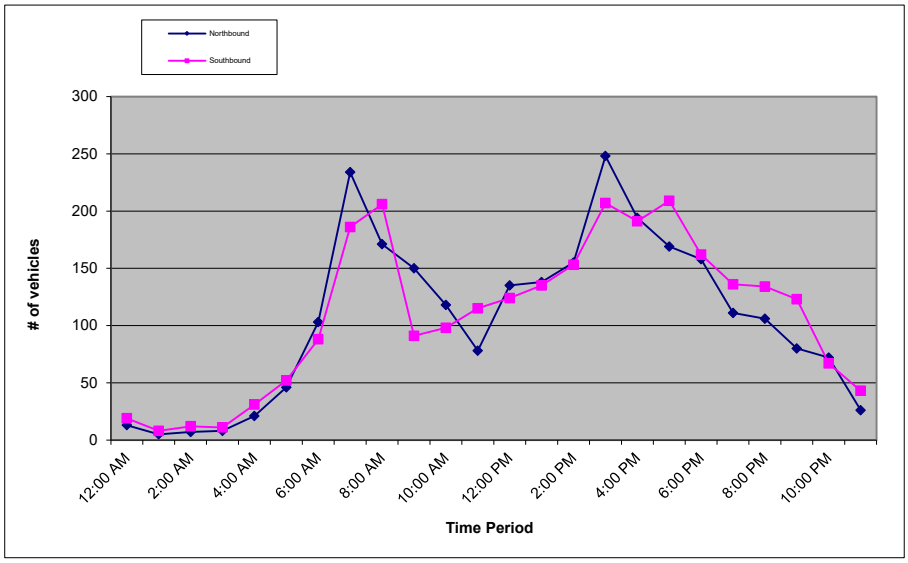
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Armstrong Ave
SEGMENT north of California
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 4

LATITUDE 36.72088857
LONGITUDE -119.6730689
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	6	2	1	4	**13**	6	8	1	4	**19**	**32**
1:00 AM	0	1	2	2	**5**	0	2	4	2	**8**	**13**
2:00 AM	0	0	1	6	**7**	4	1	2	5	**12**	**19**
3:00 AM	0	2	3	3	**8**	3	2	5	1	**11**	**19**
4:00 AM	1	4	6	10	**21**	6	7	13	5	**31**	**52**
5:00 AM	12	12	10	12	**46**	6	8	17	21	**52**	**98**
6:00 AM	17	15	32	39	**103**	10	19	33	26	**88**	**191**
7:00 AM	44	65	72	53	**234**	35	40	56	55	**186**	**420**
8:00 AM	63	25	42	41	**171**	83	69	36	18	**206**	**377**
9:00 AM	40	32	41	37	**150**	15	26	21	29	**91**	**241**
10:00 AM	31	34	18	35	**118**	26	23	31	18	**98**	**216**
11:00 AM	17	20	15	26	**78**	28	34	16	37	**115**	**193**
12:00 PM	32	26	37	40	**135**	23	30	43	28	**124**	**259**
1:00 PM	39	28	39	32	**138**	34	42	19	40	**135**	**273**
2:00 PM	23	36	58	38	**155**	30	42	32	49	**153**	**308**
3:00 PM	37	44	72	95	**248**	49	58	51	49	**207**	**455**
4:00 PM	56	39	53	46	**194**	48	50	54	39	**191**	**385**
5:00 PM	45	31	48	45	**169**	44	60	45	60	**209**	**378**
6:00 PM	43	44	40	31	**158**	40	45	38	39	**162**	**320**
7:00 PM	34	24	29	24	**111**	33	37	32	34	**136**	**247**
8:00 PM	24	29	30	23	**106**	40	32	34	28	**134**	**240**
9:00 PM	16	25	15	24	**80**	36	30	34	23	**123**	**203**
10:00 PM	23	19	20	10	**72**	16	17	13	21	**67**	**139**
11:00 PM	8	12	0	6	**26**	11	12	14	6	**43**	**69**
Total	**49.5%**				**2546**	**50.5%**				**2601**	
	5147										

AM%	**36.4%**	**AM Peak**	**487**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.83**
PM%	**63.6%**	**PM Peak**	**473**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.82**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

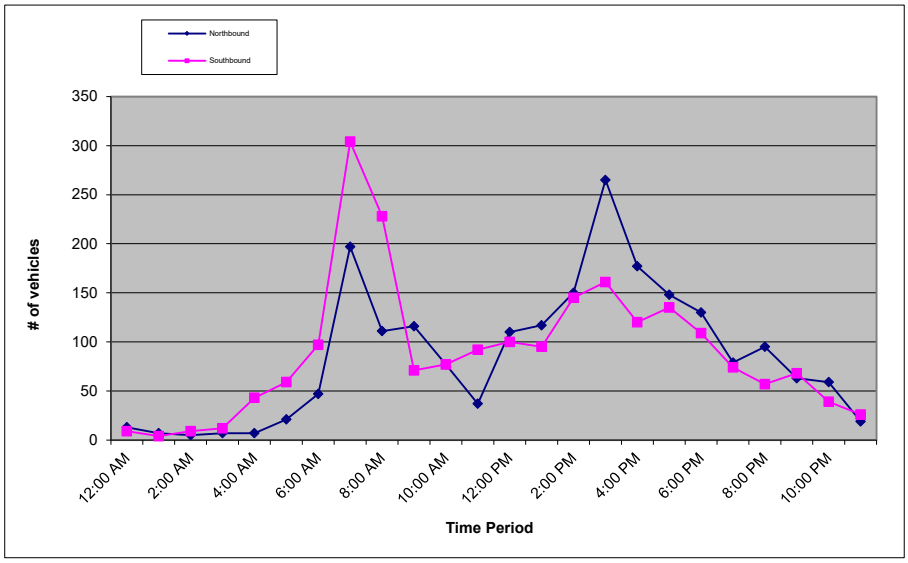
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Armstrong Ave
SEGMENT btwn California/Pitt
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 3

LATITUDE 36.71998284
LONGITUDE -119.6730604
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	5	4	1	3	**13**	3	6	0	0	**9**	**22**
1:00 AM	0	3	3	1	**7**	0	2	1	1	**4**	**11**
2:00 AM	0	0	1	4	**5**	3	1	1	4	**9**	**14**
3:00 AM	0	2	2	3	**7**	3	3	4	2	**12**	**19**
4:00 AM	0	1	2	4	**7**	8	10	15	10	**43**	**50**
5:00 AM	7	7	1	6	**21**	7	9	22	21	**59**	**80**
6:00 AM	5	8	12	22	**47**	15	20	36	26	**97**	**144**
7:00 AM	20	49	65	63	**197**	38	65	115	86	**304**	**501**
8:00 AM	38	16	32	25	**111**	92	78	35	23	**228**	**339**
9:00 AM	23	16	48	29	**116**	12	21	13	25	**71**	**187**
10:00 AM	18	25	13	21	**77**	21	18	24	14	**77**	**154**
11:00 AM	14	11	5	7	**37**	18	17	20	37	**92**	**129**
12:00 PM	28	19	39	24	**110**	12	23	44	21	**100**	**210**
1:00 PM	45	18	27	27	**117**	25	31	19	20	**95**	**212**
2:00 PM	15	26	77	32	**150**	34	39	30	42	**145**	**295**
3:00 PM	37	48	76	104	**265**	37	53	44	27	**161**	**426**
4:00 PM	55	40	48	34	**177**	26	31	32	31	**120**	**297**
5:00 PM	38	28	45	37	**148**	32	32	35	36	**135**	**283**
6:00 PM	32	37	40	21	**130**	32	30	22	25	**109**	**239**
7:00 PM	15	19	26	19	**79**	18	18	18	20	**74**	**153**
8:00 PM	22	28	19	26	**95**	18	12	19	8	**57**	**152**
9:00 PM	13	19	13	18	**63**	18	14	22	14	**68**	**131**
10:00 PM	13	17	18	11	**59**	11	7	4	17	**39**	**98**
11:00 PM	9	10	0	0	**19**	5	9	7	5	**26**	**45**
Total	**49.1%**				**2057**	**50.9%**				**2134**	
	4191										

AM%	**39.4%**	**AM Peak**	**573**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.80**
PM%	**60.6%**	**PM Peak**	**433**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.83**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

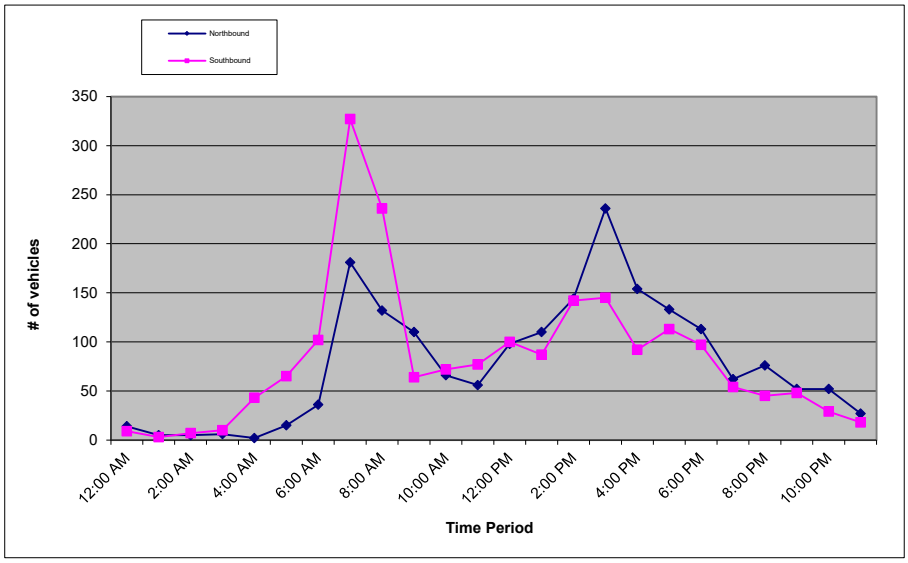
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Armstrong Ave
SEGMENT btwn Truman/Church
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 2

LATITUDE 36.71508797
LONGITUDE -119.6730874
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	5	5	1	3	**14**	3	6	0	0	**9**	**23**
1:00 AM	1	2	2	0	**5**	0	2	1	0	**3**	**8**
2:00 AM	0	0	1	4	**5**	1	2	1	3	**7**	**12**
3:00 AM	1	1	2	2	**6**	3	2	4	1	**10**	**16**
4:00 AM	0	0	1	1	**2**	8	11	13	11	**43**	**45**
5:00 AM	6	3	1	5	**15**	6	11	26	22	**65**	**80**
6:00 AM	1	6	13	16	**36**	15	22	39	26	**102**	**138**
7:00 AM	16	37	68	60	**181**	37	69	119	102	**327**	**508**
8:00 AM	34	48	28	22	**132**	88	93	32	23	**236**	**368**
9:00 AM	19	18	49	24	**110**	11	21	9	23	**64**	**174**
10:00 AM	17	16	16	17	**66**	23	12	20	17	**72**	**138**
11:00 AM	10	9	17	20	**56**	15	13	20	29	**77**	**133**
12:00 PM	19	22	36	21	**98**	11	26	42	21	**100**	**198**
1:00 PM	46	15	26	23	**110**	23	26	16	22	**87**	**197**
2:00 PM	11	27	73	33	**144**	30	40	30	42	**142**	**286**
3:00 PM	27	45	68	96	**236**	30	49	45	21	**145**	**381**
4:00 PM	53	28	42	31	**154**	19	25	22	26	**92**	**246**
5:00 PM	33	27	40	33	**133**	29	24	29	31	**113**	**246**
6:00 PM	28	34	34	17	**113**	28	30	24	15	**97**	**210**
7:00 PM	11	15	23	13	**62**	13	14	16	11	**54**	**116**
8:00 PM	19	20	12	25	**76**	14	9	16	6	**45**	**121**
9:00 PM	12	13	12	15	**52**	11	13	13	11	**48**	**100**
10:00 PM	7	16	20	9	**52**	6	5	5	13	**29**	**81**
11:00 PM	8	7	5	7	**27**	3	7	3	5	**18**	**45**
Total	**48.7%**				**1885**	**51.3%**				**1985**	
	3870										

AM%	**42.5%**	**AM Peak**	**612**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.82**
PM%	**57.5%**	**PM Peak**	**396**	**3:15 pm to 4:15 pm**	**PM P.H.F.**	**0.85**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

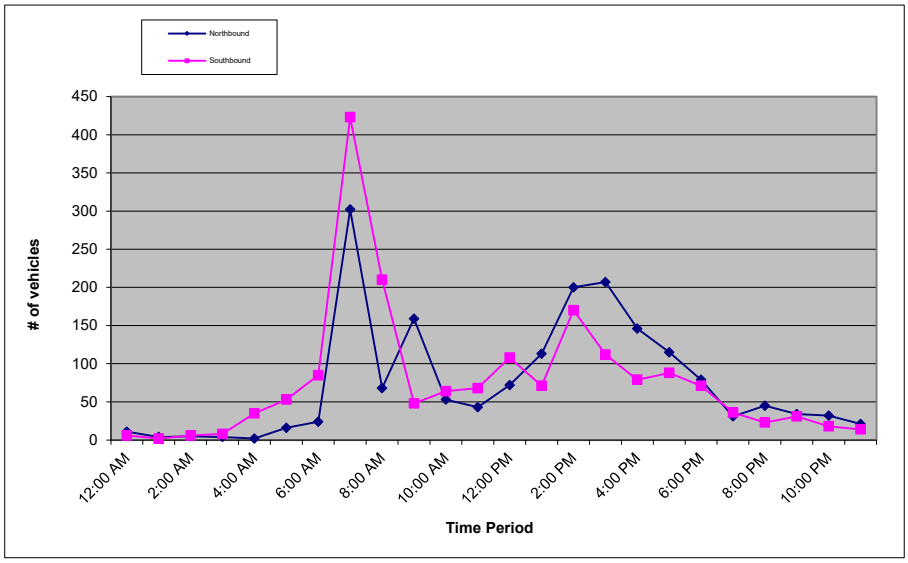
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Armstrong Ave
SEGMENT south of Church
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 2

LATITUDE 36.71453208
LONGITUDE -119.6730733
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	6	2	1	2	**11**	2	4	0	0	**6**	**17**
1:00 AM	1	1	2	0	**4**	0	1	1	0	**2**	**6**
2:00 AM	0	0	1	4	**5**	0	2	1	3	**6**	**11**
3:00 AM	1	0	2	1	**4**	2	1	4	1	**8**	**12**
4:00 AM	0	0	1	1	**2**	7	8	11	9	**35**	**37**
5:00 AM	5	3	1	7	**16**	4	11	18	20	**53**	**69**
6:00 AM	1	4	9	10	**24**	13	19	29	24	**85**	**109**
7:00 AM	6	56	115	125	**302**	44	109	155	115	**423**	**725**
8:00 AM	23	17	15	13	**68**	83	83	29	15	**210**	**278**
9:00 AM	21	32	81	25	**159**	10	14	8	16	**48**	**207**
10:00 AM	11	12	8	22	**53**	16	10	22	16	**64**	**117**
11:00 AM	8	6	8	21	**43**	13	12	17	26	**68**	**111**
12:00 PM	17	22	18	15	**72**	7	23	44	34	**108**	**180**
1:00 PM	42	33	18	20	**113**	19	16	13	23	**71**	**184**
2:00 PM	10	22	80	88	**200**	34	58	43	35	**170**	**370**
3:00 PM	38	46	51	72	**207**	23	32	40	17	**112**	**319**
4:00 PM	44	30	43	29	**146**	20	23	16	20	**79**	**225**
5:00 PM	26	28	31	30	**115**	20	21	26	21	**88**	**203**
6:00 PM	31	20	18	10	**79**	24	19	20	8	**71**	**150**
7:00 PM	5	10	10	6	**31**	10	10	10	6	**36**	**67**
8:00 PM	11	11	9	14	**45**	7	5	6	5	**23**	**68**
9:00 PM	10	8	5	11	**34**	6	7	9	9	**31**	**65**
10:00 PM	3	8	15	6	**32**	4	4	4	6	**18**	**50**
11:00 PM	4	6	5	6	**21**	2	6	1	5	**14**	**35**
Total	**49.4%**				**1786**	**50.6%**				**1829**	
	3615										

AM%	**47.0%**	**AM Peak**	**781**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.72**
PM%	**53.0%**	**PM Peak**	**387**	**2:15 pm to 3:15 pm**	**PM P.H.F.**	**0.79**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

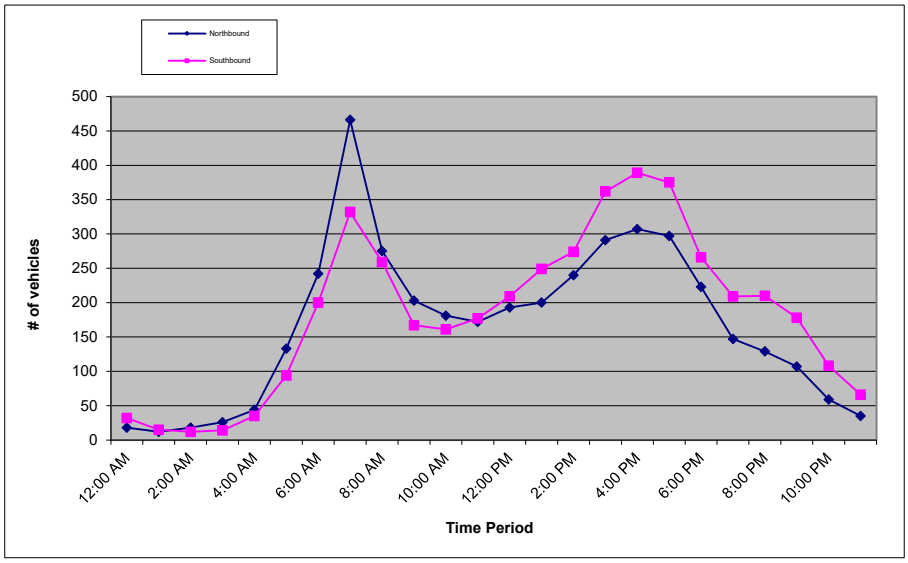
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Temperance Ave
SEGMENT north of Hamilton
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 4

LATITUDE 36.72631594
LONGITUDE -119.6643023
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	6	1	7	4	**18**	12	6	9	5	**32**	**50**
1:00 AM	2	3	2	5	**12**	3	2	5	5	**15**	**27**
2:00 AM	2	12	3	1	**18**	1	1	6	4	**12**	**30**
3:00 AM	2	8	6	10	**26**	1	3	7	3	**14**	**40**
4:00 AM	5	10	10	19	**44**	3	4	13	15	**35**	**79**
5:00 AM	16	29	33	55	**133**	15	20	23	36	**94**	**227**
6:00 AM	50	51	67	74	**242**	33	33	68	66	**200**	**442**
7:00 AM	100	132	135	99	**466**	65	102	78	87	**332**	**798**
8:00 AM	78	81	62	54	**275**	83	71	58	47	**259**	**534**
9:00 AM	56	41	61	45	**203**	35	56	46	30	**167**	**370**
10:00 AM	60	45	39	37	**181**	39	39	42	41	**161**	**342**
11:00 AM	40	35	53	44	**172**	53	44	35	45	**177**	**349**
12:00 PM	46	47	38	62	**193**	50	52	53	54	**209**	**402**
1:00 PM	52	48	52	48	**200**	53	84	59	53	**249**	**449**
2:00 PM	52	57	61	70	**240**	53	73	62	86	**274**	**514**
3:00 PM	66	70	71	84	**291**	79	89	99	95	**362**	**653**
4:00 PM	91	77	78	61	**307**	98	106	89	96	**389**	**696**
5:00 PM	77	71	80	69	**297**	102	109	82	82	**375**	**672**
6:00 PM	69	51	54	49	**223**	68	75	64	59	**266**	**489**
7:00 PM	48	34	33	32	**147**	54	58	50	47	**209**	**356**
8:00 PM	42	32	27	28	**129**	53	49	58	50	**210**	**339**
9:00 PM	24	26	28	29	**107**	51	49	49	29	**178**	**285**
10:00 PM	17	14	17	11	**59**	24	28	27	29	**108**	**167**
11:00 PM	7	15	9	4	**35**	19	13	24	10	**66**	**101**
Total	**47.8%**				**4018**	**52.2%**				**4393**	
	8411										

AM%	**39.1%**	**AM Peak**	**798**	**7:00 am to 8:00 am**	**AM P.H.F.**	**0.85**
PM%	**60.9%**	**PM Peak**	**721**	**3:30 pm to 4:30 pm**	**PM P.H.F.**	**0.95**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
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24 Hour Count Report

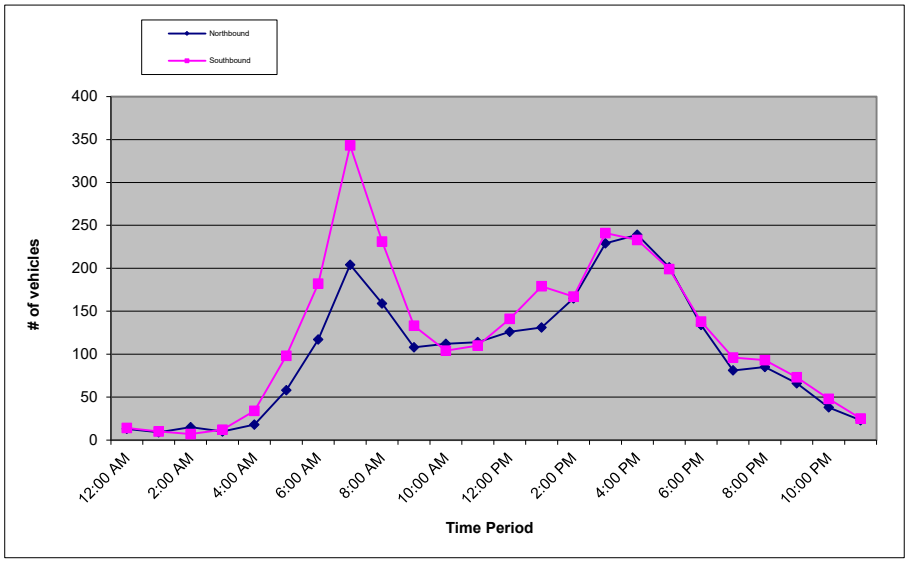
Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Temperance Ave
SEGMENT south of Hamilton
COLLECTION DATE Tuesday, June 4, 2024
NUMBER OF LANES 2

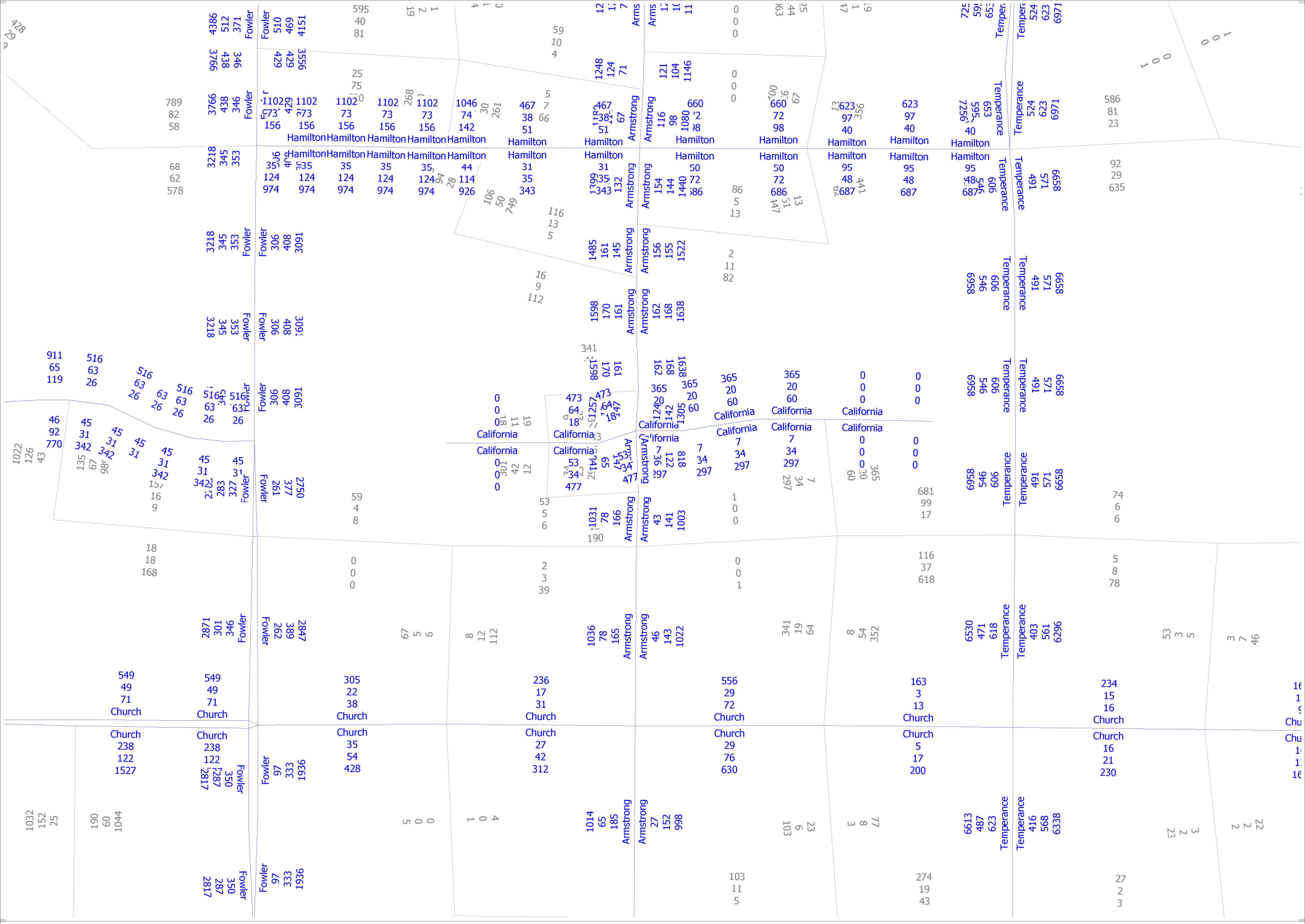
LATITUDE 36.72525888
LONGITUDE -119.6642151
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	5	1	3	4	**13**	7	3	3	1	**14**	**27**
1:00 AM	2	2	1	4	**9**	2	2	2	4	**10**	**19**
2:00 AM	2	11	2	0	**15**	2	0	3	2	**7**	**22**
3:00 AM	1	2	4	3	**10**	1	2	6	3	**12**	**22**
4:00 AM	1	1	3	13	**18**	3	4	10	17	**34**	**52**
5:00 AM	8	7	14	29	**58**	14	20	29	35	**98**	**156**
6:00 AM	31	27	29	30	**117**	23	35	63	61	**182**	**299**
7:00 AM	37	50	62	55	**204**	65	96	88	94	**343**	**547**
8:00 AM	39	44	44	32	**159**	84	60	48	39	**231**	**390**
9:00 AM	27	20	36	25	**108**	29	49	33	22	**133**	**241**
10:00 AM	36	22	26	28	**112**	26	29	26	23	**104**	**216**
11:00 AM	33	18	34	29	**114**	31	28	26	25	**110**	**224**
12:00 PM	40	27	29	30	**126**	33	36	32	40	**141**	**267**
1:00 PM	41	30	33	27	**131**	40	71	40	28	**179**	**310**
2:00 PM	37	41	40	47	**165**	32	45	41	49	**167**	**332**
3:00 PM	48	54	54	73	**229**	52	66	69	54	**241**	**470**
4:00 PM	72	58	64	45	**239**	62	67	43	61	**233**	**472**
5:00 PM	56	55	47	43	**201**	55	44	50	50	**199**	**400**
6:00 PM	45	31	34	24	**134**	35	38	34	31	**138**	**272**
7:00 PM	28	18	14	21	**81**	26	26	26	18	**96**	**177**
8:00 PM	29	18	18	20	**85**	25	20	29	19	**93**	**178**
9:00 PM	19	12	17	18	**66**	19	16	26	12	**73**	**139**
10:00 PM	13	7	10	8	**38**	13	10	16	9	**48**	**86**
11:00 PM	3	10	7	3	**23**	12	5	5	3	**25**	**48**
Total	**45.8%**				**2455**	**54.2%**				**2911**	
	5366										

AM%	**41.3%**	**AM Peak**	**568**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.95**
PM%	**58.7%**	**PM Peak**	**509**	**3:30 pm to 4:30 pm**	**PM P.H.F.**	**0.95**

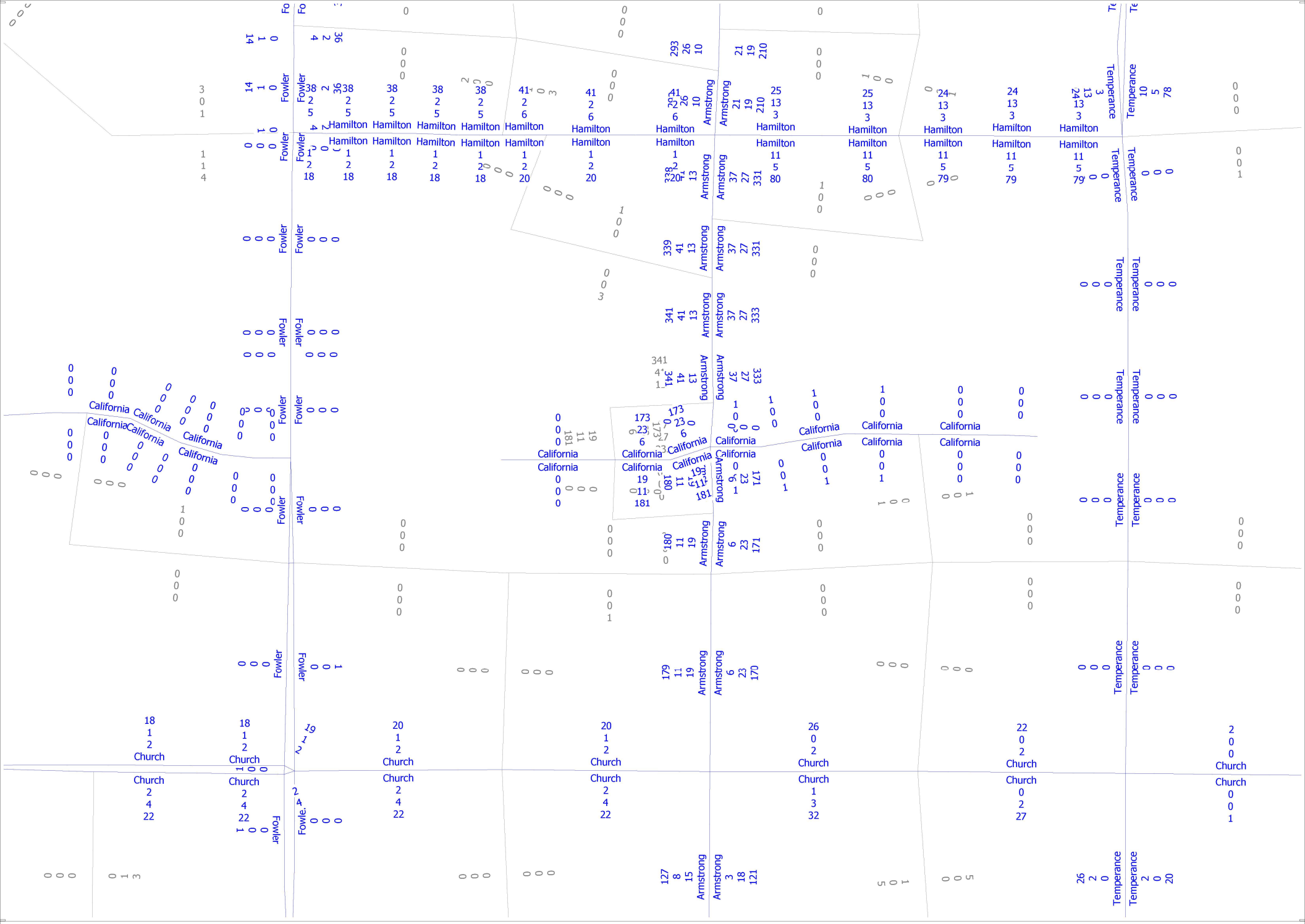


Appendix C: Traffic Modeling



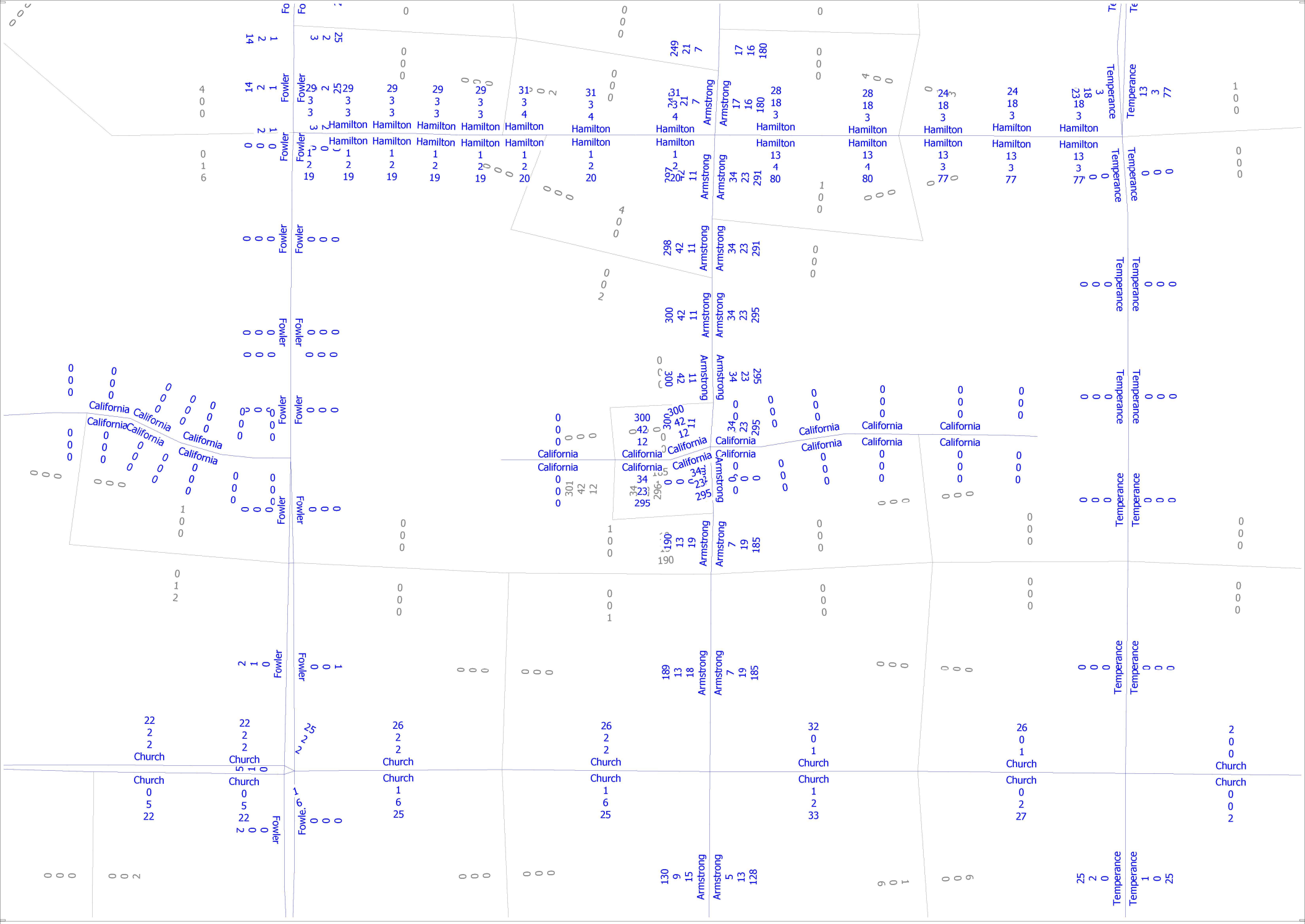
Simonian TIA
Base Year 2019 plus Project
AM, PM and Daily Volumes

cube
(Licensed to JLB Traffic Engineering, Inc)



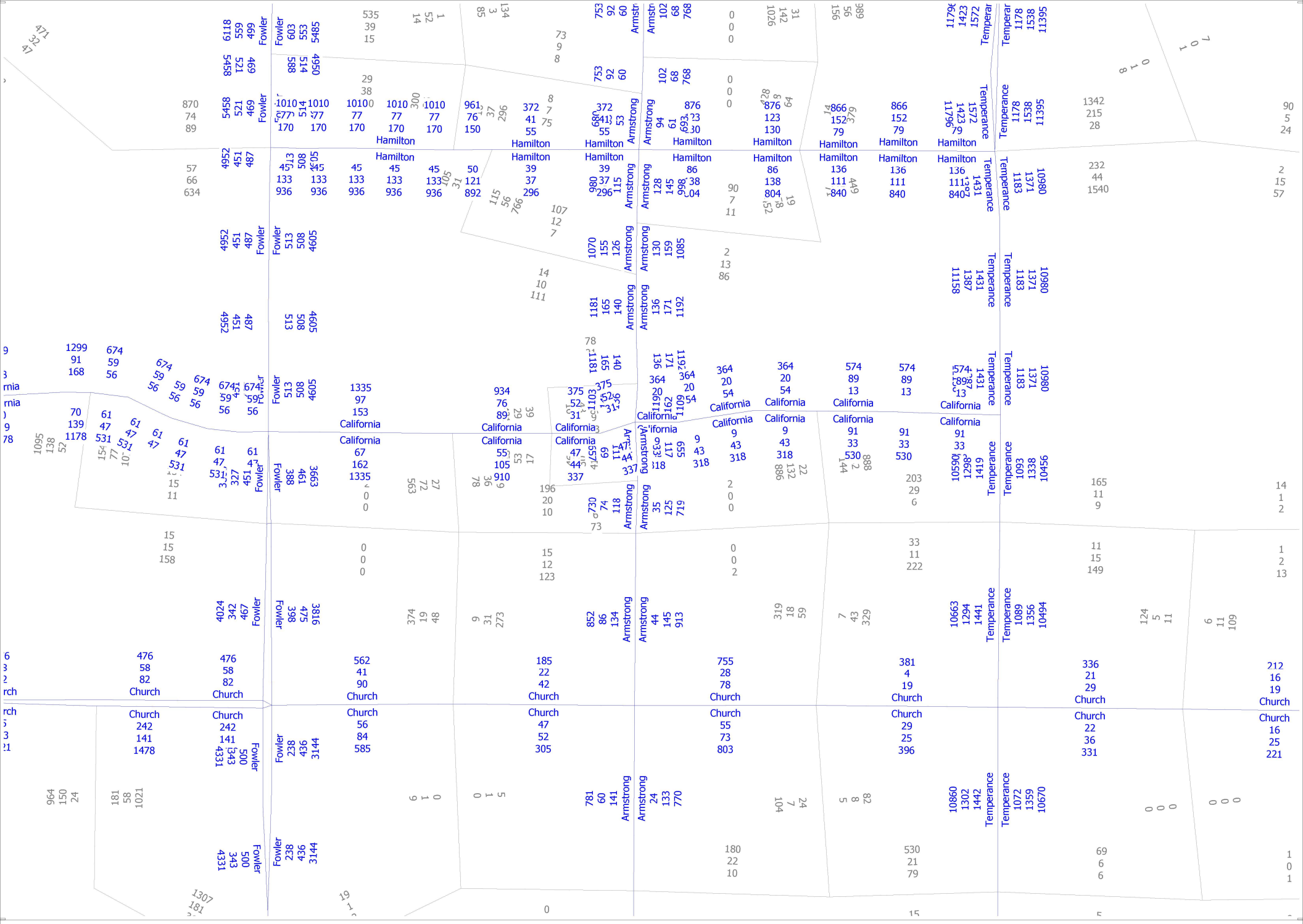
Simonian TIA
Base Year 2019 plus Project - Select Zone 1
AM, PM and Daily Volumes

cube
(Licensed to JLB Traffic Engineering, Inc)



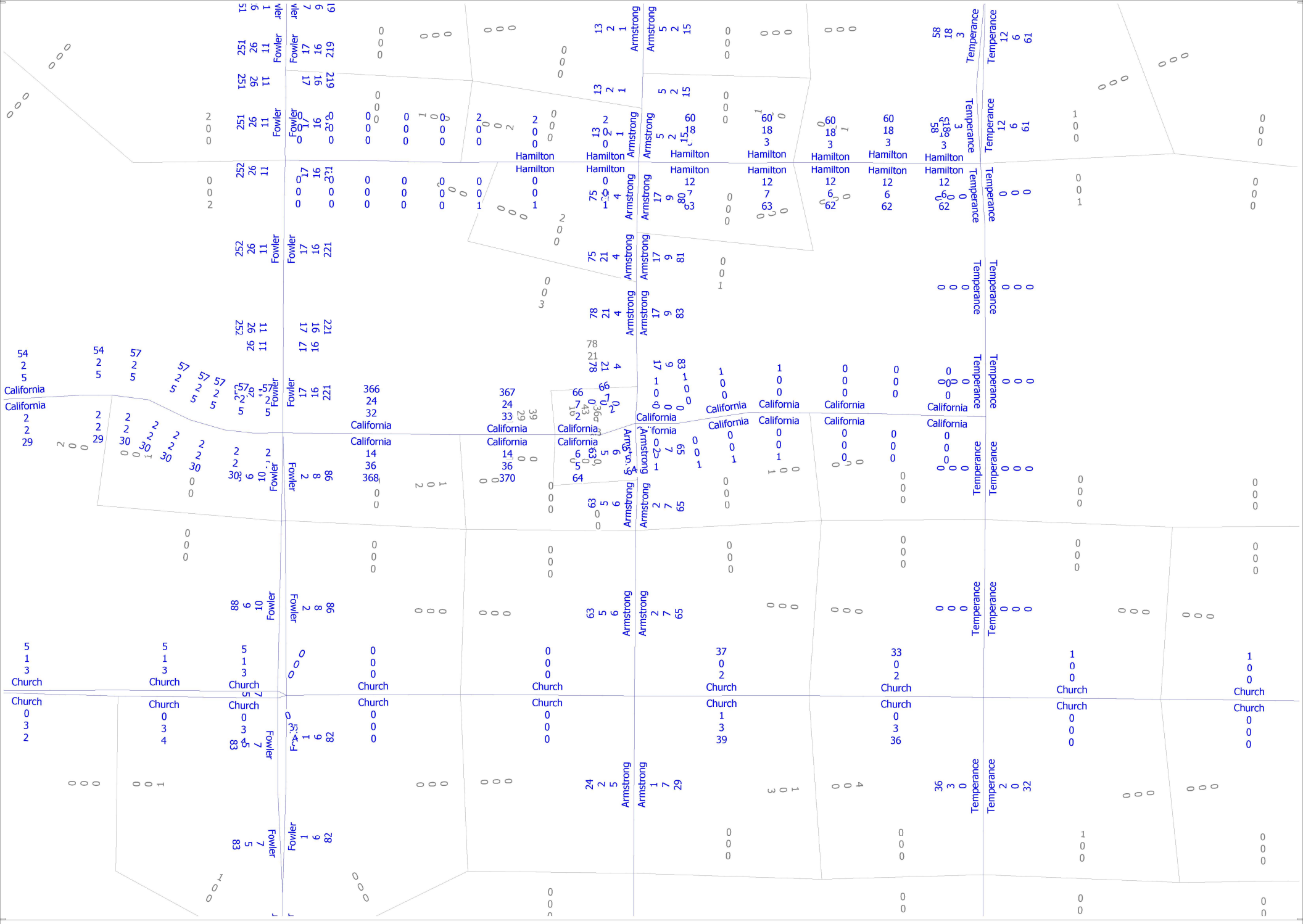
Simonian TIA
Base Year 2019 plus Project - Select Zone 2
AM, PM and Daily Volumes

cube
(Licensed to JLB Traffic Engineering, Inc)



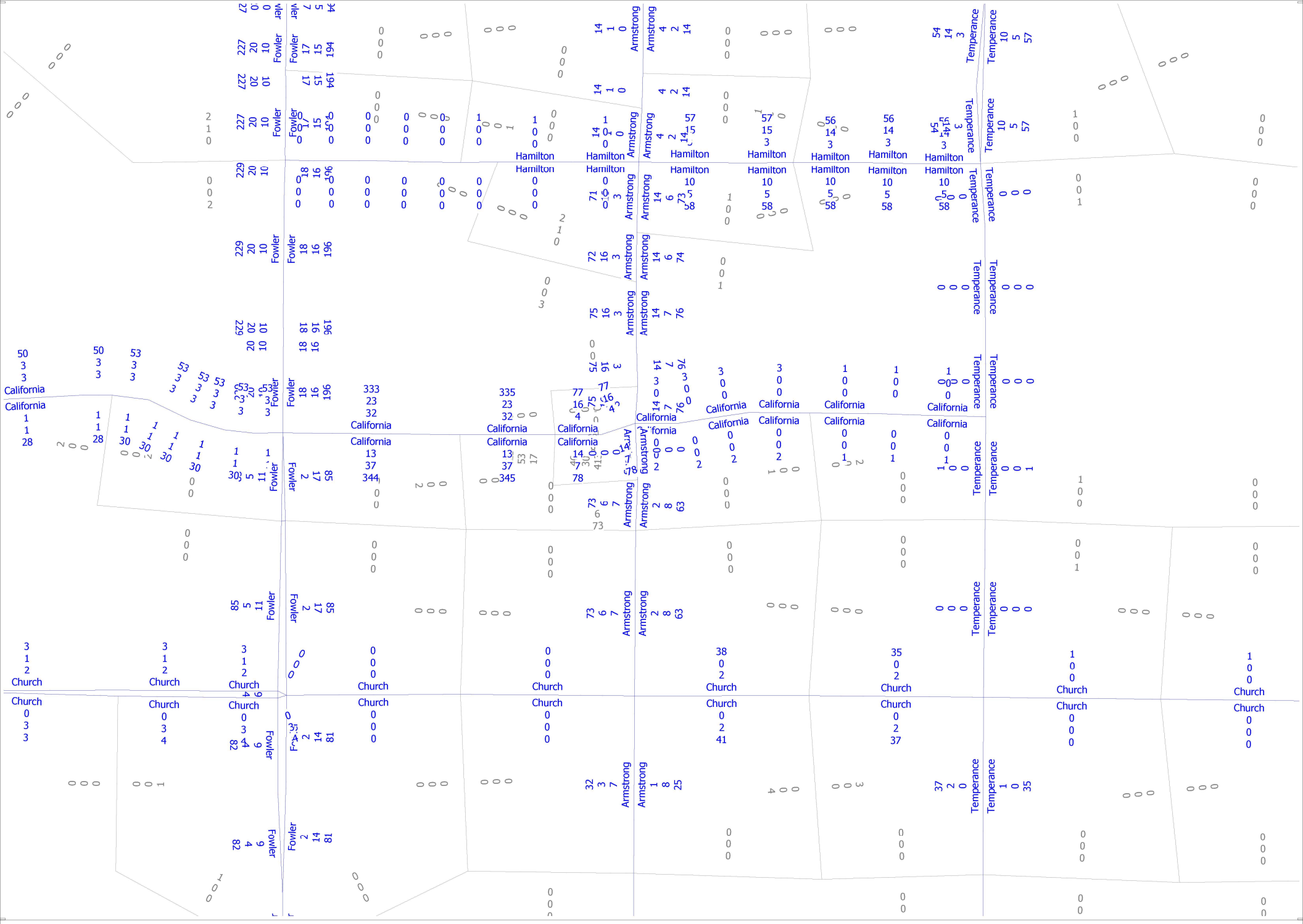
Simonian TIA
Cumulative Year 2046 plus Project
AM, PM and Daily Volumes

cube
(Licensed to JLB Traffic Engineering, Inc)



Simonian TIA
Cumulative Year 2046 plus Project - Select Zone 1
AM, PM and Daily Volumes

cube
(Licensed to JLB Traffic Engineering, Inc)



Simonian TIA
Cumulative Year 2046 plus Project - Select Zone 2
AM, PM and Daily Volumes

cube
(Licensed to JLB Traffic Engineering, Inc)

Appendix D: Methodology

Levels of Service Methodology

The description and procedures for calculating capacity and level of service (LOS) are found in the Transportation Research Board, Highway Capacity Manual (HCM). The HCM 7th Edition represents the research on capacity and quality of service for transportation facilities.

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. Level of service is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

Six levels of service are defined for each type of facility that has analysis procedures available. Letters designate each level of service (LOS), from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each LOS represents a range of operating conditions and the driver's perception of these conditions. Safety is not included in the measures that establish an LOS.

Intersection Levels of Service

One of the more important elements limiting and often interrupting the flow of traffic on a highway is the intersection. Flow on an interrupted facility is usually dominated by points of fixed operation such as traffic signals, stop signs and yield signs.

Signalized Intersections

LOS can be characterized for the entire intersection, each intersection approach and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a surrogate measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group. A description of LOS for signalized intersections is found in Table A-1.

Table 1: Signalized Intersection LOS Description (Motorized Vehicle Mode)

Level of Service	*Description*	*Average Control Delay (Seconds per Vehicle)*
A	Operations with a control delay of 10 seconds/vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is really low and either progression is exceptionally favorable or the cycle length is very short. If it's due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Operations with control delay between 10.1 to 20.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.	>10.0 to 20.0
C	Operations with average control delays between 20.1 to 35.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio no greater than 1.0, the progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 to 35
D	Operations with control delay between 35.1 to 55.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.	>35 to 55
E	Operations with control delay between 55.1 to 80.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable and the cycle length is long. Individual cycle failures are frequent.	>55 to 80
F	Operations with unacceptable control delay exceeding 80.0 seconds/vehicle and a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor and the cycle length is long. Most cycles fail to clear the queue.	>80

Note: Source: Highway Capacity Manual 7th Edition

All-Way Stop Controlled Intersections

All-way stop controlled intersections are common in the United States. They are characterized by having all approaches controlled by stop sign without any street having priority. Streets intersecting at all-way stop controlled intersections can be public or private. The intersection analysis boundaries for an all-way stop controlled intersection are assumed to be those of an isolated intersection, no upstream or downstream effects are accounted for in analysis.

Two-Way Stop Controlled Intersections

Two-way stop controlled (TWSC) intersections are also common in the United States. A typical configuration is a four-leg intersection in which one street, the major street, is uncontrolled and the other street, the minor street, is controlled by stop signs. The other typical intersection is a three-leg intersection in which a single minor street approach is controlled by a stop sign.

For the analysis of the motorized vehicle mode, the methodology addresses special circumstances that may exist at two-way stop controlled intersections including two-stage gap acceptance, approaches with shared lanes, the presence of upstream traffic signals and flared approaches for minor-street right-turning vehicles. Table A-2 provides a description of LOS at unsignalized intersections.

Table 2: Unsignalized Intersection LOS Description (Motorized Vehicle Mode)

Control Delay (Seconds per Vehicle)	***LOS by Volume-to-Capacity Ratio***	
	v/c ≤ 1.0	***v/c > 1.0***
≤10	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Note: Source: HCM 7th Edition, Exhibit 21-8.

Roundabout Controlled Intersections

Roundabouts are intersections with a generally circular shape, characterized by yield on entry and circulation around a central island. Roundabouts have been used successfully throughout the world and are being used increasingly in the United States, especially since 1990. Intersection analysis models generally fall into two categories: regression models and analytical models. Regression models use field data to develop statistically derived relationships between geometric features and performance measures such as capacity and delay. Analytical models are based on traffic flow theory combined with field measures of driver behavior, resulting in an analytical formulation of the relationship of driver behavior, resulting in an analytical formulation of the relationship between those field measures and performance measures such as capacity and delay. Table A-3 provides a description of LOS at roundabout intersections.

Table 3: Roundabout Intersection Level of Service Description (Automobile Mode)

Control Delay (Seconds per Vehicle)	***LOS by Volume-to-Capacity Ratio***	
	v/c ≤ 1.0	***v/c > 1.0***
≤10	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Note: Source: HCM 7th Edition, Exhibit 22-8.

Segment Levels of Service

Segments are portions of roads without any interruption of flow. These typically include basic freeway segments, multilane highway segments, freeway weaving segments, freeway merge and diverge segments, two-lane highway segments and urban street segments.

Urban Street Segments (Motorized Vehicle Mode)

The term "urban street segments" refers to two elements that are found: points and segments. A point is the boundary between links and is represented by an intersection or ramp terminal. A link is a length of roadway between two points. A link and its boundary are referred to as a segment. A signalized intersection is always used to define a boundary. Only intersections, or ramp terminals, in which the segment through volumes is uncontrolled can exist along the segment. A midsegment traffic control signal provided for the exclusive use of pedestrians should not be used to define a segment boundary. Chapter 18 of the Highway Capacity Manual categorizes each LOS as follows:

LOS A describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal. Travel speeds exceed 80 percent of the base free flow speed (FFS) and the volume-to-capacity ratio is no greater than 1.0.

LOS B describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67 and 80 percent of the base FFS and the volume-to-capacity ratio is no greater than 1.0.

LOS C describes stable operations. The ability to maneuver and change lanes in midblock location may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50 and 67 percent of the base FFS and the volume-to-capacity ratio is no greater than 1.0.

LOS D indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volumes or inappropriate signal timing at the boundary intersections. The travel speed is between 40 and 50 percent of the base FFS and the volume-to-capacity ratio is no greater than 1.0.

LOS E is characterized as an unstable operation and has significant delay. Such operations may be due to some combination of adverse progression, high volume and inappropriate signal timing at the boundary intersections. The travel speed is between 30 and 40 percent of the base FFS and the volume-to-capacity ratio is no greater than 1.0.

LOS F is characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30 percent or less of the base FFS or the volume-to-capacity ratio is greater than 1.0.

Urban Street Segments LOS

Two performance measures are used to characterize vehicular LOS for a given direction of travel along an urban street segment. One measure is travel speed for through vehicles. This speed reflects the factors that influence running time along the link and the delay uncured by through vehicles at the boundary intersections. The second measures Is the volume-to-capacity ratio for the through movements at the downstream boundary intersection. These performance measures indicate the degree of mobility provided by the segment. Table A-4 provides a description of LOS for Urban Street Segments.

Table 4: Urban Street Segment Levels of Service (Motorized Vehicle Mode)

LOS	***Travel Speed Threshold by Base Free-Flow Speed (miles/hour)***							***Volume-to-Capacity Ratio***
	55	**50**	**45**	**40**	**35**	**30**	**25**	
A	>44	>40	>36	>32	>28	>24	>20	≤ 1.0
B	>37	>34	>30	>27	>23	>20	>17	
C	>28	>25	>23	>20	>18	>15	>13	
D	>22	>20	>18	>16	>14	>12	>10	
E	>17	>15	>14	>12	>11	>9	>8	
F	≤17	≤15	≤14	≤12	≤11	≤9	≤8	
F	Any							> 1.0

Note: a = Volume-to-capacity ratio of through movement at downstream boundary intersection.
Source: Highway Capacity Manual 7th Edition, Exhibit 18-1.

Basic Freeway and Multilane Highway Segments

Segments of multilane highways and basic freeways outside the influence of merging maneuvers, diverging maneuvers, weaving maneuvers, or signalized intersections define LOS by density. Density describes a motorist's proximity to other vehicles and is related to a motorist's freedom to maneuver within the traffic stream. Chapter 12 of the Highway Capacity Manual categorizes each LOS as follows:

LOS A describes free-flow operations. FFS prevails on the freeway or multilane highway, and vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.

LOS B represents reasonably free-flow operations, and FFS on the freeway or multilane highway is maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents are still easily absorbed.

LOS C provides for flow with speeds near the FFS of the freeway or multilane highway. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service quality will be significant. Queues may be expected to form behind any significant blockages.

LOS D is the level at which speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited, and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.

LOS E describes operation at or near capacity. Operations on the freeway or multilane highway at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering from a ramp or an access point or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic stream. Toward the upper boundary of LOS E, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing. The physical and psychological comfort afforded to drivers is poor.

LOS F describes unstable flow. Such conditions exist within queues forming behind bottlenecks. Breakdowns occur for a number of reasons:

- Traffic incidents can temporarily reduce the capacity of a short segment so that the number of vehicles arriving at a point is greater than the number of vehicles that can move through it.
- Points of recurring congestion, such as merge or weaving segments and lane drops, experience very high demand in which the number of vehicles arriving is greater than the number of vehicles that can be discharged.
- In analyses using forecast volumes, the projected flow rate can exceed the estimated capacity of a given location.

Basic Freeway

Basic Freeway segments generally have four to eight lanes (in both directions) and posted speed limits between 50 and 75 mi/hr. The median type depends on right-of-way constraints and other factors. The performance measures include capacity, free flow speed, demand and volume-to-capacity ratio, space mean speed, average density and LOS. The following performance measures are evaluated for each segment: capacity, FFS, demand-to-capacity or volume-to-capacity ratios, space mean average, average density, travel time, vehicle miles traveled, vehicle hours of travel and vehicle hours of delay. Table A-5 provides a description of LOS for Basic Freeway Segments.

Multilane Highway

Multilane Highway segments generally have four to six lanes (in both directions) and posted speed limits between 40 and 55 mi/hr. These highways may be divided, undivided or divided by a two-way left-turn lane. The performance measures include capacity, free flow speed, demand and volume-to-capacity ratio, space mean speed, average density and LOS. The following performance measures are evaluated for each segment: capacity, FFS, demand-to-capacity or volume-to-capacity ratios, space mean average, average density, travel time, vehicle miles traveled, vehicle hours of travel and vehicle hours of delay. Table A-5 provides a description of LOS for Multilane Highway Segments.

Table 5: Basic Freeway and Multilane Highway Segment Level of Service Description

Level of Service	*Density (Passenger Cars per Mile per Lane)*	
	Urban	*Rural*
A	≤11	≤6
B	>11 to 18	>6 to 14
C	>18 to 26	>14 to 22
D	>26 to 35	>22 to 29
E	>35 to 45	>29 to 39
F	>45 or Demand Exceeds Capacity	>39 or Demand Exceeds Capacity

Note: Source: HCM 7th Edition, Exhibit 10-6.

Two-Lane Highway Segments

Two-Lane Highways generally have one lane per direction. The single lane in each direction may be supplemented with passing lanes, truck climbing lanes, turnouts or pullouts. If allowed, passing maneuvers are limited by the availability of gaps in the opposing traffic stream and by the availability of sufficient sight distance for a driver to discern the approach of an opposing vehicle safely. A principal measure of LOS is average speed, percent followers and follower density. Chapter 15 of the Highway Capacity Manual categorizes each LOS as follows:

At **LOS A**, motorists experience operating speeds near the posted speed limit and little difficulty in passing. Platooning is minimal and follower density is very low.

At **LOS B through LOS D,** represent gradations between the conditions for LOS A and LOS E.

At **LOS E**, speeds may still be reasonable, but platooning is significant and follower density is high. Passing, if allowed is essentially impossible.

LOS F exists whenever demand flow in one or both directions exceeds the segment's capacity. When demand exceeds capacity, it is expected that there will be a reduction in the capacity at the bottleneck.

Two-Lane Highway

The performance measures include average speed, FFS and follower density. The LOS output is calculated for an establish segment boundary that includes consistent terrain, lane widths, shoulder widths, facility classification and demand flow rate. Table A-6 provides a description of LOS for Two-Lane Highway Segments.

Table 6: Two-Lane Highway Segment Level of Service Description

LOS	*Follower Density (Followers per Mile per Lane)*	
	Higher-Speed Highways *Posted Speed Limit ≥ 50 miles per hour*	*Lower-Speed Highways* *Posted Speed Limit < 50 miles per hour*
A	≤2.0	≤2.5
B	>2.0 to 4.0	>2.5 to 5.0
C	>4.0 to 8.0	>5.0 to 10.0
D	>8.0 to 12.0	>10.0 to 15.0
E	>12.0	>15.0

Note: Source: HCM 7th Edition, Exhibit 15-6.

Appendix E: Collision Data

Primary Rd **CHURCH AVENUE** *Distance (ft)* **200.** *Direction* **W** *Secondary Rd* **9TH STREET** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **034** *Type* **3** *CalTrans* *Badge* **020193** *Collision Date* **20200529** *Time* **0045** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20200701**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	47	M	H	HNBD		UNS TURN	E	A	0100	BMW	2006	-	3	F	-	L	G
2	PRKD	998	-				PARKED	-	A	0100	HYUN	2006	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVENUE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ARMSTRONG** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **034** *Type* **3** *CalTrans* *Badge* **020095** *Collision Date* **20200826** *Time* **1900** *Day* **WED**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20200904**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	67	F	A	HNBD		LFT TURN	E	A	0100	HOND	2017	-	3	N	-	M	G
2	DRVR	26	M	O	HNBD		STOPPED	S	A	0100	TOYO	2012	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVENUE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **BRAWLEY** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **015** *Type* **3** *CalTrans* *Badge* **020078** *Collision Date* **20201017** *Time* **2118** *Day* **SAT**
Primary Collision Factor **STOP SGN|SIG** *Violation* **22450A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20201026**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	34	F	H	HNBD		PROC ST	W	A	0100	TOYO	2014	-	3	N	-	M	G
2	DRVR	53	M	H	HNBD		PROC ST	N	A	0800	DODGE	2013	-	3	N	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	POSSIBL	55	F	3	0	M	G

Primary Rd **CHURCH AVENUE** *Distance (ft)* **1220** *Direction* **E** *Secondary Rd* **BRAWLEY** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **015** *Type* **3** *CalTrans* *Badge* **020193** *Collision Date* **20201202** *Time* **1340** *Day* **WED**
Primary Collision Factor **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20201204**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	23	F	H	HNBD		LFT TURN	W	A	0100	TOYT	2018	-	3	N	-	M	G
2	DRVR	39	M	H	HNBD		PROC ST	E	A	0100	NISS	2005	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVENUE** *Distance (ft)* **475.** *Direction* **E** *Secondary Rd* **HUGHES AVENUE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **015** *Type* **3** *CalTrans* *Badge* **020095** *Collision Date* **20201115** *Time* **1039** *Day* **SUN**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20201123**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	74	M	H	HNBD		UNS TURN	E	D	2200	FORD	1990	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **BUTLER/ CEDAR** *Distance (ft)* **7.00** *Direction* **N** *Secondary Rd* **BUTLER** *NCIC* **1005** *State Hwy?* **Y** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00E** *Type* **0** *CalTrans* *Badge* **P1731** *Collision Date* **20211205** *Time* **1939** *Day* **SUN**
Primary Collision Factor **R-O-W PED** *Violation* **21950A** *Collision Type* **AUTO/PED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20220218**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PED** *Lighting* **DARK - ST** *Ped Action* **X-WLK AT** *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	21	M	H			LFT TURN	E	I	1199	-	2016	- 3	N		-	M K								
2	PED	66	F	H			PROC ST	N	N	6000	-		- -	N		-	- -	PED	SERIOUS	66	F	9	-	-	P

Primary Rd **BYRD AVE** *Distance (ft)* **60.0** *Direction* **W** *Secondary Rd* **CLARA AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00F** *Type* **0** *CalTrans* *Badge* **P1689** *Collision Date* **20211119** *Time* **1524** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HEAD-ON** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20211122**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	RGT TURN	W	A	0100	HYUND	2008	- -	N		-	- -								
2	PRKD	998	-				PARKED	-	A	0100	VOLKS	2006	- -	N		-	- -								

Primary Rd **CALAVERAS ST** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **CAMBRIDGE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **CENTR** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1402** *Collision Date* **20210413** *Time* **1556** *Day* **TUE**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152B** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20210419**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	68	M	B	HBD-UI		BACKING	-	A	0100	CHRYS	2006	- 3	A		N	M -								
2	DRVR	26	F	B	HNBD		PARKED	S	A	0100	KIA	2021	- 3	N		-	M G								

Primary Rd **CALAVERAS ST** *Distance (ft)* **338.** *Direction* **N** *Secondary Rd* **MCKENZIE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SW** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P1888** *Collision Date* **20211003** *Time* **2030** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20211011**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	M	H	IMP UNK	IMP UNK	PARKING	S	A	0100	FORD	2012	- 3	N		-	- -								
2	PRKD	998	-				PARKED	S	-	9900	TOYOT	2007	- 3	N		-	- -								
3	PRKD	998	-				PARKED	S	-	9900	FORD	1989	- 3	N		-	- -								

Primary Rd **CALIFORNIA AVE** *Distance (ft)* **45.0** *Direction* **E** *Secondary Rd* **ARMSTRONG AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1655** *Collision Date* **20210904** *Time* **1239** *Day* **SAT**
Primary Collision Factor **R-O-W AUTO** *Violation* **21801A** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20211004**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	34	F	O	HNBD		U-TURN	E	A	0100	-	2017	- 3	N		-	M G								

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Primary Rd **CHURCH AVE** *Distance (ft)* **25.0** *Direction* **E** *Secondary Rd* **FOWLER AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P2042** *Collision Date* **20210814** *Time* **1333** *Day* **SAT**
Primary Collision Factor **IMPROP TURN** *Violation* **22100B** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20210819**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	40	M	H	HNBD		LFT TURN	S	J	4800	CHEVR	2019	-	3	N	-	M	C

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **FRUIT AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00E** *Type* **0** *CalTrans* *Badge* **P1541** *Collision Date* **20211024** *Time* **0912** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20211028**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	24	M	H	HBD-UNK		PROC ST	N	A	0100	BMW	2002	-	-	N	-	L	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	24	M	1	0	L	-

Primary Rd **CHURCH AVE** *Distance (ft)* **125.** *Direction* **E** *Secondary Rd* **MANILA AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1387** *Collision Date* **20210617** *Time* **0956** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20210624**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	55	F	H	HNBD		PROC ST	E	D	2200	CHEVR	2007	-	3	N	-	M	G
2	DRVR	39	M	A	HNBD		PARKED	E	D	2200	FORD	2017	-	3	N	-	M	H

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **30.0** *Direction* **E** *Secondary Rd* **MAPLE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00F** *Type* **0** *CalTrans* *Badge* **P1452** *Collision Date* **20210606** *Time* **1400** *Day* **SUN**
Primary Collision Factor **OTHER IMPROP DRV** *Violation* *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20211028**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	39	F	H	HNBD		PROC ST	E	I	1900	NEWFL	2006	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **24.0** *Direction* **W** *Secondary Rd* **MAPLE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* *Type* **0** *CalTrans* *Badge* **P1213** *Collision Date* **20210722** *Time* **2140** *Day* **THU**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20210806**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	26	M	H	HBD-UI		LFT TURN	W	D	2200	CHEVR	2002	-	-	A	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	POSSIBL	41	M	3	0	M	-

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Primary Rd **E HAMILTON AVE** *Distance (ft)* **360.** *Direction* **E** *Secondary Rd* **CHANCE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **CE** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1879** *Collision Date* **20211015** *Time* **0810** *Day* **FRI**
Primary Collision Factor **OTHER IMPROP DRV** *Violation* *Collision Type* **AUTO/PED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20211108**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PED** *Lighting* **DAYLIGHT** *Ped Action* **NOT IN RD** *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	85	F	W	IMP UNK	IMP UNK	PROC ST	N	A	0100	LEXUS	2018	-	3	F	-	M -								
2	PED	49	M	B	HNBD		STOPPED	S	N	6000	-		-	3	N	-	- -	PED	POSSIBL	49	M	9	-	-	-

Primary Rd **E HAMILTON AVE** *Distance (ft)* **12.0** *Direction* **E** *Secondary Rd* **S FOWLER AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1781** *Collision Date* **20210716** *Time* **1730** *Day* **FRI**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20210830**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	20	M	H	HBD-UI		LFT TURN	S	A	0100	NISSA	2014	-	-	A	-	M G								

Primary Rd **E HERNDON AVE** *Distance (ft)* **180.** *Direction* **E** *Secondary Rd* **N BLACKSTONE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **NE** *Beat* **00C** *Type* **0** *CalTrans* *Badge* **P1979** *Collision Date* **20210528** *Time* **0238** *Day* **FRI**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20211011**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		HBD-UNK		PROC ST	E	A	0100	HONDA	2008	-	-	N	-	L -								

Primary Rd **E HERNDON AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **N CHESTNUT AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **NORTH** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P958** *Collision Date* **20211011** *Time* **1033** *Day* **MON**
Primary Collision Factor **STOP SGN|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20211020**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	48	F	W	HNBD		PROC ST	E	A	0100	TOYOT	2015	-	3	N	-	L G	DRVR	POSSIBL	48	F	1	0	L	G
2	DRVR	51	F	H	HNBD		LFT TURN	N	A	0100	ACURA	2019	-	3	N	-	L G								

Primary Rd **E HERNDON AVE** *Distance (ft)* **300.** *Direction* **E** *Secondary Rd* **N FIRST ST** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **NORTH** *Beat* **00C** *Type* **0** *CalTrans* *Badge* **P1514** *Collision Date* **20210302** *Time* **1352** *Day* **TUE**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20210413**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	42	M	W	HBD-NUI		PROC ST	E	A	0100	HYUND	2004	-	3	F	-	M G								
2	DRVR	62	F	W	HBD-NUI		SLOWING	E	A	0100	KIA	2016	-	3	G	-	M G	DRVR	POSSIBL	63	F	1	0	M	G
3	DRVR	19	M	H	HBD-NUI		SLOWING	E	A	0100	CHEVR	2005	-	3	G	-	M G								
4	DRVR	43	F	H				E	A	0100	MERCE	2015	-	-	-	-	M G								

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Primary Rd **H ST** *Distance (ft)* **40.0** *Direction* **S** *Secondary Rd* **VENTURA ST** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SW** *Beat* *Type* **0** *CalTrans* *Badge* **P1949** *Collision Date* **20210814** *Time* **2313** *Day* **SAT**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20210830**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	M	A	HBD-UNK		RAN OFF RD	N	A	0100	HONDA	2013	-	3	A	-	M	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HAMILTON AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ARMSTRONG AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **S/E** *Beat* *Type* **0** *CalTrans* *Badge* **P1748** *Collision Date* **20211026** *Time* **1712** *Day* **TUE**
Primary Collision Factor **STOP SGN|SIG** *Violation* **22450** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20211129**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	25	F	O	HNBD		PROC ST	W	A	0100	HONDA	2005	-	3	N	-	M	G
2	DRVR	35	F	O	HNBD		LFT TURN	N	A	0100	TOYOT	2016	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	25	F	1	0	M	G

Primary Rd **HAMILTON AVE** *Distance (ft)* **945.** *Direction* **W** *Secondary Rd* **MAPLE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00E** *Type* **0** *CalTrans* *Badge* **P1322** *Collision Date* **20210504** *Time* **1639** *Day* **TUE**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20210526**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	18	F	H	HBD-UNK		LFT TURN	W	A	0100	NISSA	2019	-	3	N	-	M	G
2	DRVR	48	F	W	HNBD		PROC ST	E	A	0100	HYUND	2019	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HAMILTON AVE** *Distance (ft)* **50.0** *Direction* **E** *Secondary Rd* **ORANGE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00E** *Type* **0** *CalTrans* *Badge* **P1737** *Collision Date* **20211019** *Time* **0600** *Day* **TUE**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20211103**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	68	F	H			PROC ST	W	A	0100	CHEVR	1996	-	3	N	-	M	C
2	PRKD	998	-				PARKED	-	A	0100	HONDA	2012	-	-	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HAMPTON WAY** *Distance (ft)* **45.0** *Direction* **E** *Secondary Rd* **EFFIE ST** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **P1601** *Collision Date* **20210506** *Time* **0700** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20210517**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		HNBD		LFT TURN	E	A	0700	GMC	2017	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **ANNADALE AVE** *Distance (ft)* **308.** *Direction* **W** *Secondary Rd* **TUPMAN ST** *NCIC* **1005** *State Hwy?* **Y** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SW** *Beat* **00F** *Type* **0** *CalTrans* *Badge* **P1709** *Collision Date* **20220925** *Time* **0610** *Day* **SUN**
Primary Collision Factor **WRONG SIDE** *Violation* **21651B** *Collision Type* **HEAD-ON** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20220927**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	M	H	IMP UNK	IMP UNK	PROC ST	E	A	0100	CHEVR	2011	-	-	N	-	- -
2	PRKD	998	-				PARKED	W	A	0100	HONDA	2007	-	-	N	-	- -
3	PRKD	998	-				PARKED	W	A	0100	FORD	2001	-	-	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **ANTIOCH AVE** *Distance (ft)* **300.** *Direction* **S** *Secondary Rd* **SPRUCE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **NW** *Beat* **05A** *Type* **0** *CalTrans* *Badge* **P2117** *Collision Date* **20220919** *Time* **1344** *Day* **MON**
Primary Collision Factor **NOT STATED** *Violation* *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20220921**
Weather1 **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	53	F	O	HNBD		PROC ST	N	A	0100	AUDI	2018	-	3	N	-	L G
2	PRKD	998	-				PARKED	S	A	0100	MERCE	2000	-	-	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	POSSIBL	72	F	3	0	L	G

Primary Rd **ARMSTRONG AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **CALIFORNIA AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1765** *Collision Date* **20220117** *Time* **1725** *Day* **MON**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **3** *Tow Away?* **Y** *Process Date* **20220125**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	29	F	W	HNBD		LFT TURN	E	A	0100	FORD	2018	-	3	N	-	L G
2	DRVR	74	M	O	HNBD		PROC ST	N	A	0100	KIA	2010	-	3	N	-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	74	M	1	0	L	G
PASS	POSSIBL	52	M	3	0	L	G
PASS	SERIOUS	22	M	6	0	L	G

Primary Rd **ARMSTRONG AVE** *Distance (ft)* **180.** *Direction* **N** *Secondary Rd* **FANCHER CREEK** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* *Type* **0** *CalTrans* *Badge* **P1574** *Collision Date* **20220114** *Time* **1110** *Day* **FRI**
Primary Collision Factor **LANE CHANGE** *Violation* **21658A** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220119**
Weather1 **FOG** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	26	M	H	HNBD		PROC ST	S	D	2200	TOYOT	2021	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **ARMSTRONG AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **FLORADORA AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **3** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P1264** *Collision Date* **20220429** *Time* **1248** *Day* **FRI**
Primary Collision Factor **STOP SGN|SIG** *Violation* **22450A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20220503**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	53	F	A			PROC ST	E	D	2200	TOYOT	2000	-	3	N	-	M G
2	DRVR	35	M	O			PROC ST	S	D	2200	FORD	2019	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	53	F	1	0	M	G

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Primary Rd **FOURTH ST** *Distance (ft)* **300.** *Direction* **N** *Secondary Rd* **WHITE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **C226** *Collision Date* **20220402** *Time* **2359** *Day* **SAT**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220411**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	OTHER	-	A	0100	AUDI	2008	-	3	N		-	-
2	PRKD	998	-				PARKED	-	A	0700	NISSA	2004	-	-	N		-	-
3	OTHR	45	F	H			OTHER	-	-	9900	-		-	3	N		-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FOWLER AVE** *Distance (ft)* **20.0** *Direction* **S** *Secondary Rd* **BELMONT AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P1625** *Collision Date* **20220319** *Time* **1816** *Day* **SAT**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152B** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20220420**
Weather1 **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	21	M	A	HBD-UI		PROC ST	N	A	0100	ACURA	2003	-	3	N		-	M	G
2	DRVR	49	M	H	HNBD		STOPPED	N	A	0100	HYUND	2020	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FOWLER AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **CHURCH AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* **G / 30** *Type* **0** *CalTrans* *Badge* **P1298** *Collision Date* **20220613** *Time* **1521** *Day* **MON**
Primary Collision Factor **STOP SGN|SIG** *Violation* **22450A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20220616**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	24	M	W	HNBD		PROC ST	S	D	2200	CHEVR	2000	-	1	A		-	M	G
2	DRVR	47	M	B	HNBD		PROC ST	W	A	0100	GMC	1994	-	3	N		-	P	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FOWLER AVE** *Distance (ft)* **2265** *Direction* **S** *Secondary Rd* **CLINTON AVE** *NCIC* **1005** *State Hwy?* **Y** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P1754** *Collision Date* **20220609** *Time* **2145** *Day* **THU**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **5** *Tow Away?* **Y** *Process Date* **20220615**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	33	M	O	HBD-UI		PROC ST	S	A	0100	HONDA	2017	-	3	N		-	L	G
2	DRVR	50	M	H	HNBD		PROC ST	N	A	0100	TOYOT	2007	-	3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	33	M	1	0	L	G
DRVR	MINOR	50	M	1	0	L	G
PASS	MINOR	53	F	3	0	L	G
PASS	MINOR	21	F	4	0	N	D
PASS	MINOR	25	M	6	0	N	C

Primary Rd **FOWLER AVE** *Distance (ft)* **28.0** *Direction* **S** *Secondary Rd* **CLINTON AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **3** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P1264** *Collision Date* **20221019** *Time* **1423** *Day* **WED**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20221021**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		HBD-UNK		PROC ST	N	A	0100	JAGUA	2020	-	3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **H ST** *Distance (ft)* **348.** *Direction* **S** *Secondary Rd* **E FRANKLIN AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SW** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P2095** *Collision Date* **20221205** *Time* **2346** *Day* **MON**
Primary Collision Factor **LANE CHANGE** *Violation* **21658A** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20221219**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	64	F	O			PROC ST	N	A	0100	TOYOT	2019	-	N		-	L	G
2	PRKD	998	-				PARKED	N	F	2100	WALK	2017	-	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	64	F	1	0	L	G

Primary Rd **H ST** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **FRESNO ST** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SW** *Beat* **00D** *Type* **0** *CalTrans* *Badge* **P2117** *Collision Date* **20221223** *Time* **0320** *Day* **FRI**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **FATAL** *#Killed* **1** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20221226**
Weather1 **FOG** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	M	B	IMP UNK	IMP UNK	RAN OFF RD	S	A	0100	KIA	2020	-	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	KILLED	998	-	1	0	L	G

Primary Rd **H ST** *Distance (ft)* **78.0** *Direction* **N** *Secondary Rd* **PALM AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **BAKER** *Type* **0** *CalTrans* *Badge* **P2052** *Collision Date* **20220320** *Time* **0500** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20220822**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	-	A	0100	CHRYS	2005	-	3	A	-	L	-
2	DRVR	26	F	W			PROC ST	S	A	0100	DODGE	2011	-	3	N	-	M	C

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HAMILTON AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ARMSTRONG AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* **03G** *Type* **0** *CalTrans* *Badge* **P2055** *Collision Date* **20221202** *Time* **1714** *Day* **FRI**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20230105**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	41	M	H	HBD-UI		PROC ST	N	A	0100	HONDA	1999	-	3	A	-	-	-
2	DRVR	30	M	O	HNBD		LFT TURN	S	A	0700	TESLA	2022	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HAMILTON AVE** *Distance (ft)* **100.** *Direction* **W** *Secondary Rd* **CHANCE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **C226** *Collision Date* **20220513** *Time* **2000** *Day* **FRI**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220530**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	W	A	0100	HONDA	2005	-	3	N	-	-	-
2	PRKD	998	-				PARKED	-	A	0100	NISSA	2012	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **HAMILTON AVE** *Distance (ft)* **300.** *Direction* **W** *Secondary Rd* **CHANCE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* *Type* **0** *CalTrans* *Badge* **P1748** *Collision Date* **20221101** *Time* **1750** *Day* **TUE**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20221117**
Weather1 **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	50	M	W	HBD-UI		UNS TURN	E	A	0100	FORD	2015	-	3	N	-	M	G
2	PRKD	998	-				PARKED	E	A	0100	SATUR	2003	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HAMILTON AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **DOUGLAS AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* *Type* **0** *CalTrans* *Badge* **P1757** *Collision Date* **20220429** *Time* **1725** *Day* **FRI**
Primary Collision Factor **R-O-W AUTO** *Violation* **21801A** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20220503**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	28	F	H	HNBD		LFT TURN	W	A	0100	LINCO	2017	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	28	F	1	0	M	G

[redacted]

Primary Rd **HAMPTON WAY** *Distance (ft)* **45.0** *Direction* **W** *Secondary Rd* **COLLEGE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **CE** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P1980** *Collision Date* **20220212** *Time* **0558** *Day* **SAT**
Primary Collision Factor **UNKNOWN** *Violation* **20002A** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220214**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	-	A	0100	CHEVR	2016	-	-	A	-	-	-
2	PRKD	998	-				PARKED	-	A	0100	HYUND	2011	-	-	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HAMPTON WAY** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **COLLEGE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **CE** *Beat* **00B** *Type* **0** *CalTrans* *Badge* **P2054** *Collision Date* **20220516** *Time* **0856** *Day* **MON**
Primary Collision Factor **STOP SGN|SIG** *Violation* **22450A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20221101**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	57	F	H	HNBD		PROC ST	W	A	0100	FORD	2017	-	3	N	-	M	G
2F	DRVR	51	F	W	HNBD		PROC ST	N	A	0100	KIA	2015	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	58	F	1	0	M	G

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Primary Rd **S CHESTNUT AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **E BUTLER AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **2862** *Beat* **03F** *Type* **0** *CalTrans* *Badge* **P733** *Collision Date* **20220224** *Time* **1945** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20220325**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	M	B	IMP UNK	IMP UNK	PROC ST	N	A	0100	CHEVR	2007	-	-	A	N	-	-
2	DRVR	31	F	H	HNBD		STOPPED	N	A	0100	GMC	2021	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **S FOWLER** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **E PITT** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P684** *Collision Date* **20221022** *Time* **1442** *Day* **SAT**
Primary Collision Factor **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **3** *Tow Away?* **Y** *Process Date* **20221024**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	28	M	H	HNBD		LFT TURN	E	A	0100	TOYOT	2016	-	3	L	N	L	G
2	DRVR	32	F	H	HNBD		PROC ST	S	A	0100	KIA	2018	-	3	N	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	28	M	1	0	L	G
DRVR	POSSIBL	32	F	1	0	L	G
PASS	POSSIBL	34	M	2	0	L	G

Primary Rd **S FOWLER AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **E CHURCH AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **03G** *Type* **0** *CalTrans* *Badge* **C242** *Collision Date* **20220916** *Time* **1550** *Day* **FRI**
Primary Collision Factor **R-O-W PED** *Violation* **21950A** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20230123**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **FELONY** *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	M	H			PROC ST	E	-	9900	TOYOT		-	-	O	-	-	-
2	BICY	14	M	H	HBD-NUI		SLOWING	N	L	0400	-		-	-	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
BICY	MINOR	14	M	9	0	-	-

Primary Rd **S LILY AVE** *Distance (ft)* **50.0** *Direction* **S** *Secondary Rd* **E REVEREND** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* *Beat* **0SW** *Type* **0** *CalTrans* *Badge* **P2067** *Collision Date* **20220611** *Time* **1807** *Day* **SAT**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20221125**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	M	H			PROC ST	N	-	9900	-		-	-	A	-	-	-
2	PRKD	998	-				PARKED	-	A	0100	CADIL	2017	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **S PEACH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **E OLIVE AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* **00D** *Type* **0** *CalTrans* *Badge* **P1916** *Collision Date* **20220706** *Time* **1901** *Day* **WED**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20230519**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	44	M	H	IMP UNK	IMP UNK	PROC ST	N	A	0100	FORD	2012	-	3	A	-	M	-
2	DRVR	33	M	A	IMP UNK	IMP UNK	STOPPED	N	A	0100	SUBAR	2013	-	3	N	-	M	G
3	DRVR	39	F		IMP UNK	IMP UNK	STOPPED	N	A	0100	HONDA	2013	-	3	N	-	M	G
4	DRVR	62	M	B	IMP UNK	IMP UNK	STOPPED	N	A	0100	HYUND	2013	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd SR-180 Distance(ft) 500 Direction W Secondary Rd CLOVIS AVENUE NCIC 9435 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
City FRESNO County FRESNO Population 7 Rpt Dist Beat 183 Type 1 CalTrans Dist Badge 018746 Crash Date 20230208 Time 0810 Day WED
Primary Crash Factor UNSAFE SPEED Violation 22350 Crash Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20230215
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int
Latitude 36.75297 Longitude 119.70275 Local Rpt # 9435-2023-00489 Case ID 91995482

PARTY INFO / VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip	Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	44	F	A	HNBD		PROC ST	W	A	0700	TOYT	2004	- 3	N	-	M G							
2	DRVR	40	F	H	HNBD		PROC ST	W	A	0700	KIA	2021	- 3	N	-	M G							

Primary Rd CHESTNUT AVE Distance(ft) 325 Direction S Secondary Rd LANE AVE NCIC 1005 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City FRESNO County FRESNO Population 7 Rpt Dist Beat Type CalTrans Dist Badge P959 Crash Date 20230208 Time 0905 Day WED
Primary Crash Factor UNSAFE SPEED Violation 22350 Crash Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20230209
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run MISDEMEANOR Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int
Latitude 36.73218 Longitude 119.73635 Local Rpt # 2302080357 Case ID 81990358

PARTY INFO / VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip	Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	N	A	0700	GMC	2003	- 3	N	-	- -							
2	DRVR	30	F	B	HNBD		STOPPED	N	I	1900	GILLI	2012	- 3	N	-	P G							

Primary Rd CHURCH AVE Distance(ft) I Direction Secondary Rd FOWLER AVE NCIC 1005 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City FRESNO County FRESNO Population 7 Rpt Dist 3 Beat Type CalTrans Dist Badge P1601 Crash Date 20230208 Time 1249 Day WED
Primary Crash Factor STOP SGN|SIG Violation 22450A Crash Type BROADSIDE Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20230210
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int
Latitude 36.71360 Longitude 119.68357 Local Rpt # 2302080650 Case ID 81991286

PARTY INFO / VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip	Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	16	M	H	HNBD		PROC ST	E	A	0100	LEXUS	2006	- 3	A 0	-	M G	DRVR	MINOR	16	M	1	M G	0
2	DRVR	31	F	H	HNBD		LFT TURN	W	I	1100	FORD	2020	- 3	N	-	L G							

Primary Rd H ST | Distance(ft) I | Direction | Secondary Rd SACRAMENTO ST | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City FRESNO | County FRESNO | Population 7 | Rpt Dist SOUTH | Beat 00D | Type | CalTrans Dist | Badge P1461 | Crash Date 20230318 | Time 1218 | Day SAT
Primary Crash Factor IMPROP TURN | Violation 22107 | Crash Type BROADSIDE | Severity INJURY | # Killed 0 | # Injured 2 | Tow Away? Y | Process Date 20230412
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Veh Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int
Latitude 36.74146 | Longitude 119.80196 | Local Rpt # 2303180512 | Case ID 82030153

PARTY INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	66	F	W	HNBD		PROC ST	N	A	0100	HONDA	1994	-	-	N	-	L G
2F	DRVR	22	F	O	HNBD		U-TURN	N	A	0100	BMW	2020	-	-	A 0	-	M G

VICTIM INFO

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
DRVR	SERIOUS	66	F	1	L G	0
PASS	MINOR	8	F	6	M G	0

Primary Rd SR-41 N/B | Distance(ft) 528 | Direction S | Secondary Rd SHAW AVE | NCIC 9435 | State Hwy? Y | Route | Postmile Prefix | Postmile | Side of Hwy
City FRESNO | County FRESNO | Population 7 | Rpt Dist | Beat 410 | Type 1 | CalTrans Dist | Badge 019263 | Crash Date 20230318 | Time 1355 | Day SAT
Primary Crash Factor UNSAFE SPEED | Violation 22350 | Crash Type REAR END | Severity PDO | # Killed 0 | # Injured 0 | Tow Away? N | Process Date 20230322
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run MISDEMEANOR | Motor Veh Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int
Latitude 36.79041 | Longitude 119.78418 | Local Rpt # 9435-2023-01028 | Case ID 92025605

PARTY INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	20	M	H	HNBD		PROC ST	N	D	2200	TOYT	1998	-	3	A 22350	-	M G
2F	DRVR	68	F	H	HNBD		SLOWING	N	A	0700	DODG	2011	-	3	N	-	M G
3	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	N	A	0100	UNK		-	4	N	-	- -

VICTIM INFO

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected

Primary Rd HAMILTON AVE | Distance(ft) I | Direction | Secondary Rd FOWLER AVE (N) | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City FRESNO | County FRESNO | Population 7 | Rpt Dist SOUTH | Beat 03G | Type | CalTrans Dist | Badge P2169 | Crash Date 20230318 | Time 1554 | Day SAT
Primary Crash Factor DRVR ALC|DRG | Violation 23152A | Crash Type BROADSIDE | Severity INJURY | # Killed 0 | # Injured 1 | Tow Away? Y | Process Date 20230412
Weather1 CLOUDY | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Veh Involved With MV ON OTHER RD | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int
Latitude 36.72587 | Longitude 119.68228 | Local Rpt # 2303180693_DUPLICATE | Case ID 82043512

PARTY INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	34	M	A	HBD-UI		RGT TURN	N	D	2200	TOYOT	2022	-	-	A 0	N	L -
2	DRVR	31	M	H	HNBD		STOPPED	W	A	0100	JEEP	2023	-	3	N	-	L C

VICTIM INFO

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
DRVR	MINOR	31	F	9	- C	0

Primary Rd **E CALIFORNIA &** Distance(ft) **70** Direction **N** Secondary Rd **FRESNO ST** NCIC **1005** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **FRESNO** County **FRESNO** Population **7** Rpt Dist **SW** Beat **01F** Type CalTrans Dist Badge **P2108** Crash Date **20230628** Time **2100** Day **WED**
Primary Crash Factor **IMPROP TURN** Violation **22107** Crash Type **AUTO/PED** Severity **PDO** # Killed **0** # Injured **0** Tow Away? **N** Process Date **20231018**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Veh Involved With **PED** Lighting **DARK - NO ST LTS** Ped Action **X-WLK AT IS** Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int
Latitude **36.72147** Longitude **119.81239** Local Rpt # **2306281219** Case ID **82201852**

PARTY INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip
1F	DRVR	56	M	H	HNBD		LFT TURN	N	A	0100	FORD	2007	- 3	A 0	E	M G
2	PED	35	M	H	HBD-		PROC ST	E	N	6000	-		- 3	N	-	- -

VICTIM INFO

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected

Primary Rd **FOWLER AVE** Distance(ft) **38** Direction **N** Secondary Rd **CHURCH AVE** NCIC **1005** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **FRESNO** County **FRESNO** Population **7** Rpt Dist **SOUTH** Beat **00G** Type CalTrans Dist Badge **P2031** Crash Date **20230628** Time **2343** Day **WED**
Primary Crash Factor **DRVR ALC|DRG** Violation **23152B** Crash Type **HIT OBJECT** Severity **PDO** # Killed **0** # Injured **0** Tow Away? **Y** Process Date **20230728**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Veh Involved With **FIXED OBJ** Lighting **DARK - ST LTS** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int
Latitude **36.71493** Longitude **119.68224** Local Rpt # **2306281481** Case ID **82130300**

PARTY INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip
1F	DRVR	30	F	H	HBD-UI		LFT TURN	N	A	0100	TOYOT	2018	- 3	N	-	L G

VICTIM INFO

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected

Primary Rd **SR-99 S/B** Distance(ft) **1000** Direction **S** Secondary Rd **MCKELVEY AVE** NCIC **9435** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **FRESNO** County **FRESNO** Population **7** Rpt Dist Beat **105** Type **1** CalTrans Dist Badge **019263** Crash Date **20230629** Time **0745** Day **THU**
Primary Crash Factor **LANE CHANGE** Violation **21658A** Crash Type **SIDESWIPE** Severity **PDO** # Killed **0** # Injured **0** Tow Away? **N** Process Date **20230630**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Veh Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int
Latitude **36.76201** Longitude **119.83274** Local Rpt # **9435-2023-02427** Case ID **92107240**

PARTY INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip
1F	DRVR	43	M	H	HNBD		CHANG LN	N	A	0100	NISS	2010	- 3	N	-	M G
2	DRVR	59	M	H	HNBD		PROC ST	N	E	2235	FORD	2000	- 3	N	-	M G

VICTIM INFO

Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected

Primary Rd ARMSTRONG AVE | Distance(ft) I | Direction | Secondary Rd HAMILTON AVE | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City FRESNO | County FRESNO | Population 7 | Rpt Dist SOUTH | Beat 03G | Type | CalTrans Dist | Badge P2218 | Crash Date 20230702 | Time 1212 | Day SUN
Primary Crash Factor R-O-W AUTO | Violation 21801A | Crash Type HEAD-ON | Severity PDO | # Killed 0 | # Injured 0 | Tow Away? Y | Process Date 20230717
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Veh Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int
Latitude 36.72457 | Longitude 119.67443 | Local Rpt # 2307020523 | Case ID 82118268

PARTY INFO / VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip	Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1	DRVR	71	M	O	HNBD		PROC ST	S	A	0100	TOYOT	2019	- 3	N	-	L G							
2F	DRVR	17	M	A	HNBD		LFT TURN	N	A	0100	HONDA	2009	- 3	N	-	L G							

Primary Rd BELMONT AVE | Distance(ft) I | Direction | Secondary Rd EFFIE ST | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City FRESNO | County FRESNO | Population 7 | Rpt Dist SW | Beat 01B | Type | CalTrans Dist | Badge C252 | Crash Date 20230702 | Time 1316 | Day SUN
Primary Crash Factor UNKNOWN | Violation 20002A | Crash Type REAR END | Severity PDO | # Killed 0 | # Injured 0 | Tow Away? N | Process Date 20230717
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run MISDEMEANOR | Motor Veh Involved With PKD MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int
Latitude 36.75038 | Longitude 119.78811 | Local Rpt # 2307020575 | Case ID 82118269

PARTY INFO / VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip	Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1	DRVR	998	-				PROC ST	-	-	9900	TOYOT	2014	- 3	A 0	F	- -							
2	PRKD	998	-				PARKED	-	-	9900	NISSA	2023	- 3	M	N	- -							

Primary Rd FIRST ST | Distance(ft) 198 | Direction S | Secondary Rd MCKINLEY AVE | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City FRESNO | County FRESNO | Population 7 | Rpt Dist SOUTH | Beat 2358 | Type | CalTrans Dist | Badge P1735 | Crash Date 20230702 | Time 1555 | Day SUN
Primary Crash Factor PED VIOL | Violation 21954A | Crash Type AUTO/PED | Severity INJURY | # Killed 0 | # Injured 1 | Tow Away? N | Process Date 20230728
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Veh Involved With PED | Lighting DAYLIGHT | Ped Action NOT IN X-WLK | Cntrl Dev FNCTNG | Loc Type | Ramp/Int
Latitude 36.76510 | Longitude 119.77243 | Local Rpt # 2307020729 | Case ID 82130311

PARTY INFO / VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Crash	Dir	SW Veh	Chp Veh	Make	Year	Sp Info	OAF1 Viol	OAF2	Safety Equip	Role	Ext Of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	PED	63	M	H	HNBD		OTHER	E	N	6000	-	-	3	N	-	- -	PED	POSSIBLE	63	M	9	- P	-
2	DRVR	19	M	H	HNBD		PROC ST	N	A	0100	HONDA	2009	- 3	N	-	M G							

Primary Rd **CHURCH AV** *Distance (ft)* **182.** *Direction* **E** *Secondary Rd* **HOLT AV** *NCIC* **1013** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Sanger** *County* **Fresno** *Population* **3** *Rpt Dist* **M120** *Beat* **001** *Type* **0** *CalTrans* *Badge* **M164** *Collision Date* **20190806** *Time* **2203** *Day* **TUE**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* *Process Date* **20191120**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	18	M	W	HNBD		RAN OFF RD	W	F	2600	FORD	2003	-	1	F	-	M G
2	PRKD	998	-				PARKED	-	I	1100	FORD	2011	-	3	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AV** *Distance (ft)* **226.** *Direction* **E** *Secondary Rd* **INDIANOLA** *NCIC* **1013** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Sanger** *County* **Fresno** *Population* **3** *Rpt Dist* **M130** *Beat* **001** *Type* **0** *CalTrans* *Badge* **M041** *Collision Date* **20190815** *Time* **1436** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20191115**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	50	M	A	IMP UNK	IMP UNK	PROC ST	E	A	0100	NISSA	2015	-	3	N	-	M G
2	DRVR	43	F	H	HNBD		STOPPED	E	A	0100	HONDA	2015	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **420.** *Direction* **W** *Secondary Rd* **9TH ST** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **034** *Type* **3** *CalTrans* *Badge* **021230** *Collision Date* **20191006** *Time* **1815** *Day* **SUN**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20191016**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	38	F	H	HBD-UI		UNS TURN	E	A	0100	FORD	2015	-	3	A	22107	- L G
2	PRKD	998	-				PARKED	E	A	0700	CHEVY	1997	-	3	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ARMSTRONG AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **034** *Type* **3** *CalTrans* *Badge* **020450** *Collision Date* **20190115** *Time* **2212** *Day* **TUE**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20190124**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	26	M	H	HNBD		STOPPED	W	A	0100	INFI	2003	-	3	N	-	M G
2F	DRVR	28	M	H	HNBD		PROC ST	W	A	0100	AUDI	2012	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ARMSTRONG AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **034** *Type* **3** *CalTrans* *Badge* **020122** *Collision Date* **20190626** *Time* **1603** *Day* **WED**
Primary Collision Factor **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **3** *Tow Away?* **Y** *Process Date* **20190703**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	33	F	A	HNBD		PROC ST	E	A	0800	DODG	1998	-	3	N	-	M G
2	DRVR	20	M	B	HNBD		PROC ST	N	A	0100	KIA	2010	-	3	N	-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	33	F	1	0	M	G
DRVR	POSSIBL	20	M	1	0	L	G
PASS	MINOR	18	M	6	0	L	G

This report is accepted subject to the Terms of Use. Due to collision records processing backlogs, SWITRS data is typically seven months behind. Data requested for dates seven months prior to the current date will be incomplete.

Primary Rd **CHURCH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ARMSTRONG AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **034** *Type* **3** *CalTrans* *Badge* **020095** *Collision Date* **20190924** *Time* **1800** *Day* **TUE**
Primary Collision Factor **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20191004**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **HOLES** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	62	F	O	HNBD		PROC ST	E	A	0700	LEXU	2017	-	3	N	-	L	G
2	DRVR	20	M	A	HNBD		PROC ST	S	A	0100	LEXU	2006	-	3	N	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **CEDAR AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **FRESN** *Beat* **00E** *Type* **0** *CalTrans* *Badge* **P710** *Collision Date* **20191228** *Time* **1030** *Day* **SAT**
Primary Collision Factor **STOP SGN|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20191231**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	37	F	H	HNBD		PROC ST	S	A	0100	TOYOT	1999	-	3	N	-	L	G
2	DRVR	57	F	H	HNBD		PROC ST	W	A	0100	NISSA	2015	-	3	N	-	L	G
3	DRVR	55	M	H	HNBD		STOPPED	E	A	0100	NISSA	2013	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	POSSIBL	34	F	3	0	L	G

Primary Rd **CHURCH AVE** *Distance (ft)* **195.** *Direction* **W** *Secondary Rd* **DICKENSON AVE** *NCIC* **9435** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Fresno** *Population* **9** *Rpt Dist* *Beat* **015** *Type* **3** *CalTrans* *Badge* **019789** *Collision Date* **20191026** *Time* **2047** *Day* **SAT**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20191104**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	31	M	H	HNBD		UNS TURN	E	A	0100	HONDA	2002	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **64.0** *Direction* **E** *Secondary Rd* **LILY AVE** *NCIC* **1005** *State Hwy?* **Y** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1709** *Collision Date* **20191208** *Time* **0230** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20191224**
Weather1 **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT FNCT** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		HBD-UNK		PROC ST	E	A	0100	BMW	2006	-	-	A	N	-	-
2	PRKD	998	-				PARKED	-	A	0100	CHEVR	2002	-	-	N	-	-	-
3	PRKD	998	-				PARKED	-	A	0100	HONDA	2007	-	-	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **66.0** *Direction* **E** *Secondary Rd* **LOTUS AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1738** *Collision Date* **20191204** *Time* **1904** *Day* **WED**
Primary Collision Factor **PED VIOL** *Violation* **21954A** *Collision Type* **AUTO/PED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20191213**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PED** *Lighting* **DARK - ST** *Ped Action* **NOT IN X-** *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	PED	56	M	H	IMP UNK	IMP UNK	PROC ST	N	N	6000	-		-	3	F	-	-	-
2	DRVR	40	M	B			PROC ST	E	I	2000	GILLI	2014	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	POSSIBL	56	M	9	-	-	P

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Primary Rd **CHURCH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **ELM AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00F** *Type* **0** *CalTrans* *Badge* **P2017** *Collision Date* **20201028** *Time* **1632** *Day* **WED**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23153B** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20201103**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	62	M	B	HBD-UI		PROC ST	E	D	2200	CHEVR	1999	-	3	N	-	L G
2	DRVR	76	M	O	HNBD		LFT TURN	S	A	0100	JAGUA	2015	-	3	A	-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	76	M	1	0	L	G

Primary Rd **CHURCH AVE** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **FOWLER AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SOUTH** *Beat* **00G** *Type* **0** *CalTrans* *Badge* **P1632** *Collision Date* **20200602** *Time* **2500** *Day* **TUE**
Primary Collision Factor **UNKNOWN** *Violation* *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20200915**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **OBSTR ON RD** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	998	-				OTHER	-	-	9900	-		-	-	A	N	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **30.0** *Direction* **E** *Secondary Rd* **FOWLER AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **P1959** *Collision Date* **20200626** *Time* **1555** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22100B** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20200720**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	24	M	A			LFT TURN	S	A	0100	FORD	2014	-	3	A	N	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHURCH AVE** *Distance (ft)* **420.** *Direction* **W** *Secondary Rd* **JACKSON AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* **SE** *Beat* *Type* **0** *CalTrans* *Badge* **P1117** *Collision Date* **20200614** *Time* **1502** *Day* **SUN**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152B** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20200617**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	29	M	H	HBD-UI		RAN OFF RD	E	A	0100	CHEVR	2014	-	3	A	N	L -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	29	M	1	0	L	-

Primary Rd **CHURCH AVE** *Distance (ft)* **63.0** *Direction* **W** *Secondary Rd* **JACKSON AVE** *NCIC* **1005** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Fresno** *County* **Fresno** *Population* **7** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **P1982** *Collision Date* **20200814** *Time* **2340** *Day* **FRI**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20200817**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	E	A	0100	NISSA	2009	-	3	A	N	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd CALAVERAS ST | Distance (ft) 338. | Direction N | Secondary Rd MCKENZIE AVE | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist SW | Beat 00B | Type 0 | CalTrans | Badge P1888 | Collision Date 20211003 | Time 2030 | Day SUN
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type SIDESWIPE | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20211011
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run MSDMNR | Motor Vehicle Involved With PKD MV | Lighting DARK - ST | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	M	H	IMP UNK	IMP UNK	PARKING	S	A	0100	FORD	2012	-	3	N	-	-	-
2	PRKD	998	-				PARKED	S	-	9900	TOYOT	2007	-	3	N	-	-	-
3	PRKD	998	-				PARKED	S	-	9900	FORD	1989	-	3	N	-	-	-

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd CALIFORNIA AVE | Distance (ft) 45.0 | Direction E | Secondary Rd ARMSTRONG AVE | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist SOUTH | Beat 00G | Type 0 | CalTrans | Badge P1655 | Collision Date 20210904 | Time 1239 | Day SAT
Primary Collision Factor R-O-W AUTO | Violation 21801A | Collision Type HIT OBJECT | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20211004
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With FIXED OBJ | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	34	F	O	HNBD		U-TURN	E	A	0100	-	2017	-	3	N	-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd CALIFORNIA AVE | Distance (ft) 91.0 | Direction W | Secondary Rd CLARA AVE | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist 1E | Beat 2955 | Type 0 | CalTrans | Badge P874 | Collision Date 20210512 | Time 1404 | Day WED
Primary Collision Factor IMPROP TURN | Violation 22107 | Collision Type REAR END | Severity INJURY | #Killed 0 | #Injured 1 | Tow Away? N | Process Date 20210514
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With PKD MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	21	M	B	HNBD		LFT TURN	W	C	0300	HONDA	2021	-	3	A	-	-	W
2	PRKD	998	-				PARKED	W	A	0100	TOYOT	2004	-	-	N	-	-	-

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	MINOR	21	M	1	0	N	W

Primary Rd CALIFORNIA AVE | Distance (ft) 2640 | Direction W | Secondary Rd DICKENSON | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 015 | Type 3 | CalTrans | Badge 020122 | Collision Date 20210803 | Time 1015 | Day TUE
Primary Collision Factor IMPROP TURN | Violation 22107 | Collision Type HIT OBJECT | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20210813
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With FIXED OBJ | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	23	F	W	HNBD		UNS TURN	E	A	0100	LINC	2004	-	3	N	-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd CALIFORNIA AVE | Distance (ft) 1000 | Direction E | Secondary Rd FLOYD AVE | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 015 | Type 3 | CalTrans | Badge 021544 | Collision Date 20210905 | Time 1540 | Day SUN
Primary Collision Factor R-O-W AUTO | Violation 21801A | Collision Type SIDESWIPE | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20220113
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	57	M	H	HNBD		LFT TURN	W	D	2200	FORD	1978	-	3	N	-	P	C
2	DRVR	54	M	W	HNBD		PASSING	W	D	2200	GMC	2016	-	3	N	-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd CHURCH AV | Distance (ft) 8.00 | Direction W | Secondary Rd ACADEMY AV | NCIC 1013 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Sanger | County Fresno | Population 3 | Rpt Dist SANGE | Beat 002 | Type 0 | CalTrans | Badge M164 | Collision Date 20210201 | Time 0028 | Day MON
Primary Collision Factor R-O-W PED | Violation 21950A | Collision Type AUTO/PED | Severity FATAL | #Killed 1 | #Injured 0 | Tow Away? N | Process Date 20210812
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run FELONY | Motor Vehicle Involved With PED | Lighting DARK - ST | Ped Action NOT IN X- | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	20	M	H	HNBD		PROC ST	W	A	0100	-	2015	-	3	-	-	M	G
2	PED	46	M	H	HBD-UI			N	N	6000	-		-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	KILLED	48	M	-	-	P	-

Primary Rd CHURCH AV | Distance (ft) 54.0 | Direction W | Secondary Rd QUALITY AV | NCIC 1013 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Sanger | County Fresno | Population 3 | Rpt Dist SANGE | Beat N21 | Type 0 | CalTrans | Badge M158 | Collision Date 20210630 | Time 0540 | Day WED
Primary Collision Factor UNKNOWN | Violation | Collision Type HIT OBJECT | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20210830
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run MSDMNR | Motor Vehicle Involved With FIXED OBJ | Lighting DARK - NO | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	998	-		IMP UNK	IMP UNK	RAN OFF RD	S	A	0100	-	2006	-	-	A	10851	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd CHURCH AVE | Distance (ft) 595. | Direction W | Secondary Rd 9TH ST | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist | Beat 034 | Type 3 | CalTrans | Badge 020095 | Collision Date 20211202 | Time 1747 | Day THU
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20211214
Weather1 CLEAR | Weather2 | Rdwy Surface WET | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DARK - NO | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	26	F	H	HNBD		SLOWING	E	A	0100	HOND	2014	-	3	N	-	M	G
2	DRVR	45	M	H	HNBD		RGT TURN	E	D	2200	DODG	2008	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd CHURCH AVE | Distance (ft) 25.0 | Direction W | Secondary Rd ANNA ST | NCIC 1005 | State Hwy? Y | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist 1 | Beat 00G | Type 0 | CalTrans | Badge P1264 | Collision Date 20210917 | Time 1556 | Day FRI
Primary Collision Factor NOT DRIVER | Violation | Collision Type OTHER | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20210927
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 HOLES | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER OBJ | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	51	M	W	HNBD		PROC ST	E	C	0200	BMW	2018	-	3	N	-	-	W

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd CHURCH AVE | Distance (ft) 12.0 | Direction E | Secondary Rd ARMSTRONG AVE | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 034 | Type 3 | CalTrans | Badge 021299 | Collision Date 20210925 | Time 0745 | Day SAT
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20210928
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run MSDMNR | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	38	M	A	HNBD		STOPPED	W	D	2200	TOYT	1998	-	3	N	-	M	G
2F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	W	A	0100	HOND	2014	-	4	N	-	B	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd FOWLER AVENUE | Distance (ft) 0.00 | Direction | Secondary Rd FLORAL AVENUE | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 040 | Type 3 | CalTrans | Badge 021165 | Collision Date 20210821 | Time 1750 | Day SAT
Primary Collision Factor R-O-W AUTO | Violation 21800A | Collision Type BROADSIDE | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20210827
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	22	M	H	HNBD		PROC ST	N	A	0100	KIA	2011	-	3	N	-	M	G
2	DRVR	37	M	O	HNBD		PROC ST	E	A	0100	TOYT	2020		3	N		M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

[redacted]

City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 015 | Type 3 | CalTrans | Badge 020592 | Collision Date 20210628 | Time 2120 | Day MON
Primary Collision Factor IMPROP TURN | Violation 22107 | Collision Type HEAD-ON | Severity FATAL | #Killed 1 | #Injured 2 | Tow Away? Y | Process Date 20210730
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DARK - NO | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	29	M	H	IMP UNK	IMP UNK	OPPOS LN	S	D	2200	FORD	2007	-	3	N	-	L	G
2	DRVR	34	F	H	HNBD		PROC ST	N	A	0100	CHRY	2015	-	3	N	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	KILLED	29	M	1	0	L	G
DRVR	MINOR	34	F	1	0	L	G
PASS	MINOR	61	M	3	0	L	G

Primary Rd FOWLER AVENUE | Distance (ft) 0.00 | Direction | Secondary Rd HARLAN AVENUE | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 146 | Type 1 | CalTrans | Badge 014363 | Collision Date 20211008 | Time 0700 | Day FRI
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity INJURY | #Killed 0 | #Injured 2 | Tow Away? Y | Process Date 20211020
Weather1 CLOUDY | Weather2 RAINING | Rdwy Surface WET | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	60	M	W	HNBD		PROC ST	S	D	2200	RAM	2018	-	3	N	-	M	G
2	DRVR	38	M	H	HNBD		SLOWING	S	A	0100	HYUN	2008	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	38	M	1	0	M	G
PASS	SERIOUS	38	M	3	0	M	G

Primary Rd FOWLER AVENUE | Distance (ft) 0.00 | Direction | Secondary Rd LINCOLN AVE | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 034 | Type 3 | CalTrans | Badge 014363 | Collision Date 20210817 | Time 0745 | Day TUE
Primary Collision Factor WRONG SIDE | Violation 21752D | Collision Type REAR END | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20210825
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	32	F	H			PROC ST	S	A	0100	DODG	2006	-	3	N	-	M	G
2	DRVR	54	F	H			LFT TURN	S	A	0100	KIA	2013	-	3	N	-	M	A

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd FOWLER AVE | Distance (ft) 0.00 | Direction | Secondary Rd FEDORA AVE | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist SE | Beat 00B | Type 0 | CalTrans | Badge P1940 | Collision Date 20220918 | Time 2115 | Day SUN
Primary Collision Factor R-O-W AUTO | Violation 21804A | Collision Type BROADSIDE | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20221107
Weather1 RAINING | Weather2 | Rdwy Surface WET | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DARK - ST | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	73	F	O	HNBD		ENT TRAF	E	A	0100	ACURA	2015	- 3	N		-	M G
2	DRVR	44	M	A	HBD-UI		PROC ST	S	A	0100	TOYOT	2017	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd FOWLER AVE | Distance (ft) 0.00 | Direction | Secondary Rd FLORAL AVE | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 040 | Type 3 | CalTrans | Badge 020998 | Collision Date 20221105 | Time 1638 | Day SAT
Primary Collision Factor STOP SGN|SIG | Violation 22450A | Collision Type BROADSIDE | Severity INJURY | #Killed 0 | #Injured 2 | Tow Away? Y | Process Date 20221115
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	20	M	H	HNBD		PROC ST	N	A	0100	HOND	2006	- 3	N		-	L G
2	DRVR	23	M	H	HNBD		PROC ST	E	A	0100	CHEV	2015	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	23	M	1	0	L	G
PASS	MINOR	17	M	3	0	L	G

Primary Rd FOWLER AVE | Distance (ft) 60.0 | Direction N | Secondary Rd FOUNTAIN WAY | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist | Beat | Type 0 | CalTrans | Badge P959 | Collision Date 20220525 | Time 1107 | Day WED
Primary Collision Factor IMPROP TURN | Violation 22107 | Collision Type SIDESWIPE | Severity INJURY | #Killed 0 | #Injured 1 | Tow Away? Y | Process Date 20220526
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	34	F	W	HNBD		PASSING	N	A	0700	FORD	2016	- 1	N		-	L G
2	DRVR	39	M	H	HNBD		PROC ST	N	D	2200	CHEVR	2010	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	34	F	1	0	L	G

Primary Rd FOWLER AVE | Distance (ft) 0.00 | Direction | Secondary Rd HAMILTON AVE | NCIC 9435 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Fresno | Population 9 | Rpt Dist | Beat 034 | Type 3 | CalTrans | Badge 021589 | Collision Date 20220504 | Time 0440 | Day WED
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type HIT OBJECT | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20220811
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With FIXED OBJ | Lighting DARK - ST | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	28	M	H		FATG	PROC ST	W	A	0100	HOND	2007	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd FOWLER AVE | Distance (ft) 171. | Direction S | Secondary Rd KINGS CANYON | NCIC 1005 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City Fresno | County Fresno | Population 7 | Rpt Dist SE / | Beat 2666 | Type 0 | CalTrans | Badge P1700 | Collision Date 20220823 | Time 1714 | Day TUE
Primary Collision Factor DRVR ALC|DRG | Violation 23153A | Collision Type HIT OBJECT | Severity INJURY | #Killed 0 | #Injured 1 | Tow Away? Y | Process Date 20220824
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With FIXED OBJ | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	21	M	H	HBD-UI		PROC ST	N	A	0100	CHEVR	2013	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	MINOR	3	F	4	0	M	G

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Appendix F: Existing Traffic Conditions

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	128	144	509	97	63	358
Future Vol, veh/h	128	144	509	97	63	358
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	132	148	525	100	65	369

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1076	577	0	0	627	0
Stage 1	577	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	242	515	-	-	950	-
Stage 1	560	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	225	514	-	-	948	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	566	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	17.61	0	1.36
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	359	514	948	-
HCM Lane V/C Ratio	-	-	0.367	0.289	0.068	-
HCM Control Delay (s/veh)	-	-	20.7	14.8	9.1	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.6	1.2	0.2	-

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	97	62	55	51	52	74	139	114	34	141	23
Future Vol, veh/h	27	97	62	55	51	52	74	139	114	34	141	23
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	32	114	73	65	60	61	87	164	134	40	166	27
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	10.8	10.5	11.1	11.8
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	139	114	27	97	62	55	51	52	34	141
LT Vol	74	0	0	27	0	0	55	0	0	34	0
Through Vol	0	139	0	0	97	0	0	51	0	0	141
RT Vol	0	0	114	0	0	62	0	0	52	0	0
Lane Flow Rate	87	164	134	32	114	73	65	60	61	40	166
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.168	0.292	0.214	0.065	0.217	0.124	0.133	0.115	0.105	0.08	0.309
Departure Headway (Hd)	6.931	6.431	5.731	7.332	6.832	6.132	7.399	6.899	6.199	7.204	6.704
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	516	556	624	487	524	581	483	517	575	496	534
Service Time	4.694	4.194	3.494	5.101	4.601	3.901	5.172	4.672	3.972	4.972	4.472
HCM Lane V/C Ratio	0.169	0.295	0.215	0.066	0.218	0.126	0.135	0.116	0.106	0.081	0.311
HCM Control Delay, s/veh	11.1	11.9	10.1	10.6	11.5	9.8	11.3	10.6	9.7	10.6	12.5
HCM Lane LOS	B	B	B	B	B	A	B	B	A	B	B
HCM 95th-tile Q	0.6	1.2	0.8	0.2	0.8	0.4	0.5	0.4	0.4	0.3	1.3

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	261	73	23	183	289	61
Future Vol, veh/h	261	73	23	183	289	61
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	293	82	26	206	325	69
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	15.9	12.5	15.1
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	183	261	73	289	61
LT Vol	23	0	261	0	0	0
Through Vol	0	183	0	0	289	0
RT Vol	0	0	0	73	0	61
Lane Flow Rate	26	206	293	82	325	69
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.049	0.364	0.555	0.128	0.555	0.104
Departure Headway (Hd)	6.885	6.375	6.817	5.604	6.158	5.447
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	519	563	528	639	584	657
Service Time	4.635	4.126	4.56	3.346	3.903	3.191
HCM Lane V/C Ratio	0.05	0.366	0.555	0.128	0.557	0.105
HCM Control Delay, s/veh	10	12.8	17.8	9.2	16.4	8.8
HCM Lane LOS	A	B	C	A	C	A
HCM 95th-tile Q	0.2	1.7	3.4	0.4	3.4	0.3

Intersection	
Int Delay, s/veh	4.9

Movement	WBU	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	6	153	115	138	77	29	205
Future Vol, veh/h	6	153	115	138	77	29	205
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	0	0	-	150	230	-
Veh in Median Storage, #	-	0	-	0	-	-	0
Grade, %	-	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	7	184	139	166	93	35	247

Major/Minor	Minor1			Major1		Major2	
Conflicting Flow All	0	483	83	0	0	259	0
Stage 1	0	166	-	-	-	-	-
Stage 2	0	317	-	-	-	-	-
Critical Hdwy	-	6.645	6.945	-	-	4.145	-
Critical Hdwy Stg 1	-	5.845	-	-	-	-	-
Critical Hdwy Stg 2	-	5.445	-	-	-	-	-
Follow-up Hdwy	-	3.5285	3.3285	-	-	2.2285	-
Pot Cap-1 Maneuver	0	525	957	-	-	1298	-
Stage 1	0	844	-	-	-	-	-
Stage 2	0	735	-	-	-	-	-
Platoon blocked, %	-			-	-		-
Mov Cap-1 Maneuver	0	511	957	-	-	1298	-
Mov Cap-2 Maneuver	0	582	-	-	-	-	-
Stage 1	0	844	-	-	-	-	-
Stage 2	0	715	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.04	0	0.97
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	582	957	1298	-
HCM Lane V/C Ratio	-	-	0.317	0.145	0.027	-
HCM Control Delay (s/veh)	-	-	14	9.4	7.9	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.5	0.1	-

Intersection	
Intersection Delay, s/veh	33.1
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Vol, veh/h	10	106	125	112	59	93	60	1	130	289	57	1
Future Vol, veh/h	10	106	125	112	59	93	60	1	130	289	57	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	116	137	123	65	102	66	1	143	318	63	1
Number of Lanes	0	1	1	1	0	1	0	0	1	1	0	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	3
HCM Control Delay, s/veh	16.3	30.6	56.9	23.5
HCM LOS	C	D	F	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	28%	100%	0%	0%
Vol Thru, %	0%	84%	0%	100%	0%	44%	0%	100%	50%
Vol Right, %	0%	16%	0%	0%	100%	28%	0%	0%	50%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	131	346	116	125	112	212	83	211	211
LT Vol	131	0	116	0	0	59	83	0	0
Through Vol	0	289	0	125	0	93	0	211	105
RT Vol	0	57	0	0	112	60	0	0	106
Lane Flow Rate	144	380	127	137	123	233	91	232	232
Geometry Grp	6	6	5	5	5	6	6	6	6
Degree of Util (X)	0.396	0.977	0.342	0.349	0.287	0.657	0.252	0.606	0.585
Departure Headway (Hd)	9.896	9.255	9.657	9.137	8.409	10.151	9.95	9.43	9.065
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	363	392	372	393	426	354	360	382	397
Service Time	7.686	7.044	7.433	6.912	6.183	7.948	7.74	7.219	6.854
HCM Lane V/C Ratio	0.397	0.969	0.341	0.349	0.289	0.658	0.253	0.607	0.584
HCM Control Delay, s/veh	19.1	71.2	17.4	16.8	14.6	30.6	16.1	25.8	24
HCM Lane LOS	C	F	C	C	B	D	C	D	C
HCM 95th-tile Q	1.8	11.3	1.5	1.5	1.2	4.4	1	3.8	3.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Vol, veh/h	82	316	106
Future Vol, veh/h	82	316	106
Peak Hour Factor	0.91	0.91	0.91
Heavy Vehicles, %	3	3	3
Mvmt Flow	90	347	116
Number of Lanes	1	2	0

Approach	
Opposing Approach	
Opposing Lanes	
Conflicting Approach Left	
Conflicting Lanes Left	
Conflicting Approach Right	
Conflicting Lanes Right	
HCM Control Delay, s/veh	
HCM LOS	

Intersection	
Intersection Delay, s/veh	26.9
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	57	157	28	20	18	146	140	33	35	277	66
Future Vol, veh/h	41	57	157	28	20	18	146	140	33	35	277	66
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	53	74	204	36	26	23	190	182	43	45	360	86
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	19.5	12.6	26.2	34.9
HCM LOS	C	B	D	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	46%	16%	42%	9%
Vol Thru, %	44%	22%	30%	73%
Vol Right, %	10%	62%	27%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	319	255	66	378
LT Vol	146	41	28	35
Through Vol	140	57	20	277
RT Vol	33	157	18	66
Lane Flow Rate	414	331	86	491
Geometry Grp	1	1	1	1
Degree of Util (X)	0.744	0.607	0.187	0.848
Departure Headway (Hd)	6.465	6.603	7.85	6.219
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	555	543	460	579
Service Time	4.553	4.689	5.85	4.3
HCM Lane V/C Ratio	0.746	0.61	0.187	0.848
HCM Control Delay, s/veh	26.2	19.5	12.6	34.9
HCM Lane LOS	D	C	B	D
HCM 95th-tile Q	6.4	4	0.7	9.1

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	116	429	63	148	461
Future Vol, veh/h	48	116	429	63	148	461
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	53	129	477	70	164	512

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1353	513	0	0	547	0
Stage 1	512	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	164	559	-	-	1018	-
Stage 1	600	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	138	559	-	-	1018	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	353	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16	0	2.24
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	260	559	1018	-
HCM Lane V/C Ratio	-	-	0.205	0.231	0.162	-
HCM Control Delay (s/veh)	-	-	22.4	13.4	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0.9	0.6	-

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	55	46	102	46	22	38	128	61	27	100	17
Future Vol, veh/h	14	55	46	102	46	22	38	128	61	27	100	17
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	17	66	55	123	55	27	46	154	73	33	120	20
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	9.5	10.5	10.1	10.2
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	128	61	14	55	46	102	46	22	27	100
LT Vol	38	0	0	14	0	0	102	0	0	27	0
Through Vol	0	128	0	0	55	0	0	46	0	0	100
RT Vol	0	0	61	0	0	46	0	0	22	0	0
Lane Flow Rate	46	154	73	17	66	55	123	55	27	33	120
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.083	0.259	0.109	0.032	0.117	0.087	0.228	0.095	0.04	0.061	0.208
Departure Headway (Hd)	6.536	6.036	5.336	6.857	6.357	5.657	6.69	6.19	5.49	6.723	6.223
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	549	595	672	522	564	633	537	579	652	533	577
Service Time	4.269	3.769	3.069	4.596	4.096	3.396	4.426	3.926	3.226	4.46	3.96
HCM Lane V/C Ratio	0.084	0.259	0.109	0.033	0.117	0.087	0.229	0.095	0.041	0.062	0.208
HCM Control Delay, s/veh	9.9	10.9	8.7	9.8	9.9	8.9	11.4	9.6	8.5	9.9	10.6
HCM Lane LOS	A	B	A	A	A	A	B	A	A	A	B
HCM 95th-tile Q	0.3	1	0.4	0.1	0.4	0.3	0.9	0.3	0.1	0.2	0.8

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	103	27	35	204	206	183
Future Vol, veh/h	103	27	35	204	206	183
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	114	30	39	227	229	203
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Righ	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	10.6	10.7	9.9
HCM LOS	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	204	103	27	206	183
LT Vol	35	0	103	0	0	0
Through Vol	0	204	0	0	206	0
RT Vol	0	0	0	27	0	183
Lane Flow Rate	39	227	114	30	229	203
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.064	0.341	0.21	0.045	0.335	0.258
Departure Headway (Hd)	5.918	5.414	6.609	5.398	5.275	4.57
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	602	660	539	656	678	781
Service Time	3.688	3.184	4.401	3.19	3.034	2.329
HCM Lane V/C Ratio	0.065	0.344	0.212	0.046	0.338	0.26
HCM Control Delay, s/veh	9.1	11	11.2	8.4	10.7	8.9
HCM Lane LOS	A	B	B	A	B	A
HCM 95th-tile Q	0.2	1.5	0.8	0.1	1.5	1

Intersection	
Int Delay, s/veh	4.1

Movement	WBU	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	1	36	65	104	44	110	99
Future Vol, veh/h	1	36	65	104	44	110	99
Conflicting Peds, #/hr	0	0	0	0	1	1	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	0	0	-	150	230	-
Veh in Median Storage, #	-	0	-	0	-	-	0
Grade, %	-	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	1	37	67	107	45	113	102

Major/Minor	Minor1			Major1		Major2	
Conflicting Flow All	0	437	55	0	0	154	0
Stage 1	0	108	-	-	-	-	-
Stage 2	0	329	-	-	-	-	-
Critical Hdwy	-	6.645	6.945	-	-	4.145	-
Critical Hdwy Stg 1	-	5.845	-	-	-	-	-
Critical Hdwy Stg 2	-	5.445	-	-	-	-	-
Follow-up Hdwy	-	3.5285	3.3285	-	-	2.2285	-
Pot Cap-1 Maneuver	0	560	998	-	-	1419	-
Stage 1	0	902	-	-	-	-	-
Stage 2	0	726	-	-	-	-	-
Platoon blocked, %	-			-	-		-
Mov Cap-1 Maneuver	0	515	997	-	-	1418	-
Mov Cap-2 Maneuver	0	570	-	-	-	-	-
Stage 1	0	901	-	-	-	-	-
Stage 2	0	668	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.9	0	4.08
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	570	997	1418	-
HCM Lane V/C Ratio	-	-	0.065	0.067	0.08	-
HCM Control Delay (s/veh)	-	-	11.8	8.9	7.8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.2	0.3	-

Intersection	
Intersection Delay, s/veh	13.5
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Vol, veh/h	6	134	63	30	21	52	25	0	36	262	25	1
Future Vol, veh/h	6	134	63	30	21	52	25	0	36	262	25	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	6	141	66	32	22	55	26	0	38	276	26	1
Number of Lanes	0	1	1	1	0	1	0	0	1	1	0	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	3
HCM Control Delay, s/veh	11.9	12.1	16.6	12
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	21%	100%	0%	0%
Vol Thru, %	0%	91%	0%	100%	0%	53%	0%	100%	34%
Vol Right, %	0%	9%	0%	0%	100%	26%	0%	0%	66%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	287	140	63	30	98	16	125	184
LT Vol	36	0	140	0	0	21	16	0	0
Through Vol	0	262	0	63	0	52	0	125	62
RT Vol	0	25	0	0	30	25	0	0	122
Lane Flow Rate	38	302	147	66	32	103	17	131	194
Geometry Grp	6	6	5	5	5	6	6	6	6
Degree of Util (X)	0.076	0.555	0.296	0.124	0.053	0.213	0.034	0.246	0.339
Departure Headway (Hd)	7.182	6.613	7.234	6.728	6.019	7.44	7.261	6.754	6.284
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	495	541	494	529	590	486	490	528	567
Service Time	4.975	4.405	5.024	4.518	3.808	5.14	5.057	4.55	4.079
HCM Lane V/C Ratio	0.077	0.558	0.298	0.125	0.054	0.212	0.035	0.248	0.342
HCM Control Delay, s/veh	10.6	17.4	13.1	10.5	9.1	12.1	10.3	11.8	12.3
HCM Lane LOS	B	C	B	B	A	B	B	B	B
HCM 95th-tile Q	0.2	3.4	1.2	0.4	0.2	0.8	0.1	1	1.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Vol, veh/h	15	187	122
Future Vol, veh/h	15	187	122
Peak Hour Factor	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3
Mvmt Flow	16	197	128
Number of Lanes	1	2	0

Approach	
Opposing Approach	
Opposing Lanes	
Conflicting Approach Left	
Conflicting Lanes Left	
Conflicting Approach Right	
Conflicting Lanes Right	
HCM Control Delay, s/veh	
HCM LOS	

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	36	23	2	13	0	32	110	4	9	54	29
Future Vol, veh/h	44	36	23	2	13	0	32	110	4	9	54	29
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	50	41	26	2	15	0	36	125	5	10	61	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.3	7.9	8.5	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	43%	13%	10%
Vol Thru, %	75%	35%	87%	59%
Vol Right, %	3%	22%	0%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	146	103	15	92
LT Vol	32	44	2	9
Through Vol	110	36	13	54
RT Vol	4	23	0	29
Lane Flow Rate	166	117	17	105
Geometry Grp	1	1	1	1
Degree of Util (X)	0.203	0.147	0.022	0.124
Departure Headway (Hd)	4.405	4.53	4.726	4.278
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	816	794	758	839
Service Time	2.42	2.548	2.749	2.294
HCM Lane V/C Ratio	0.203	0.147	0.022	0.125
HCM Control Delay, s/veh	8.5	8.3	7.9	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.5	0.1	0.4

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	148	134	22	51
Average Queue (ft)	71	51	1	22
95th Queue (ft)	127	87	10	48
Link Distance (ft)	2565		1307	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		250
Storage Blk Time (%)	7	1		
Queuing Penalty (veh)	10	1		

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	31	78	53	65	62	25	86	65	65	47	59	60
Average Queue (ft)	17	35	25	22	23	21	26	33	30	15	31	12
95th Queue (ft)	39	68	47	44	50	25	53	55	59	38	51	32
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	110	77	32	93	144	31
Average Queue (ft)	48	24	21	48	65	22
95th Queue (ft)	85	50	42	73	112	39
Link Distance (ft)		462		475	1255	1255
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Armstrong Avenue & California Avenue

Movement	WB	WB	SB
Directions Served	UL	R	L
Maximum Queue (ft)	130	89	28
Average Queue (ft)	41	27	5
95th Queue (ft)	82	54	23
Link Distance (ft)	794	794	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			230
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	WB	NB	NB	SB	SB	SB
Directions Served	UL	T	R	LTR	UL	TR	UL	T	TR
Maximum Queue (ft)	79	74	75	116	105	167	98	135	105
Average Queue (ft)	47	47	35	60	36	81	36	72	51
95th Queue (ft)	76	71	56	101	71	148	64	115	90
Link Distance (ft)		2491	2491	2578		1078		1880	1880
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	215				240		240		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	102	53	136	138
Average Queue (ft)	48	27	58	65
95th Queue (ft)	77	49	93	107
Link Distance (ft)	2578	2495	2635	638
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 11

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	SB
Directions Served	L	R	L
Maximum Queue (ft)	92	97	116
Average Queue (ft)	28	38	37
95th Queue (ft)	66	65	77
Link Distance (ft)	2565		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	250
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	30	50	45	54	60	38	49	63	66	47	90	16
Average Queue (ft)	5	26	22	30	23	11	23	30	18	17	28	6
95th Queue (ft)	22	44	42	47	42	30	44	52	38	38	58	16
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)											0	
Queuing Penalty (veh)											0	

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	24	32	54	104	80	81
Average Queue (ft)	21	7	26	50	38	39
95th Queue (ft)	28	19	48	81	61	63
Link Distance (ft)		462		475	1255	1255
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Armstrong Avenue & California Avenue

Movement	WB	WB	SB
Directions Served	UL	R	L
Maximum Queue (ft)	55	34	46
Average Queue (ft)	16	13	13
95th Queue (ft)	38	25	37
Link Distance (ft)	794	794	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			230
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	WB	NB	NB	SB	SB	SB
Directions Served	UL	T	R	LTR	UL	TR	UL	T	TR
Maximum Queue (ft)	76	53	51	79	44	94	28	87	117
Average Queue (ft)	43	32	21	35	16	45	9	46	44
95th Queue (ft)	67	43	44	55	33	82	29	73	81
Link Distance (ft)		2491	2491	2578		1078		1880	1880
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	215				240		240		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	53	30	79	80
Average Queue (ft)	31	7	38	33
95th Queue (ft)	41	28	60	56
Link Distance (ft)	2578	2495	2635	638
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Existing Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	AM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	461	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.82	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	52.9

Vehicle Results

Average Speed, mi/h	52.9	Percent Followers, %	52.7
Segment Travel Time, minutes	1.13	Follower Density, followers/mi/ln	4.6
Vehicle LOS	C		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	4.6	C

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HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Existing Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	PM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	181	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.85	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	54.0

Vehicle Results

Average Speed, mi/h	54.0	Percent Followers, %	31.1
Segment Travel Time, minutes	1.11	Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	1.0	A

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Appendix G: Existing plus Project Traffic Conditions

Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	128	177	511	97	77	358
Future Vol, veh/h	128	177	511	97	77	358
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	132	182	527	100	79	369

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1107	579	0	0	629	0
Stage 1	579	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	232	513	-	-	948	-
Stage 1	559	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	212	512	-	-	947	-
Mov Cap-2 Maneuver	347	-	-	-	-	-
Stage 1	558	-	-	-	-	-
Stage 2	540	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	18.27	0	1.62
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	347	512	947	-
HCM Lane V/C Ratio	-	-	0.38	0.356	0.084	-
HCM Ctrl Dly (s/v)	-	-	21.6	15.9	9.2	-
HCM Lane LOS	-	-	C	C	A	-
HCM 95th %tile Q(veh)	-	-	1.7	1.6	0.3	-

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	97	76	53	51	52	107	149	84	34	146	23
Future Vol, veh/h	27	97	76	53	51	52	107	149	84	34	146	23
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	32	114	89	62	60	61	126	175	99	40	172	27
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	10.9	10.7	11.6	12.1
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	107	149	84	27	97	76	53	51	52	34	146
LT Vol	107	0	0	27	0	0	53	0	0	34	0
Through Vol	0	149	0	0	97	0	0	51	0	0	146
RT Vol	0	0	84	0	0	76	0	0	52	0	0
Lane Flow Rate	126	175	99	32	114	89	62	60	61	40	172
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.245	0.317	0.159	0.065	0.219	0.154	0.13	0.117	0.108	0.081	0.325
Departure Headway (Hd)	7.003	6.503	5.803	7.42	6.92	6.22	7.526	7.026	6.326	7.305	6.805
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	511	550	615	481	516	573	475	508	563	488	526
Service Time	4.77	4.27	3.57	5.196	4.696	3.996	5.305	4.805	4.105	5.079	4.579
HCM Lane V/C Ratio	0.247	0.318	0.161	0.067	0.221	0.155	0.131	0.118	0.108	0.082	0.327
HCM Control Delay, s/veh	12	12.3	9.7	10.7	11.6	10.1	11.4	10.7	9.9	10.7	12.9
HCM Lane LOS	B	B	A	B	B	B	B	B	A	B	B
HCM 95th-tile Q	1	1.4	0.6	0.2	0.8	0.5	0.4	0.4	0.4	0.3	1.4

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	231	73	23	237	295	59
Future Vol, veh/h	231	73	23	237	295	59
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	260	82	26	266	331	66
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Righ	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	14.9	14	15.4
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	237	231	73	295	59
LT Vol	23	0	231	0	0	0
Through Vol	0	237	0	0	295	0
RT Vol	0	0	0	73	0	59
Lane Flow Rate	26	266	260	82	331	66
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.049	0.464	0.503	0.131	0.566	0.1
Departure Headway (Hd)	6.782	6.273	6.972	5.757	6.143	5.432
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	527	573	517	622	587	658
Service Time	4.535	4.026	4.72	3.505	3.892	3.18
HCM Lane V/C Ratio	0.049	0.464	0.503	0.132	0.564	0.1
HCM Control Delay, s/veh	9.9	14.4	16.6	9.4	16.7	8.8
HCM Lane LOS	A	B	C	A	C	A
HCM 95th-tile Q	0.2	2.4	2.8	0.4	3.5	0.3

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	23	14	21	6	101	2	76	8	146	69	25	211	12
Future Vol, veh/h	23	14	21	6	101	2	76	8	146	69	25	211	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	250	-	120	-	250	-	0	70	-	150	230	-	115
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	28	17	25	7	122	2	92	10	176	83	30	254	14

Major/Minor	Minor2			Minor1				Major1			Major2		
Conflicting Flow All	423	593	127	0	391	524	88	269	0	0	259	0	0
Stage 1	314	314	-	0	195	195	-	-	-	-	-	-	-
Stage 2	108	278	-	0	196	329	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	-	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	513	415	896	0	540	454	950	1285	-	-	1295	-	-
Stage 1	668	652	-	0	785	736	-	-	-	-	-	-	-
Stage 2	882	676	-	0	785	643	-	-	-	-	-	-	-
Platoon blocked, %				-					-	-		-	-
Mov Cap-1 Maneuver	447	402	896	0	488	440	950	1285	-	-	1295	-	-
Mov Cap-2 Maneuver	447	402	-	0	488	440	-	-	-	-	-	-	-
Stage 1	653	637	-	0	779	730	-	-	-	-	-	-	-
Stage 2	789	671	-	0	725	628	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.16	12.41	0.28	0.79
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1285	-	-	447	402	896	488	440	950	1295	-	-
HCM Lane V/C Ratio	0.008	-	-	0.062	0.042	0.028	0.249	0.005	0.096	0.023	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	13.6	14.3	9.1	14.8	13.2	9.2	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0.1	1	0	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	54	52	9	206	2	362	6
Future Vol, veh/h	54	52	9	206	2	362	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	250	-	250	-	250
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	63	60	10	240	2	421	7

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	681	421	428	0	-	-	0
Stage 1	421	-	-	-	-	-	-
Stage 2	260	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	414	630	1126	-	-	-	-
Stage 1	660	-	-	-	-	-	-
Stage 2	781	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	410	630	1126	-	-	-	-
Mov Cap-2 Maneuver	410	-	-	-	-	-	-
Stage 1	654	-	-	-	-	-	-
Stage 2	781	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.37	0.34	
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	1126	-	410	630	-	-	-
HCM Lane V/C Ratio	0.009	-	0.153	0.096	-	-	-
HCM Ctrl Dly (s/v)	8.2	-	15.3	11.3	-	-	-
HCM Lane LOS	A	-	C	B	-	-	-
HCM 95th %tile Q(veh)	0	-	0.5	0.3	-	-	-

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	10	106	127	112	68	95	60	1	130	291	60	1
Future Volume (vph)	10	106	127	112	68	95	60	1	130	291	60	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00			1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.99	1.00	1.00			1.00	1.00	0.98	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.94			1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1752	3505	1548	1752	1737			1752	1845	1535	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1752	3505	1548	1752	1737			1752	1845	1535	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	116	140	123	75	104	66	1	143	320	66	1
RTOR Reduction (vph)	0	0	0	91	0	24	0	0	0	0	47	0
Lane Group Flow (vph)	0	127	140	32	75	146	0	0	144	320	19	0
Confl. Peds. (#/hr)				1	1				27		1	
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases				4							2	
Actuated Green, G (s)		9.3	18.9	18.9	6.2	15.4			10.4	21.2	21.2	
Effective Green, g (s)		9.3	18.9	18.9	6.2	15.4			10.4	21.2	21.2	
Actuated g/C Ratio		0.13	0.26	0.26	0.09	0.21			0.14	0.29	0.29	
Clearance Time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		224	913	403	149	368			251	539	448	
v/s Ratio Prot		c0.07	c0.04		0.04	c0.08			c0.08	c0.17		
v/s Ratio Perm				0.02							0.01	
v/c Ratio		0.57	0.15	0.08	0.50	0.40			0.57	0.59	0.04	
Uniform Delay, d1		29.7	20.6	20.2	31.7	24.5			29.0	22.0	18.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		3.3	0.1	0.1	2.7	0.7			3.2	1.8	0.0	
Delay (s)		33.0	20.7	20.3	34.3	25.3			32.1	23.7	18.4	
Level of Service		C	C	C	C	C			C	C	B	
Approach Delay (s/veh)			24.6			28.0				25.3		
Approach LOS			C			C				C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	72.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	82	316	106
Future Volume (vph)	82	316	106
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	4.2	5.3	5.3
Lane Util. Factor	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1492
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1752	3505	1492
Peak-hour factor, PHF	0.91	0.91	0.91
Adj. Flow (vph)	90	347	116
RTOR Reduction (vph)	0	0	87
Lane Group Flow (vph)	91	347	29
Confl. Peds. (#/hr)	1		27
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	7.6	18.4	18.4
Effective Green, g (s)	7.6	18.4	18.4
Actuated g/C Ratio	0.10	0.25	0.25
Clearance Time (s)	4.2	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	183	889	378
v/s Ratio Prot	0.05	0.10	
v/s Ratio Perm			0.02
v/c Ratio	0.50	0.39	0.08
Uniform Delay, d1	30.6	22.4	20.6
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.3	0.1
Delay (s)	32.8	22.7	20.7
Level of Service	C	C	C
Approach Delay (s/veh)		23.9	
Approach LOS		C	

Intersection Summary

Intersection	
Intersection Delay, s/veh	26.2
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	57	157	28	20	24	146	138	33	30	261	77
Future Vol, veh/h	46	57	157	28	20	24	146	138	33	30	261	77
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	74	204	36	26	31	190	179	43	39	339	100
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	20	12.8	26.3	33
HCM LOS	C	B	D	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	46%	18%	39%	8%
Vol Thru, %	44%	22%	28%	71%
Vol Right, %	10%	60%	33%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	317	260	72	368
LT Vol	146	46	28	30
Through Vol	138	57	20	261
RT Vol	33	157	24	77
Lane Flow Rate	412	338	94	478
Geometry Grp	1	1	1	1
Degree of Util (X)	0.744	0.62	0.202	0.83
Departure Headway (Hd)	6.504	6.611	7.794	6.253
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	552	544	463	574
Service Time	4.596	4.701	5.794	4.341
HCM Lane V/C Ratio	0.746	0.621	0.203	0.833
HCM Control Delay, s/veh	26.3	20	12.8	33
HCM Lane LOS	D	C	B	D
HCM 95th-tile Q	6.4	4.2	0.7	8.6

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	141	429	63	181	461
Future Vol, veh/h	48	141	429	63	181	461
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	53	157	477	70	201	512

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1426	513	0	0	547	0
Stage 1	512	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	148	559	-	-	1018	-
Stage 1	600	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	119	559	-	-	1018	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	312	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.7	0	2.65
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	234	559	1018	-
HCM Lane V/C Ratio	-	-	0.228	0.28	0.198	-
HCM Ctrl Dly (s/v)	-	-	24.8	13.9	9.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.9	1.1	0.7	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	55	79	50	46	22	63	136	43	27	118	17
Future Vol, veh/h	14	55	79	50	46	22	63	136	43	27	118	17
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	17	66	95	60	55	27	76	164	52	33	142	20
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	9.6	9.9	10.4	10.5
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	136	43	14	55	79	50	46	22	27	118
LT Vol	63	0	0	14	0	0	50	0	0	27	0
Through Vol	0	136	0	0	55	0	0	46	0	0	118
RT Vol	0	0	43	0	0	79	0	0	22	0	0
Lane Flow Rate	76	164	52	17	66	95	60	55	27	33	142
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.137	0.273	0.076	0.032	0.116	0.149	0.115	0.098	0.042	0.06	0.244
Departure Headway (Hd)	6.504	6.004	5.304	6.827	6.327	5.627	6.88	6.38	5.68	6.688	6.188
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	552	600	676	525	567	637	521	561	630	536	580
Service Time	4.235	3.735	3.035	4.563	4.063	3.363	4.619	4.119	3.419	4.422	3.922
HCM Lane V/C Ratio	0.138	0.273	0.077	0.032	0.116	0.149	0.115	0.098	0.043	0.062	0.245
HCM Control Delay, s/veh	10.3	11	8.5	9.8	9.9	9.4	10.5	9.8	8.7	9.9	10.9
HCM Lane LOS	B	B	A	A	A	A	B	A	A	A	B
HCM 95th-tile Q	0.5	1.1	0.2	0.1	0.4	0.5	0.4	0.3	0.1	0.2	1

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	85	27	35	233	289	131
Future Vol, veh/h	85	27	35	233	289	131
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	94	30	39	259	321	146
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Righ	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	10.4	11.3	11.3
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	233	85	27	289	131
LT Vol	35	0	85	0	0	0
Through Vol	0	233	0	0	289	0
RT Vol	0	0	0	27	0	131
Lane Flow Rate	39	259	94	30	321	146
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.064	0.387	0.178	0.046	0.467	0.183
Departure Headway (Hd)	5.889	5.385	6.77	5.558	5.24	4.535
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	605	663	526	637	684	786
Service Time	3.659	3.154	4.566	3.353	2.999	2.294
HCM Lane V/C Ratio	0.064	0.391	0.179	0.047	0.469	0.186
HCM Control Delay, s/veh	9.1	11.6	11	8.6	12.6	8.3
HCM Lane LOS	A	B	B	A	B	A
HCM 95th-tile Q	0.2	1.8	0.6	0.1	2.5	0.7

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	23	6	15	1	27	17	43	21	112	20	46	111	34
Future Vol, veh/h	23	6	15	1	27	17	43	21	112	20	46	111	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	250	-	120	-	250	-	0	70	-	150	230	-	115
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	6	15	1	28	18	44	22	115	21	47	114	35

Major/Minor	Minor2			Minor1				Major1			Major2		
Conflicting Flow All	319	390	57	0	315	404	59	149	0	0	137	0	0
Stage 1	209	209	-	0	160	160	-	-	-	-	-	-	-
Stage 2	110	180	-	0	155	244	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	-	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	608	542	994	0	612	532	991	1422	-	-	1437	-	-
Stage 1	770	725	-	0	824	762	-	-	-	-	-	-	-
Stage 2	881	747	-	0	829	700	-	-	-	-	-	-	-
Platoon blocked, %				-					-	-		-	-
Mov Cap-1 Maneuver	535	516	994	0	566	506	991	1422	-	-	1436	-	-
Mov Cap-2 Maneuver	535	516	-	0	566	506	-	-	-	-	-	-	-
Stage 1	745	701	-	0	810	750	-	-	-	-	-	-	-
Stage 2	809	735	-	0	782	677	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.9	10.39	1.04	1.83
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1422	-	-	535	516	994	566	506	991	1436	-	-
HCM Lane V/C Ratio	0.015	-	-	0.044	0.012	0.016	0.049	0.035	0.045	0.033	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	12	12.1	8.7	11.7	12.4	8.8	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	0.2	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	29	11	25	239	1	233	83
Future Vol, veh/h	29	11	25	239	1	233	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	250	-	250	-	250
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	32	12	28	266	1	259	92

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	580	259	351	0	-	-	0
Stage 1	259	-	-	-	-	-	-
Stage 2	321	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	475	777	1202	-	-	-	-
Stage 1	782	-	-	-	-	-	-
Stage 2	733	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	464	777	1202	-	-	-	-
Mov Cap-2 Maneuver	464	-	-	-	-	-	-
Stage 1	764	-	-	-	-	-	-
Stage 2	733	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.34	0.76	
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	1202	-	464	777	-	-	-
HCM Lane V/C Ratio	0.023	-	0.069	0.016	-	-	-
HCM Ctrl Dly (s/v)	8.1	-	13.3	9.7	-	-	-
HCM Lane LOS	A	-	B	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0	-	-	-

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	134	66	30	23	57	25	36	262	28	1	15
Future Volume (vph)	6	134	66	30	23	57	25	36	262	28	1	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.9	4.9	4.2	5.3		4.2	5.3	5.3		4.2
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		1752	3505	1568	1752	1761		1752	1845	1568		1752
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)		1752	3505	1568	1752	1761		1752	1845	1568		1752
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	6	141	69	32	24	60	26	38	276	29	1	16
RTOR Reduction (vph)	0	0	0	20	0	17	0	0	0	20	0	0
Lane Group Flow (vph)	0	147	69	12	24	69	0	38	276	9	0	17
Confl. Peds. (#/hr)								4				
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	Prot
Protected Phases	7	7	4		3	8		5	2		1	1
Permitted Phases				4						2		
Actuated Green, G (s)		11.6	24.1	24.1	0.8	12.9		2.5	20.7	20.7		0.8
Effective Green, g (s)		11.6	24.1	24.1	0.8	12.9		2.5	20.7	20.7		0.8
Actuated g/C Ratio		0.18	0.37	0.37	0.01	0.20		0.04	0.32	0.32		0.01
Clearance Time (s)		4.2	4.9	4.9	4.2	5.3		4.2	5.3	5.3		4.2
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		312	1299	581	21	349		67	587	499		21
v/s Ratio Prot		c0.08	0.02		0.01	c0.04		c0.02	c0.15			0.01
v/s Ratio Perm				0.01						0.01		
v/c Ratio		0.47	0.05	0.02	1.14	0.20		0.57	0.47	0.02		0.81
Uniform Delay, d1		23.9	13.1	13.0	32.1	21.7		30.7	17.8	15.2		32.0
Progression Factor		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2		1.1	0.0	0.0	244.5	0.3		10.6	0.6	0.0		109.0
Delay (s)		25.1	13.1	13.0	276.6	22.0		41.3	18.4	15.2		141.1
Level of Service		C	B	B	F	C		D	B	B		F
Approach Delay (s/veh)			20.2			77.6			20.6			
Approach LOS			C			E			C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	187	122
Future Volume (vph)	187	122
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.3	5.3
Lane Util. Factor	0.95	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3505	1531
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3505	1531
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	197	128
RTOR Reduction (vph)	0	91
Lane Group Flow (vph)	197	37
Confl. Peds. (#/hr)		4
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	19.0	19.0
Effective Green, g (s)	19.0	19.0
Actuated g/C Ratio	0.29	0.29
Clearance Time (s)	5.3	5.3
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1024	447
v/s Ratio Prot	0.06	
v/s Ratio Perm		0.02
v/c Ratio	0.19	0.08
Uniform Delay, d1	17.2	16.7
Progression Factor	1.00	1.00
Incremental Delay, d2	0.1	0.1
Delay (s)	17.3	16.8
Level of Service	B	B
Approach Delay (s/veh)	23.3	
Approach LOS	C	

Intersection Summary

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	36	23	2	13	0	32	117	4	10	62	36
Future Vol, veh/h	50	36	23	2	13	0	32	117	4	10	62	36
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	57	41	26	2	15	0	36	133	5	11	70	41
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.5	7.9	8.7	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	21%	46%	13%	9%
Vol Thru, %	76%	33%	87%	57%
Vol Right, %	3%	21%	0%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	153	109	15	108
LT Vol	32	50	2	10
Through Vol	117	36	13	62
RT Vol	4	23	0	36
Lane Flow Rate	174	124	17	123
Geometry Grp	1	1	1	1
Degree of Util (X)	0.215	0.158	0.023	0.147
Departure Headway (Hd)	4.448	4.606	4.801	4.3
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	808	780	746	836
Service Time	2.464	2.627	2.827	2.318
HCM Lane V/C Ratio	0.215	0.159	0.023	0.147
HCM Control Delay, s/veh	8.7	8.5	7.9	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.1	0.5

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	251	200	55	116
Average Queue (ft)	81	71	4	32
95th Queue (ft)	172	141	23	71
Link Distance (ft)	2565		1307	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		250
Storage Blk Time (%)	13	1		
Queuing Penalty (veh)	23	1		

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	46	79	54	41	68	48	68	92	45	43	64	93
Average Queue (ft)	21	37	32	23	28	18	30	41	23	15	33	10
95th Queue (ft)	42	63	52	37	55	38	49	74	40	34	57	39
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)												0
Queuing Penalty (veh)												0

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	118	42	31	115	124	71
Average Queue (ft)	47	19	13	51	64	27
95th Queue (ft)	83	33	37	80	102	54
Link Distance (ft)		462		475	1255	1255
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Armstrong Avenue & California Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	R	UL	T	R	L	L
Maximum Queue (ft)	50	24	66	84	18	60	49	41
Average Queue (ft)	18	8	15	29	1	18	2	5
95th Queue (ft)	41	25	38	54	6	35	19	24
Link Distance (ft)		1964			794	794		
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250		120	250			70	230
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: Temperance Avenue & California Avenue

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	46	38	26
Average Queue (ft)	20	16	2
95th Queue (ft)	38	32	12
Link Distance (ft)	1680	1680	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	T	T	R	L	TR	UL	T	R	UL	T	T
Maximum Queue (ft)	152	110	109	43	107	129	154	399	65	189	177	138
Average Queue (ft)	71	51	11	23	44	57	78	150	17	62	94	48
95th Queue (ft)	124	90	49	42	94	114	141	267	44	135	134	114
Link Distance (ft)		2479	2479			897		1067	1067		1880	1880
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215			115	200		240			240		
Storage Blk Time (%)			0					1				
Queuing Penalty (veh)			0					2				

Intersection: 6: Fowler Avenue & Church Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	54
Average Queue (ft)	29
95th Queue (ft)	54
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	170
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	143	53	135	146
Average Queue (ft)	65	28	56	68
95th Queue (ft)	104	49	94	112
Link Distance (ft)	1612	2495	2635	638
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 25

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	74	130	52	93
Average Queue (ft)	27	46	4	42
95th Queue (ft)	58	87	22	75
Link Distance (ft)	2565		1307	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		250
Storage Blk Time (%)		1		
Queuing Penalty (veh)		0		

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	30	50	53	48	74	24	49	64	20	42	56	34
Average Queue (ft)	8	26	29	24	21	9	24	34	13	17	23	7
95th Queue (ft)	28	46	45	41	49	25	41	56	27	34	45	20
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	45	33	32	98	135	79
Average Queue (ft)	22	8	17	52	52	36
95th Queue (ft)	35	24	43	83	93	63
Link Distance (ft)		462		475	1255	1255
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Armstrong Avenue & California Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	R	UL	T	R	L	L	R
Maximum Queue (ft)	48	24	21	44	42	37	25	26	12
Average Queue (ft)	14	3	8	16	7	13	2	6	0
95th Queue (ft)	37	16	24	34	25	25	14	22	4
Link Distance (ft)		1970			794	794			
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		120	250			70	230	115
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 5: Temperance Avenue & California Avenue

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	23	18	31
Average Queue (ft)	12	6	5
95th Queue (ft)	27	19	21
Link Distance (ft)	1672	1672	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	T	T	R	L	TR	UL	T	R	UL	T	T
Maximum Queue (ft)	136	68	22	60	45	85	47	239	20	52	116	50
Average Queue (ft)	73	26	1	11	16	31	16	74	7	14	59	10
95th Queue (ft)	118	56	8	30	40	69	45	148	20	39	103	35
Link Distance (ft)		2479	2479			903		1067	1067		1880	1880
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215			115	200		240			240		
Storage Blk Time (%)								0				
Queuing Penalty (veh)								0				

Intersection: 6: Fowler Avenue & Church Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	72
Average Queue (ft)	35
95th Queue (ft)	67
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	170
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	80	30	55	68
Average Queue (ft)	36	14	34	31
95th Queue (ft)	62	36	47	43
Link Distance (ft)	1606	2495	2635	638
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Existing plus Project Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	AM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	449	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.82	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	52.9

Vehicle Results

Average Speed, mi/h	52.9	Percent Followers, %	52.0
Segment Travel Time, minutes	1.13	Follower Density, followers/mi/ln	4.4
Vehicle LOS	C		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	4.4	C

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HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Existing plus Project Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	PM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	196	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.85	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	53.9

Vehicle Results

Average Speed, mi/h	53.9	Percent Followers, %	32.6
Segment Travel Time, minutes	1.11	Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	1.2	A

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Appendix H: Near Term plus Project Traffic Conditions

Intersection	
Int Delay, s/veh	5.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	128	214	583	97	92	446
Future Vol, veh/h	128	214	583	97	92	446
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	132	221	601	100	95	460

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1303	653	0	0	703	0
Stage 1	653	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	176	466	-	-	890	-
Stage 1	516	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	157	465	-	-	888	-
Mov Cap-2 Maneuver	294	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	463	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	22.29	0	1.63
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	294	465	888	-
HCM Lane V/C Ratio	-	-	0.449	0.475	0.107	-
HCM Control Delay (s/veh)	-	-	26.9	19.6	9.5	-
HCM Lane LOS	-	-	D	C	A	-
HCM 95th %tile Q(veh)	-	-	2.2	2.5	0.4	-

Intersection	
Intersection Delay, s/veh	14
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	97	92	64	51	55	145	207	100	36	204	24
Future Vol, veh/h	28	97	92	64	51	55	145	207	100	36	204	24
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	33	114	108	75	60	65	171	244	118	42	240	28
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	12.3	12	14.4	15.9
HCM LOS	B	B	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	207	100	28	97	92	64	51	55	36	204
LT Vol	145	0	0	28	0	0	64	0	0	36	0
Through Vol	0	207	0	0	97	0	0	51	0	0	204
RT Vol	0	0	100	0	0	92	0	0	55	0	0
Lane Flow Rate	171	244	118	33	114	108	75	60	65	42	240
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.358	0.477	0.207	0.075	0.245	0.212	0.175	0.131	0.129	0.094	0.497
Departure Headway (Hd)	7.545	7.045	6.345	8.241	7.741	7.041	8.369	7.869	7.169	7.957	7.457
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	478	511	566	435	464	510	429	455	500	451	482
Service Time	5.284	4.784	4.084	5.986	5.486	4.786	6.116	5.616	4.916	5.701	5.201
HCM Lane V/C Ratio	0.358	0.477	0.208	0.076	0.246	0.212	0.175	0.132	0.13	0.093	0.498
HCM Control Delay, s/veh	14.5	16.1	10.7	11.7	13	11.7	12.9	11.8	11	11.5	17.4
HCM Lane LOS	B	C	B	B	B	B	B	B	B	B	C
HCM 95th-tile Q	1.6	2.5	0.8	0.2	1	0.8	0.6	0.4	0.4	0.3	2.7

Intersection	
Intersection Delay, s/veh	38.7
Intersection LOS	E

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	239	128	40	346	472	63
Future Vol, veh/h	239	128	40	346	472	63
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	269	144	45	389	530	71
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Righ	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	18.5	26.9	61.1
HCM LOS	C	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	346	239	128	472	63
LT Vol	40	0	239	0	0	0
Through Vol	0	346	0	0	472	0
RT Vol	0	0	0	128	0	63
Lane Flow Rate	45	389	269	144	530	71
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.094	0.756	0.593	0.273	1.011	0.121
Departure Headway (Hd)	7.643	7.129	8.083	6.831	6.865	6.148
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	472	509	448	528	530	586
Service Time	5.343	4.829	5.783	4.552	4.571	3.854
HCM Lane V/C Ratio	0.095	0.764	0.6	0.273	1	0.121
HCM Control Delay, s/veh	11.1	28.7	21.9	12.1	68	9.7
HCM Lane LOS	B	D	C	B	F	A
HCM 95th-tile Q	0.3	6.5	3.8	1.1	14.5	0.4

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	62	24	47	8	109	5	78	19	226	77	34	283	25
Future Vol, veh/h	62	24	47	8	109	5	78	19	226	77	34	283	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	250	-	120	-	250	-	0	70	-	150	230	-	115
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	75	29	57	10	131	6	94	23	272	93	41	341	30

Major/Minor	Minor2			Minor1				Major1			Major2		
Conflicting Flow All	608	834	170	0	585	771	136	371	0	0	365	0	0
Stage 1	423	423	-	0	318	318	-	-	-	-	-	-	-
Stage 2	185	411	-	0	267	453	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	-	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	378	301	840	0	392	327	884	1177	-	-	1183	-	-
Stage 1	576	584	-	0	665	650	-	-	-	-	-	-	-
Stage 2	796	591	-	0	713	566	-	-	-	-	-	-	-
Platoon blocked, %				-					-	-		-	-
Mov Cap-1 Maneuver	314	285	840	0	313	310	884	1177	-	-	1183	-	-
Mov Cap-2 Maneuver	314	285	-	0	313	310	-	-	-	-	-	-	-
Stage 1	557	563	-	0	652	637	-	-	-	-	-	-	-
Stage 2	691	579	-	0	609	546	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.17	18.27	0.48	0.81
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1177	-	-	314	285	840	313	310	884	1183	-	-
HCM Lane V/C Ratio	0.019	-	-	0.238	0.102	0.067	0.42	0.019	0.106	0.035	-	-
HCM Control Delay (s/veh)	8.1	-	-	20	19.1	9.6	24.6	16.9	9.6	8.2	-	-
HCM Lane LOS	A	-	-	C	C	A	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.3	0.2	2	0.1	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	108	118	10	288	2	576	10
Future Vol, veh/h	108	118	10	288	2	576	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	250	-	250	-	250
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	126	137	12	335	2	670	12

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1028	670	681	0	-	-	0
Stage 1	670	-	-	-	-	-	-
Stage 2	358	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	258	455	907	-	-	-	-
Stage 1	507	-	-	-	-	-	-
Stage 2	705	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	255	455	907	-	-	-	-
Mov Cap-2 Maneuver	255	-	-	-	-	-	-
Stage 1	500	-	-	-	-	-	-
Stage 2	705	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	23.84	0.3	
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	907	-	255	455	-	-	-
HCM Lane V/C Ratio	0.013	-	0.493	0.301	-	-	-
HCM Control Delay (s/veh)	9	-	32.1	16.3	-	-	-
HCM Lane LOS	A	-	D	C	-	-	-
HCM 95th %tile Q(veh)	0	-	2.5	1.3	-	-	-

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	10	118	143	151	125	112	67	38	182	337	98	1
Future Volume (vph)	10	118	143	151	125	112	67	38	182	337	98	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00			1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.99	1.00	1.00			1.00	1.00	0.98	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.94			1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1752	3505	1548	1752	1741			1752	1845	1535	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1752	3505	1548	1752	1741			1752	1845	1535	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	130	157	166	137	123	74	42	200	370	108	1
RTOR Reduction (vph)	0	0	0	131	0	24	0	0	0	0	73	0
Lane Group Flow (vph)	0	141	157	35	137	173	0	0	242	370	35	0
Confl. Peds. (#/hr)				1	1				27		1	
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases				4							2	
Actuated Green, G (s)		8.2	15.5	15.5	8.2	15.1			11.4	23.6	23.6	
Effective Green, g (s)		8.2	15.5	15.5	8.2	15.1			11.4	23.6	23.6	
Actuated g/C Ratio		0.11	0.21	0.21	0.11	0.21			0.16	0.32	0.32	
Clearance Time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		197	746	329	197	361			274	598	497	
v/s Ratio Prot		c0.08	0.04		0.08	c0.10			c0.14	c0.20		
v/s Ratio Perm				0.02							0.02	
v/c Ratio		0.72	0.21	0.11	0.70	0.48			0.88	0.62	0.07	
Uniform Delay, d1		31.2	23.6	23.1	31.1	25.4			30.0	20.8	17.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		11.7	0.1	0.1	10.2	1.0			26.6	1.9	0.1	
Delay (s)		42.9	23.7	23.2	41.3	26.4			56.7	22.7	17.1	
Level of Service		D	C	C	D	C			E	C	B	
Approach Delay (s/veh)			29.4			32.5				33.3		
Approach LOS			C			C				C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	72.8	Sum of lost time (s)	19.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	92	388	114
Future Volume (vph)	92	388	114
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	4.2	5.3	5.3
Lane Util. Factor	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1492
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1752	3505	1492
Peak-hour factor, PHF	0.91	0.91	0.91
Adj. Flow (vph)	101	426	125
RTOR Reduction (vph)	0	0	92
Lane Group Flow (vph)	102	426	33
Confl. Peds. (#/hr)	1		27
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	6.9	19.1	19.1
Effective Green, g (s)	6.9	19.1	19.1
Actuated g/C Ratio	0.09	0.26	0.26
Clearance Time (s)	4.2	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	166	919	391
v/s Ratio Prot	0.06	0.12	
v/s Ratio Perm			0.02
v/c Ratio	0.61	0.46	0.08
Uniform Delay, d1	31.7	22.5	20.3
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	6.6	0.4	0.1
Delay (s)	38.3	22.9	20.3
Level of Service	D	C	C
Approach Delay (s/veh)		24.8	
Approach LOS		C	

Intersection Summary

Intersection	
Intersection Delay, s/veh	254.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	240	181	30	298	27	183	150	33	30	310	104
Future Vol, veh/h	61	240	181	30	298	27	183	150	33	30	310	104
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	79	312	235	39	387	35	238	195	43	39	403	135
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	334.6	173.5	191	286
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	13%	8%	7%
Vol Thru, %	41%	50%	84%	70%
Vol Right, %	9%	38%	8%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	366	482	355	444
LT Vol	183	61	30	30
Through Vol	150	240	298	310
RT Vol	33	181	27	104
Lane Flow Rate	475	626	461	577
Geometry Grp	1	1	1	1
Degree of Util (X)	1.28	1.643	1.232	1.525
Departure Headway (Hd)	14.373	12.724	14.517	13.204
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	257	294	254	283
Service Time	12.373	10.724	12.517	11.204
HCM Lane V/C Ratio	1.848	2.129	1.815	2.039
HCM Control Delay, s/veh	191	334.6	173.5	286
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	16.2	28.8	14.9	24.3

Intersection	
Int Delay, s/veh	4.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	174	516	63	220	535
Future Vol, veh/h	48	174	516	63	220	535
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	53	193	573	70	244	594

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1692	609	0	0	643	0
Stage 1	608	-	-	-	-	-
Stage 2	1083	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	102	493	-	-	937	-
Stage 1	541	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	75	493	-	-	937	-
Mov Cap-2 Maneuver	179	-	-	-	-	-
Stage 1	541	-	-	-	-	-
Stage 2	239	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.5	0	2.97
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	179	493	937	-
HCM Lane V/C Ratio	-	-	0.298	0.393	0.261	-
HCM Control Delay (s/veh)	-	-	33.4	17	10.2	-
HCM Lane LOS	-	-	D	C	B	-
HCM 95th %tile Q(veh)	-	-	1.2	1.8	1	-

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	55	114	62	46	25	96	172	58	32	146	20
Future Vol, veh/h	16	55	114	62	46	25	96	172	58	32	146	20
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	66	137	75	55	30	116	207	70	39	176	24
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	10.7	10.8	11.8	12
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	172	58	16	55	114	62	46	25	32	146
LT Vol	96	0	0	16	0	0	62	0	0	32	0
Through Vol	0	172	0	0	55	0	0	46	0	0	146
RT Vol	0	0	58	0	0	114	0	0	25	0	0
Lane Flow Rate	116	207	70	19	66	137	75	55	30	39	176
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.221	0.367	0.11	0.039	0.126	0.234	0.155	0.107	0.052	0.077	0.326
Departure Headway (Hd)	6.883	6.383	5.683	7.341	6.841	6.141	7.451	6.951	6.251	7.175	6.675
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	520	562	628	486	522	582	480	513	570	498	537
Service Time	4.642	4.142	3.442	5.11	4.61	3.91	5.224	4.724	4.024	4.94	4.44
HCM Lane V/C Ratio	0.223	0.368	0.111	0.039	0.126	0.235	0.156	0.107	0.053	0.078	0.328
HCM Control Delay, s/veh	11.6	12.8	9.2	10.4	10.6	10.8	11.6	10.6	9.4	10.5	12.7
HCM Lane LOS	B	B	A	B	B	B	B	B	A	B	B
HCM 95th-tile Q	0.8	1.7	0.4	0.1	0.4	0.9	0.5	0.4	0.2	0.2	1.4

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	91	31	37	337	383	147
Future Vol, veh/h	91	31	37	337	383	147
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	101	34	41	374	426	163
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Righ	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	11.4	15.7	15.5
HCM LOS	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	337	91	31	383	147
LT Vol	37	0	91	0	0	0
Through Vol	0	337	0	0	383	0
RT Vol	0	0	0	31	0	147
Lane Flow Rate	41	374	101	34	426	163
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.071	0.592	0.208	0.059	0.655	0.22
Departure Headway (Hd)	6.201	5.695	7.419	6.199	5.545	4.838
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	579	637	484	578	655	746
Service Time	3.927	3.422	5.157	3.937	3.245	2.538
HCM Lane V/C Ratio	0.071	0.587	0.209	0.059	0.65	0.218
HCM Control Delay, s/veh	9.4	16.4	12.1	9.3	18.1	8.9
HCM Lane LOS	A	C	B	A	C	A
HCM 95th-tile Q	0.2	3.9	0.8	0.2	4.9	0.8

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	50	12	32	1	28	28	46	44	171	32	51	126	86
Future Vol, veh/h	50	12	32	1	28	28	46	44	171	32	51	126	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	250	-	120	-	250	-	0	70	-	150	230	-	115
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	52	12	33	1	29	29	47	45	176	33	53	130	89

Major/Minor	Minor2			Minor1				Major1			Major2		
Conflicting Flow All	428	536	65	0	444	592	89	219	0	0	210	0	0
Stage 1	235	235	-	0	268	268	-	-	-	-	-	-	-
Stage 2	193	301	-	0	176	324	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	-	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	508	447	982	0	495	416	948	1341	-	-	1350	-	-
Stage 1	744	707	-	0	712	684	-	-	-	-	-	-	-
Stage 2	787	661	-	0	805	646	-	-	-	-	-	-	-
Platoon blocked, %				-					-	-		-	-
Mov Cap-1 Maneuver	417	415	982	0	431	385	947	1341	-	-	1349	-	-
Mov Cap-2 Maneuver	417	415	-	0	431	385	-	-	-	-	-	-	-
Stage 1	715	679	-	0	687	660	-	-	-	-	-	-	-
Stage 2	691	638	-	0	734	621	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.67	12.03	1.39	1.51
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1341	-	-	417	415	982	431	385	947	1349	-	-
HCM Lane V/C Ratio	0.034	-	-	0.124	0.03	0.034	0.067	0.075	0.05	0.039	-	-
HCM Control Delay (s/veh)	7.8	-	-	14.9	13.9	8.8	13.9	15.1	9	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0.1	0.2	0.2	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	38	11	27	340	1	318	99
Future Vol, veh/h	38	11	27	340	1	318	99
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	250	-	250	-	250
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	42	12	30	378	1	353	110

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	791	353	463	0	-	-	0
Stage 1	353	-	-	-	-	-	-
Stage 2	438	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	357	688	1093	-	-	-	-
Stage 1	709	-	-	-	-	-	-
Stage 2	649	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	347	688	1093	-	-	-	-
Mov Cap-2 Maneuver	347	-	-	-	-	-	-
Stage 1	689	-	-	-	-	-	-
Stage 2	649	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.34	0.62	
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	1093	-	347	688	-	-	-
HCM Lane V/C Ratio	0.027	-	0.122	0.018	-	-	-
HCM Control Delay (s/veh)	8.4	-	16.8	10.3	-	-	-
HCM Lane LOS	A	-	C	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	0.1	-	-	-

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	6	150	74	45	36	61	29	14	60	335	44	1
Future Volume (vph)	6	150	74	45	36	61	29	14	60	335	44	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00			1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.95			1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1752	3505	1568	1752	1754			1752	1845	1568	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1752	3505	1568	1752	1754			1752	1845	1568	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	6	158	78	47	38	64	31	15	63	353	46	1
RTOR Reduction (vph)	0	0	0	32	0	20	0	0	0	0	29	0
Lane Group Flow (vph)	0	164	78	15	38	75	0	0	78	353	17	0
Confl. Peds. (#/hr)									4			
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases				4							2	
Actuated Green, G (s)		12.3	21.6	21.6	2.6	11.5			6.1	24.5	24.5	
Effective Green, g (s)		12.3	21.6	21.6	2.6	11.5			6.1	24.5	24.5	
Actuated g/C Ratio		0.18	0.32	0.32	0.04	0.17			0.09	0.36	0.36	
Clearance Time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		315	1110	496	66	295			156	662	563	
v/s Ratio Prot		c0.09	0.02		0.02	c0.04			c0.04	c0.19		
v/s Ratio Perm				0.01							0.01	
v/c Ratio		0.52	0.07	0.03	0.58	0.25			0.50	0.53	0.03	
Uniform Delay, d1		25.3	16.3	16.1	32.3	24.6			29.6	17.3	14.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		1.6	0.0	0.0	11.6	0.5			2.5	0.8	0.0	
Delay (s)		26.8	16.3	16.1	43.8	25.1			32.1	18.1	14.2	
Level of Service		C	B	B	D	C			C	B	B	
Approach Delay (s/veh)			22.2			30.4				20.0		
Approach LOS			C			C				C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	68.2	Sum of lost time (s)	19.0
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	20	239	140
Future Volume (vph)	20	239	140
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	4.2	5.3	5.3
Lane Util. Factor	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1530
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1752	3505	1530
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	21	252	147
RTOR Reduction (vph)	0	0	105
Lane Group Flow (vph)	22	252	42
Confl. Peds. (#/hr)			4
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	0.9	19.3	19.3
Effective Green, g (s)	0.9	19.3	19.3
Actuated g/C Ratio	0.01	0.28	0.28
Clearance Time (s)	4.2	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	23	991	432
v/s Ratio Prot	0.01	0.07	
v/s Ratio Perm			0.03
v/c Ratio	0.96	0.25	0.10
Uniform Delay, d1	33.6	18.9	18.0
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	166.5	0.1	0.1
Delay (s)	200.2	19.0	18.1
Level of Service	F	B	B
Approach Delay (s/veh)		28.2	
Approach LOS		C	

Intersection Summary

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	107	33	2	79	3	41	155	6	14	80	41
Future Vol, veh/h	58	107	33	2	79	3	41	155	6	14	80	41
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	66	122	38	2	90	3	47	176	7	16	91	47
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.3	9.1	10.4	9.3
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	29%	2%	10%
Vol Thru, %	77%	54%	94%	59%
Vol Right, %	3%	17%	4%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	202	198	84	135
LT Vol	41	58	2	14
Through Vol	155	107	79	80
RT Vol	6	33	3	41
Lane Flow Rate	230	225	95	153
Geometry Grp	1	1	1	1
Degree of Util (X)	0.317	0.311	0.137	0.208
Departure Headway (Hd)	4.969	4.97	5.175	4.892
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	716	718	684	726
Service Time	3.046	3.047	3.268	2.976
HCM Lane V/C Ratio	0.321	0.313	0.139	0.211
HCM Control Delay, s/veh	10.4	10.3	9.1	9.3
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.4	1.3	0.5	0.8

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	239	128	40	346	0	472	63
Future Volume (veh/h)	239	128	40	346	0	472	63
Initial Q (Qb), veh	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	269	144	45	389		530	71
Peak Hour Factor	0.89	0.89	0.89	0.89		0.89	0.89
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	378	337	133	1005		685	581
Arrive On Green	0.21	0.21	0.08	0.54		0.37	0.37
Sat Flow, veh/h	1767	1572	1767	1856		1856	1572
Grp Volume(v), veh/h	269	144	45	389		530	71
Grp Sat Flow(s),veh/h/ln	1767	1572	1767	1856		1856	1572
Q Serve(g_s), s	6.1	3.4	1.0	5.3		10.9	1.3
Cycle Q Clear(g_c), s	6.1	3.4	1.0	5.3		10.9	1.3
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	378	337	133	1005		685	581
V/C Ratio(X)	0.71	0.43	0.34	0.39		0.77	0.12
Avail Cap(c_a), veh/h	1508	1342	318	1301		1301	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	15.8	14.7	19.0	5.8		12.1	9.0
Incr Delay (d2), s/veh	2.5	0.9	1.5	0.2		1.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.1	0.4	1.0		3.4	0.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	18.3	15.6	20.5	6.0		14.0	9.1
LnGrp LOS	B	B	C	A		B	A
Approach Vol, veh/h	413			434		601	
Approach Delay, s/veh	17.3			7.5		13.4	
Approach LOS	B			A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.8		14.6	7.5	21.3
Change Period (Y+Rc), s		5.3		5.3	4.2	5.3
Max Green Setting (Gmax), s		30.4		37.0	7.8	30.4
Max Q Clear Time (g_c+I1), s		7.3		8.1	3.0	12.9
Green Ext Time (p_c), s		2.1		1.2	0.0	3.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.8
HCM 7th LOS	B

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	240	181	30	298	27	183	150	33	30	310	104
Future Volume (veh/h)	61	240	181	30	298	27	183	150	33	30	310	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	79	312	235	39	387	35	238	195	43	39	403	135
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	506	429	92	427	39	246	615	136	92	439	147
Arrive On Green	0.07	0.27	0.27	0.05	0.25	0.25	0.14	0.42	0.42	0.05	0.33	0.33
Sat Flow, veh/h	1767	1856	1572	1767	1677	152	1767	1472	325	1767	1330	445
Grp Volume(v), veh/h	79	312	235	39	0	422	238	0	238	39	0	538
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1828	1767	0	1797	1767	0	1775
Q Serve(g_s), s	4.3	14.6	12.7	2.1	0.0	22.2	13.3	0.0	8.8	2.1	0.0	28.9
Cycle Q Clear(g_c), s	4.3	14.6	12.7	2.1	0.0	22.2	13.3	0.0	8.8	2.1	0.0	28.9
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.18	1.00		0.25
Lane Grp Cap(c), veh/h	123	506	429	92	0	466	246	0	750	92	0	586
V/C Ratio(X)	0.64	0.62	0.55	0.43	0.00	0.91	0.97	0.00	0.32	0.43	0.00	0.92
Avail Cap(c_a), veh/h	139	575	487	139	0	554	246	0	750	139	0	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.9	31.5	30.8	45.5	0.0	35.8	42.4	0.0	19.4	45.5	0.0	31.9
Incr Delay (d2), s/veh	8.0	1.6	1.1	3.1	0.0	16.7	47.9	0.0	1.1	3.1	0.0	21.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	6.4	4.5	1.0	0.0	11.2	8.7	0.0	3.5	1.0	0.0	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.9	33.1	31.9	48.6	0.0	52.4	90.3	0.0	20.5	48.6	0.0	53.6
LnGrp LOS	D	C	C	D		D	F		C	D		D
Approach Vol, veh/h		626			461			476			577	
Approach Delay, s/veh		35.1			52.1			55.4			53.2	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	47.4	9.3	33.0	18.0	38.7	11.1	31.2
Change Period (Y+Rc), s	4.2	6.0	4.2	* 6	4.2	* 6	4.2	6.0
Max Green Setting (Gmax), s	7.8	38.0	7.8	* 31	13.8	* 33	7.8	30.0
Max Q Clear Time (g_c+I1), s	4.1	10.8	4.1	16.6	15.3	30.9	6.3	24.2
Green Ext Time (p_c), s	0.0	1.2	0.0	2.1	0.0	0.6	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	48.2
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	91	31	37	337	0	383	147
Future Volume (veh/h)	91	31	37	337	0	383	147
Initial Q (Qb), veh	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	101	34	41	374		426	163
Peak Hour Factor	0.90	0.90	0.90	0.90		0.90	0.90
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	288	256	129	990		632	534
Arrive On Green	0.16	0.16	0.07	0.53		0.34	0.34
Sat Flow, veh/h	1767	1572	1767	1856		1856	1570
Grp Volume(v), veh/h	101	34	41	374		426	163
Grp Sat Flow(s),veh/h/ln	1767	1572	1767	1856		1856	1570
Q Serve(g_s), s	1.8	0.6	0.8	4.1		6.9	2.7
Cycle Q Clear(g_c), s	1.8	0.6	0.8	4.1		6.9	2.7
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	288	256	129	990		632	534
V/C Ratio(X)	0.35	0.13	0.32	0.38		0.67	0.30
Avail Cap(c_a), veh/h	1870	1664	394	1614		1614	1365
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	13.0	12.5	15.4	4.8		9.9	8.5
Incr Delay (d2), s/veh	0.7	0.2	1.4	0.2		1.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.6	0.3	0.5		1.8	0.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	13.7	12.7	16.8	5.0		11.1	8.8
LnGrp LOS	B	B	B	A		B	A
Approach Vol, veh/h	135			415		589	
Approach Delay, s/veh	13.5			6.2		10.5	
Approach LOS	B			A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.0		11.0	6.8	17.2
Change Period (Y+Rc), s		5.3		5.3	4.2	5.3
Max Green Setting (Gmax), s		30.4		37.0	7.8	30.4
Max Q Clear Time (g_c+I1), s		6.1		3.8	2.8	8.9
Green Ext Time (p_c), s		2.0		0.4	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	9.3
HCM 7th LOS	A

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	107	33	2	79	3	41	155	6	14	80	41
Future Volume (veh/h)	58	107	33	2	79	3	41	155	6	14	80	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	66	122	38	2	90	3	47	176	7	16	91	47
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	174	494	419	8	307	10	137	401	16	56	208	107
Arrive On Green	0.10	0.27	0.27	0.00	0.17	0.17	0.08	0.23	0.23	0.03	0.18	0.18
Sat Flow, veh/h	1767	1856	1572	1767	1785	60	1767	1772	70	1767	1153	595
Grp Volume(v), veh/h	66	122	38	2	0	93	47	0	183	16	0	138
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1845	1767	0	1843	1767	0	1748
Q Serve(g_s), s	1.5	2.2	0.8	0.0	0.0	1.9	1.1	0.0	3.7	0.4	0.0	3.0
Cycle Q Clear(g_c), s	1.5	2.2	0.8	0.0	0.0	1.9	1.1	0.0	3.7	0.4	0.0	3.0
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.04	1.00		0.34
Lane Grp Cap(c), veh/h	174	494	419	8	0	317	137	0	417	56	0	315
V/C Ratio(X)	0.38	0.25	0.09	0.26	0.00	0.29	0.34	0.00	0.44	0.29	0.00	0.44
Avail Cap(c_a), veh/h	359	1188	1007	319	0	1108	319	0	1150	319	0	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.3	12.5	11.9	21.5	0.0	15.6	18.9	0.0	14.4	20.5	0.0	15.8
Incr Delay (d2), s/veh	1.4	0.3	0.1	17.5	0.0	0.5	1.5	0.0	0.7	2.8	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.7	0.2	0.1	0.0	0.6	0.4	0.0	1.2	0.2	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.6	12.7	12.0	39.0	0.0	16.1	20.4	0.0	15.1	23.3	0.0	16.7
LnGrp LOS	B	B	B	D		B	C		B	C		B
Approach Vol, veh/h		226			95			230			154	
Approach Delay, s/veh		14.6			16.6			16.2			17.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	15.8	4.4	17.5	7.6	13.8	8.5	13.4
Change Period (Y+Rc), s	4.2	6.0	4.2	* 6	4.2	* 6	4.2	6.0
Max Green Setting (Gmax), s	7.8	27.0	7.8	* 28	7.8	* 28	8.8	26.0
Max Q Clear Time (g_c+I1), s	2.4	5.7	2.0	4.2	3.1	5.0	3.5	3.9
Green Ext Time (p_c), s	0.0	0.8	0.0	0.6	0.0	0.6	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	16.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	573	200	32	91
Average Queue (ft)	197	123	2	38
95th Queue (ft)	427	236	15	72
Link Distance (ft)	2565		1307	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		250
Storage Blk Time (%)	55	6		
Queuing Penalty (veh)	117	8		

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	48	111	68	50	50	46	73	159	60	64	79	39
Average Queue (ft)	18	35	34	24	21	20	35	47	29	21	42	11
95th Queue (ft)	42	64	55	44	43	42	58	94	50	46	75	28
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)								0				
Queuing Penalty (veh)								1				

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	159	66	51	198	238	31
Average Queue (ft)	88	33	24	74	120	18
95th Queue (ft)	140	61	50	138	193	39
Link Distance (ft)		462		475	1255	1255
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)				0	0	
Queuing Penalty (veh)				0	0	

Intersection: 4: Armstrong Avenue & California Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	R	UL	T	R	L	L
Maximum Queue (ft)	66	46	70	66	42	41	28	70
Average Queue (ft)	31	14	18	34	6	17	7	6
95th Queue (ft)	61	39	43	56	23	33	25	30
Link Distance (ft)		1964			794	794		
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250		120	250			70	230
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: Temperance Avenue & California Avenue

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	107	122	27
Average Queue (ft)	39	38	3
95th Queue (ft)	76	83	16
Link Distance (ft)	1680	1680	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	T	T	R	L	TR	UL	T	R	UL	T	T
Maximum Queue (ft)	170	126	43	87	203	237	230	321	64	160	214	146
Average Queue (ft)	79	61	11	39	87	98	130	138	17	78	116	85
95th Queue (ft)	147	110	34	69	147	176	198	248	41	136	186	155
Link Distance (ft)		2479	2479			915		1067	1067		1880	1880
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215			115	200		240			240		
Storage Blk Time (%)					1		0	1				
Queuing Penalty (veh)					2		0	2				

Intersection: 6: Fowler Avenue & Church Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	73
Average Queue (ft)	38
95th Queue (ft)	64
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	170
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	L	TR
Maximum Queue (ft)	140	273	116	97	265	273	257	74	395
Average Queue (ft)	49	119	59	28	166	129	85	31	177
95th Queue (ft)	106	206	100	69	265	231	195	61	284
Link Distance (ft)		1588			2489		2616		632
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		250	250		250		250	
Storage Blk Time (%)		1			2	1	0		3
Queuing Penalty (veh)		1			0	1	0		1

Network Summary

Network wide Queuing Penalty: 134

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	113	74	52	117
Average Queue (ft)	33	46	4	52
95th Queue (ft)	76	73	22	92
Link Distance (ft)	2565		1307	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		250
Storage Blk Time (%)	1			
Queuing Penalty (veh)	2			

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	51	94	74	50	48	38	47	97	45	25	45	35
Average Queue (ft)	8	26	34	25	20	13	28	42	17	15	29	7
95th Queue (ft)	30	57	54	44	44	34	40	68	36	32	47	25
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	135	20	72	182	225	79
Average Queue (ft)	39	5	22	60	88	29
95th Queue (ft)	84	16	53	139	165	59
Link Distance (ft)		462		475	1255	1255
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 4: Armstrong Avenue & California Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	R	UL	T	R	L	L	R
Maximum Queue (ft)	67	24	44	43	57	38	44	47	16
Average Queue (ft)	26	11	14	15	17	11	6	12	1
95th Queue (ft)	51	30	32	37	43	25	25	33	7
Link Distance (ft)		1970			794	794			
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		120	250			70	230	115
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 5: Temperance Avenue & California Avenue

Movement	EB	EB	NB	SB
Directions Served	L	R	L	U
Maximum Queue (ft)	63	20	88	26
Average Queue (ft)	24	6	9	1
95th Queue (ft)	48	20	40	9
Link Distance (ft)	1672	1672		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	T	T	R	L	TR	UL	T	R	UL	T	T
Maximum Queue (ft)	176	64	22	78	67	80	106	178	20	76	117	103
Average Queue (ft)	81	31	2	17	19	41	41	94	9	20	65	26
95th Queue (ft)	133	59	13	40	48	76	91	161	21	60	110	70
Link Distance (ft)		2479	2479			909		1067	1067		1880	1880
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215			115	200		240			240		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 6: Fowler Avenue & Church Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	55
Average Queue (ft)	33
95th Queue (ft)	51
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	170
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	L	TR
Maximum Queue (ft)	75	97	119	25	74	47	107	31	94
Average Queue (ft)	34	42	18	2	37	18	41	12	38
95th Queue (ft)	67	80	56	15	67	42	93	34	73
Link Distance (ft)		1594			2489		2616		632
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		250	250		250		250	
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 2

HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Near Term plus Project Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	AM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	541	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.82	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	52.7

Vehicle Results

Average Speed, mi/h	52.7	Percent Followers, %	57.0
Segment Travel Time, minutes	1.14	Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	5.9	C

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HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Near Term plus Project Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	PM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	254	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.85	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	53.6

Vehicle Results

Average Speed, mi/h	53.6	Percent Followers, %	38.1
Segment Travel Time, minutes	1.12	Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	1.8	A

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Appendix I: Cumulative Year 2046 plus Project Traffic Conditions

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	148	172	702	108	94	495
Future Vol, veh/h	148	172	702	108	94	495
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	153	177	724	111	97	510

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1486	781	0	0	837	0
Stage 1	781	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	~ 136	393	-	-	793	-
Stage 1	449	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 120	392	-	-	791	-
Mov Cap-2 Maneuver	255	-	-	-	-	-
Stage 1	449	-	-	-	-	-
Stage 2	429	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	29.27	0	1.63
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	255	392	791	-
HCM Lane V/C Ratio	-	-	0.599	0.452	0.122	-
HCM Control Delay (s/veh)	-	-	38.3	21.5	10.2	-
HCM Lane LOS	-	-	E	C	B	-
HCM 95th %tile Q(veh)	-	-	3.5	2.3	0.4	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	120	77	60	69	68	100	203	94	40	191	27
Future Vol, veh/h	31	120	77	60	69	68	100	203	94	40	191	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	34	130	84	65	75	74	109	221	102	43	208	29
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	11.8	11.4	13	13.8
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	203	94	31	120	77	60	69	68	40	191
LT Vol	100	0	0	31	0	0	60	0	0	40	0
Through Vol	0	203	0	0	120	0	0	69	0	0	191
RT Vol	0	0	94	0	0	77	0	0	68	0	0
Lane Flow Rate	109	221	102	34	130	84	65	75	74	43	208
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.224	0.424	0.177	0.074	0.267	0.155	0.144	0.155	0.138	0.093	0.414
Departure Headway (Hd)	7.424	6.924	6.224	7.866	7.366	6.666	7.945	7.445	6.745	7.681	7.181
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	487	523	580	456	488	538	452	482	531	467	502
Service Time	5.124	4.624	3.924	5.605	5.105	4.405	5.685	5.185	4.485	5.417	4.917
HCM Lane V/C Ratio	0.224	0.423	0.176	0.075	0.266	0.156	0.144	0.156	0.139	0.092	0.414
HCM Control Delay, s/veh	12.3	14.6	10.3	11.2	12.8	10.6	12	11.6	10.6	11.2	14.9
HCM Lane LOS	B	B	B	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.9	2.1	0.6	0.2	1.1	0.5	0.5	0.5	0.5	0.3	2

Intersection	
Intersection Delay, s/veh	465.2
Intersection LOS	F

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	261	112	36	916	1148	86
Future Vol, veh/h	261	112	36	916	1148	86
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	284	122	39	996	1248	93
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	25.3	437.1	619.9
HCM LOS	D	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	916	261	112	1148	86
LT Vol	36	0	261	0	0	0
Through Vol	0	916	0	0	1148	0
RT Vol	0	0	0	112	0	86
Lane Flow Rate	39	996	284	122	1248	93
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.082	1.946	0.645	0.236	2.425	0.163
Departure Headway (Hd)	9.063	8.539	10.34	9.025	8.069	7.34
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	398	438	352	401	462	492
Service Time	6.763	6.239	8.04	6.725	5.769	5.04
HCM Lane V/C Ratio	0.098	2.274	0.807	0.304	2.701	0.189
HCM Control Delay, s/veh	12.6	453.8	30	14.5	665.5	11.5
HCM Lane LOS	B	F	D	B	F	B
HCM 95th-tile Q	0.3	55.4	4.3	0.9	84.3	0.6

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	25	105	37	7	107	54	78	18	220	76	31	271	11
Future Vol, veh/h	25	105	37	7	107	54	78	18	220	76	31	271	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	250	-	120	-	250	-	0	70	-	150	230	-	115
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	114	40	8	116	59	85	20	239	83	34	295	12

Major/Minor	Minor2			Minor1				Major1			Major2		
Conflicting Flow All	550	723	147	0	550	652	120	307	0	0	322	0	0
Stage 1	362	362	-	0	278	278	-	-	-	-	-	-	-
Stage 2	188	361	-	0	272	374	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	-	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	416	349	870	0	416	384	906	1244	-	-	1228	-	-
Stage 1	626	621	-	0	702	676	-	-	-	-	-	-	-
Stage 2	793	622	-	0	708	614	-	-	-	-	-	-	-
Platoon blocked, %				-					-	-		-	-
Mov Cap-1 Maneuver	305	334	870	0	254	367	906	1244	-	-	1228	-	-
Mov Cap-2 Maneuver	305	334	-	0	254	367	-	-	-	-	-	-	-
Stage 1	609	604	-	0	691	666	-	-	-	-	-	-	-
Stage 2	645	612	-	0	533	597	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.12	20.56	0.46	0.79
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1244	-	-	305	334	870	254	367	906	1228	-	-
HCM Lane V/C Ratio	0.016	-	-	0.089	0.342	0.046	0.459	0.16	0.094	0.027	-	-
HCM Control Delay (s/veh)	7.9	-	-	17.9	21.3	9.3	30.7	16.7	9.4	8	-	-
HCM Lane LOS	A	-	-	C	C	A	D	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1.5	0.1	2.2	0.6	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	103.6

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	142	105	10	810	2	1171	58
Future Vol, veh/h	142	105	10	810	2	1171	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	250	-	250	-	250
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	165	122	12	942	2	1362	67

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2327	1362	1429	0	-	-	0
Stage 1	1362	-	-	-	-	-	-
Stage 2	965	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	~ 41	180	473	-	-	-	-
Stage 1	237	-	-	-	-	-	-
Stage 2	368	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 40	180	473	-	-	-	-
Mov Cap-2 Maneuver	~ 40	-	-	-	-	-	-
Stage 1	231	-	-	-	-	-	-
Stage 2	368	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $/s	$963.26	0.16	
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	473	-	40	180	-	-	-
HCM Lane V/C Ratio	0.025	-	4.167	0.677	-	-	-
HCM Control Delay (s/veh)	12.8	$	1631.9	59	-	-	-
HCM Lane LOS	B	-	F	F	-	-	-
HCM 95th %tile Q(veh)	0.1	-	19	4	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	10	121	165	160	130	113	75	47	194	415	102	1
Future Volume (vph)	10	121	165	160	130	113	75	47	194	415	102	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00			1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	0.99	1.00	1.00			1.00	1.00	0.98	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.94			1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1752	3505	1548	1752	1735			1752	1845	1535	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1752	3505	1548	1752	1735			1752	1845	1535	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	133	181	176	143	124	82	52	213	456	112	1
RTOR Reduction (vph)	0	0	0	147	0	24	0	0	0	0	74	0
Lane Group Flow (vph)	0	144	181	29	143	182	0	0	265	456	38	0
Confl. Peds. (#/hr)				1	1				27		1	
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases				4							2	
Actuated Green, G (s)		9.2	13.4	13.4	12.3	16.1			18.0	27.1	27.1	
Effective Green, g (s)		9.2	13.4	13.4	12.3	16.1			18.0	27.1	27.1	
Actuated g/C Ratio		0.11	0.17	0.17	0.15	0.20			0.22	0.33	0.33	
Clearance Time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		199	580	256	266	345			389	618	514	
v/s Ratio Prot		c0.08	0.05		0.08	c0.10			0.15	c0.25		
v/s Ratio Perm				0.02							0.02	
v/c Ratio		0.72	0.31	0.11	0.54	0.53			0.68	0.74	0.07	
Uniform Delay, d1		34.6	29.7	28.7	31.7	29.0			28.8	23.8	18.3	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		12.2	0.3	0.2	2.1	1.5			4.9	4.6	0.1	
Delay (s)		46.9	30.0	28.9	33.8	30.5			33.7	28.4	18.4	
Level of Service		D	C	C	C	C			C	C	B	
Approach Delay (s/veh)			34.5			31.8				28.7		
Approach LOS			C			C				C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.9	Sum of lost time (s)	19.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	94	444	117
Future Volume (vph)	94	444	117
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	4.2	5.3	5.3
Lane Util. Factor	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1487
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1752	3505	1487
Peak-hour factor, PHF	0.91	0.91	0.91
Adj. Flow (vph)	103	488	129
RTOR Reduction (vph)	0	0	99
Lane Group Flow (vph)	104	488	30
Confl. Peds. (#/hr)	1		27
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	9.5	18.6	18.6
Effective Green, g (s)	9.5	18.6	18.6
Actuated g/C Ratio	0.12	0.23	0.23
Clearance Time (s)	4.2	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	205	805	341
v/s Ratio Prot	0.06	c0.14	
v/s Ratio Perm			0.02
v/c Ratio	0.51	0.61	0.09
Uniform Delay, d1	33.5	27.9	24.5
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	2.0	1.3	0.1
Delay (s)	35.5	29.2	24.6
Level of Service	D	C	C
Approach Delay (s/veh)		29.3	
Approach LOS		C	

Intersection Summary

Intersection	
Intersection Delay, s/veh	234.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	288	187	30	367	39	192	145	33	34	281	99
Future Vol, veh/h	74	288	187	30	367	39	192	145	33	34	281	99
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	86	335	217	35	427	45	223	169	38	40	327	115
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	347.7	215.4	145	184.1
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	52%	13%	7%	8%
Vol Thru, %	39%	52%	84%	68%
Vol Right, %	9%	34%	9%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	370	549	436	414
LT Vol	192	74	30	34
Through Vol	145	288	367	281
RT Vol	33	187	39	99
Lane Flow Rate	430	638	507	481
Geometry Grp	1	1	1	1
Degree of Util (X)	1.159	1.679	1.353	1.273
Departure Headway (Hd)	13.889	11.985	13.207	13.208
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	267	313	279	279
Service Time	11.889	9.985	11.207	11.208
HCM Lane V/C Ratio	1.61	2.038	1.817	1.724
HCM Control Delay, s/veh	145	347.7	215.4	184.1
HCM Lane LOS	F	F	F	F
HCM 95th-tile Q	13.5	31.5	19.2	17

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	130	557	82	176	610
Future Vol, veh/h	52	130	557	82	176	610
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	57	141	605	89	191	663

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1696	651	0	0	695	0
Stage 1	650	-	-	-	-	-
Stage 2	1046	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	101	467	-	-	896	-
Stage 1	518	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	80	466	-	-	896	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	518	-	-	-	-	-
Stage 2	265	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.45	0	2.26
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	192	466	896	-
HCM Lane V/C Ratio	-	-	0.295	0.303	0.213	-
HCM Control Delay (s/veh)	-	-	31.5	16	10.1	-
HCM Lane LOS	-	-	D	C	B	-
HCM 95th %tile Q(veh)	-	-	1.2	1.3	0.8	-

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	90	58	98	50	25	49	181	65	34	140	20
Future Vol, veh/h	16	90	58	98	50	25	49	181	65	34	140	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	17	98	63	107	54	27	53	197	71	37	152	22
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay, s/veh	10.2	10.8	11.2	11.1
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	181	65	16	90	58	98	50	25	34	140
LT Vol	49	0	0	16	0	0	98	0	0	34	0
Through Vol	0	181	0	0	90	0	0	50	0	0	140
RT Vol	0	0	65	0	0	58	0	0	25	0	0
Lane Flow Rate	53	197	71	17	98	63	107	54	27	37	152
Geometry Grp	6	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.1	0.341	0.109	0.034	0.18	0.103	0.209	0.099	0.044	0.071	0.273
Departure Headway (Hd)	6.74	6.24	5.54	7.107	6.607	5.907	7.061	6.561	5.861	6.948	6.448
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	531	574	645	503	542	605	507	545	609	515	555
Service Time	4.489	3.989	3.289	4.863	4.363	3.663	4.816	4.316	3.616	4.7	4.2
HCM Lane V/C Ratio	0.1	0.343	0.11	0.034	0.181	0.104	0.211	0.099	0.044	0.072	0.274
HCM Control Delay, s/veh	10.2	12.2	9	10.1	10.8	9.3	11.7	10	8.9	10.2	11.6
HCM Lane LOS	B	B	A	B	B	A	B	A	A	B	B
HCM 95th-tile Q	0.3	1.5	0.4	0.1	0.7	0.3	0.8	0.3	0.1	0.2	1.1

Intersection	
Intersection Delay, s/veh	408.9
Intersection LOS	F

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	142	34	39	1029	1117	179
Future Vol, veh/h	142	34	39	1029	1117	179
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	154	37	42	1118	1214	195
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay, s/veh	16.9	439.3	437.1
HCM LOS	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	1029	142	34	1117	179
LT Vol	39	0	142	0	0	0
Through Vol	0	1029	0	0	1117	0
RT Vol	0	0	0	34	0	179
Lane Flow Rate	42	1118	154	37	1214	195
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.08	1.958	0.351	0.072	2.072	0.294
Departure Headway (Hd)	7.805	7.292	9.982	8.686	7.019	6.299
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	462	514	363	415	534	574
Service Time	5.505	4.992	7.682	6.386	4.719	3.999
HCM Lane V/C Ratio	0.091	2.175	0.424	0.089	2.273	0.34
HCM Control Delay, s/veh	11.2	455.5	18	12.1	505.3	11.6
HCM Lane LOS	B	F	C	B	F	B
HCM 95th-tile Q	0.3	64.7	1.5	0.2	74.1	1.2

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	22	28	24	1	27	105	46	33	158	28	51	136	42
Future Vol, veh/h	22	28	24	1	27	105	46	33	158	28	51	136	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	250	-	120	-	250	-	0	70	-	150	230	-	115
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	23	29	25	1	28	108	47	34	163	29	53	140	43

Major/Minor	Minor2			Minor1				Major1			Major2		
Conflicting Flow All	449	506	70	0	422	521	82	184	0	0	193	0	0
Stage 1	245	245	-	0	232	232	-	-	-	-	-	-	-
Stage 2	204	261	-	0	190	289	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	-	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	491	465	975	0	514	456	957	1382	-	-	1371	-	-
Stage 1	734	699	-	0	747	709	-	-	-	-	-	-	-
Stage 2	776	689	-	0	791	669	-	-	-	-	-	-	-
Platoon blocked, %				-					-	-		-	-
Mov Cap-1 Maneuver	332	436	975	0	440	428	956	1382	-	-	1369	-	-
Mov Cap-2 Maneuver	332	436	-	0	440	428	-	-	-	-	-	-	-
Stage 1	706	673	-	0	728	691	-	-	-	-	-	-	-
Stage 2	607	671	-	0	710	644	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.03	13.98	1.16	1.72
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1382	-	-	332	436	975	440	428	956	1369	-	-
HCM Lane V/C Ratio	0.025	-	-	0.068	0.066	0.025	0.063	0.253	0.05	0.038	-	-
HCM Control Delay (s/veh)	7.7	-	-	16.6	13.8	8.8	13.7	16.2	9	7.7	-	-
HCM Lane LOS	A	-	-	C	B	A	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.2	0.1	0.2	1	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	14.5

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	61	12	28	1007	1	983	168
Future Vol, veh/h	61	12	28	1007	1	983	168
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	250	-	250	-	250
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	68	13	31	1119	1	1092	187

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2273	1092	1279	0	-	-	0
Stage 1	1092	-	-	-	-	-	-
Stage 2	1181	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	~ 44	260	539	-	-	-	-
Stage 1	320	-	-	-	-	-	-
Stage 2	290	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	~ 41	260	539	-	-	-	-
Mov Cap-2 Maneuver	~ 41	-	-	-	-	-	-
Stage 1	302	-	-	-	-	-	-
Stage 2	290	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $/+	$ 442.94	0.33	
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	539	-	41	260	-	-	-
HCM Lane V/C Ratio	0.058	-	1.637	0.051	-	-	-
HCM Control Delay (s/veh)	12.1	-	$ 526.2	19.6	-	-	-
HCM Lane LOS	B	-	F	C	-	-	-
HCM 95th %tile Q(veh)	0.2	-	7	0.2	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	6	155	76	47	38	61	29	18	65	368	46	1
Future Volume (vph)	6	155	76	47	38	61	29	18	65	368	46	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00			1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.95			1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1752	3505	1568	1752	1754			1752	1845	1568	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1752	3505	1568	1752	1754			1752	1845	1568	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	6	163	80	49	40	64	31	19	68	387	48	1
RTOR Reduction (vph)	0	0	0	33	0	20	0	0	0	0	31	0
Lane Group Flow (vph)	0	169	80	16	40	75	0	0	87	387	17	0
Confl. Peds. (#/hr)									4			
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases				4							2	
Actuated Green, G (s)		12.6	22.2	22.2	2.4	11.6			6.0	24.2	24.2	
Effective Green, g (s)		12.6	22.2	22.2	2.4	11.6			6.0	24.2	24.2	
Actuated g/C Ratio		0.18	0.32	0.32	0.03	0.17			0.09	0.35	0.35	
Clearance Time (s)		4.2	4.9	4.9	4.2	5.3			4.2	5.3	5.3	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		316	1114	498	60	291			150	639	543	
v/s Ratio Prot		c0.10	0.02		0.02	c0.04			c0.05	c0.21		
v/s Ratio Perm				0.01							0.01	
v/c Ratio		0.53	0.07	0.03	0.67	0.26			0.58	0.61	0.03	
Uniform Delay, d1		25.9	16.6	16.4	33.3	25.3			30.7	18.9	15.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		1.7	0.0	0.0	24.5	0.5			5.4	1.6	0.0	
Delay (s)		27.7	16.6	16.4	57.8	25.8			36.0	20.5	15.1	
Level of Service		C	B	B	E	C			D	C	B	
Approach Delay (s/veh)			22.9			35.3				22.6		
Approach LOS			C			D				C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	69.8	Sum of lost time (s)	19.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	20	262	145
Future Volume (vph)	20	262	145
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	4.2	5.3	5.3
Lane Util. Factor	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1530
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1752	3505	1530
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	21	276	153
RTOR Reduction (vph)	0	0	108
Lane Group Flow (vph)	22	276	45
Confl. Peds. (#/hr)			4
Turn Type	Prot	NA	Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	2.4	20.6	20.6
Effective Green, g (s)	2.4	20.6	20.6
Actuated g/C Ratio	0.03	0.30	0.30
Clearance Time (s)	4.2	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	60	1034	451
v/s Ratio Prot	0.01	0.08	
v/s Ratio Perm			0.03
v/c Ratio	0.37	0.27	0.10
Uniform Delay, d1	33.0	18.8	17.9
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	3.8	0.1	0.1
Delay (s)	36.7	19.0	18.0
Level of Service	D	B	B
Approach Delay (s/veh)		19.5	
Approach LOS		B	

Intersection Summary

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	127	35	2	96	7	43	130	6	18	81	41
Future Vol, veh/h	59	127	35	2	96	7	43	130	6	18	81	41
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	66	141	39	2	107	8	48	144	7	20	90	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.6	9.3	10.2	9.4
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	24%	27%	2%	13%
Vol Thru, %	73%	57%	91%	58%
Vol Right, %	3%	16%	7%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	179	221	105	140
LT Vol	43	59	2	18
Through Vol	130	127	96	81
RT Vol	6	35	7	41
Lane Flow Rate	199	246	117	156
Geometry Grp	1	1	1	1
Degree of Util (X)	0.281	0.337	0.166	0.215
Departure Headway (Hd)	5.078	4.939	5.12	4.967
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	700	719	692	714
Service Time	3.165	3.024	3.219	3.058
HCM Lane V/C Ratio	0.284	0.342	0.169	0.218
HCM Control Delay, s/veh	10.2	10.6	9.3	9.4
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.2	1.5	0.6	0.8

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	261	112	36	916	0	1148	86
Future Volume (veh/h)	261	112	36	916	0	1148	86
Initial Q (Qb), veh	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	284	122	39	996		1248	93
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	325	289	489	1339		1436	641
Arrive On Green	0.18	0.18	0.28	0.72		0.41	0.41
Sat Flow, veh/h	1767	1572	1767	1856		3618	1572
Grp Volume(v), veh/h	284	122	39	996		1248	93
Grp Sat Flow(s),veh/h/ln	1767	1572	1767	1856		1763	1572
Q Serve(g_s), s	17.5	7.7	1.8	36.2		36.4	4.2
Cycle Q Clear(g_c), s	17.5	7.7	1.8	36.2		36.4	4.2
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	325	289	489	1339		1436	641
V/C Ratio(X)	0.87	0.42	0.08	0.74		0.87	0.15
Avail Cap(c_a), veh/h	584	519	489	1339		1649	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	44.4	40.4	30.0	9.4		30.4	20.9
Incr Delay (d2), s/veh	7.3	1.0	0.1	3.8		7.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	7.0	0.8	12.4		15.8	1.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	51.7	41.4	30.0	13.2		37.8	21.4
LnGrp LOS	D	D	C	B		D	C
Approach Vol, veh/h	406			1035		1341	
Approach Delay, s/veh	48.6			13.8		36.7	
Approach LOS	D			B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		86.1		25.9	35.2	50.9
Change Period (Y+Rc), s		5.3		5.3	4.2	5.3
Max Green Setting (Gmax), s		52.4		37.0	7.8	52.4
Max Q Clear Time (g_c+I1), s		38.2		19.5	3.8	38.4
Green Ext Time (p_c), s		6.2		1.1	0.0	7.3

Intersection Summary	
HCM 7th Control Delay, s/veh	29.9
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	142	105	10	810	2	1171	58
Future Volume (veh/h)	142	105	10	810	2	1171	58
Initial Q (Qb), veh	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	165	122	12	942		1362	67
Peak Hour Factor	0.86	0.86	0.86	0.86		0.86	0.86
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	206	183	38	1476		2595	1157
Arrive On Green	0.12	0.12	0.02	0.80		0.74	0.74
Sat Flow, veh/h	1767	1572	1767	1856		3618	1572
Grp Volume(v), veh/h	165	122	12	942		1362	67
Grp Sat Flow(s),veh/h/ln	1767	1572	1767	1856		1763	1572
Q Serve(g_s), s	10.2	8.3	0.7	23.6		18.6	1.3
Cycle Q Clear(g_c), s	10.2	8.3	0.7	23.6		18.6	1.3
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	206	183	38	1476		2595	1157
V/C Ratio(X)	0.80	0.67	0.31	0.64		0.52	0.06
Avail Cap(c_a), veh/h	584	519	123	1476		2595	1157
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	48.2	47.4	54.0	4.8		6.4	4.1
Incr Delay (d2), s/veh	7.1	4.1	4.6	2.1		0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	7.4	0.4	6.3		5.4	0.4
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	55.3	51.5	58.5	6.9		7.1	4.2
LnGrp LOS	E	D	E	A		A	A
Approach Vol, veh/h	287			954		1429	
Approach Delay, s/veh	53.7			7.5		7.0	
Approach LOS	D			A		A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		94.4		17.6	6.6	87.7
Change Period (Y+Rc), s		5.3		4.6	4.2	5.3
Max Green Setting (Gmax), s		53.1		37.0	7.8	53.1
Max Q Clear Time (g_c+I1), s		25.6		12.2	2.7	20.6
Green Ext Time (p_c), s		7.6		0.8	0.0	12.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.2
HCM 7th LOS	B

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	288	187	30	367	39	192	145	33	34	281	99
Future Volume (veh/h)	74	288	187	30	367	39	192	145	33	34	281	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	86	335	217	35	427	45	223	169	38	40	327	115
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	584	495	92	471	50	189	481	108	100	365	128
Arrive On Green	0.08	0.31	0.31	0.05	0.29	0.29	0.11	0.33	0.33	0.06	0.28	0.28
Sat Flow, veh/h	1767	1856	1572	1767	1650	174	1767	1466	330	1767	1311	461
Grp Volume(v), veh/h	86	335	217	35	0	472	223	0	207	40	0	442
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1824	1767	0	1796	1767	0	1773
Q Serve(g_s), s	3.9	12.4	9.0	1.6	0.0	20.5	8.8	0.0	7.2	1.8	0.0	19.7
Cycle Q Clear(g_c), s	3.9	12.4	9.0	1.6	0.0	20.5	8.8	0.0	7.2	1.8	0.0	19.7
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.18	1.00		0.26
Lane Grp Cap(c), veh/h	144	584	495	92	0	521	189	0	590	100	0	493
V/C Ratio(X)	0.60	0.57	0.44	0.38	0.00	0.91	1.18	0.00	0.35	0.40	0.00	0.90
Avail Cap(c_a), veh/h	167	618	523	167	0	592	189	0	596	167	0	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.5	23.6	22.4	37.7	0.0	28.3	36.8	0.0	21.0	37.5	0.0	28.6
Incr Delay (d2), s/veh	4.3	1.2	0.6	2.6	0.0	16.4	122.5	0.0	0.4	2.5	0.0	14.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.1	3.0	0.7	0.0	10.2	9.9	0.0	2.7	0.8	0.0	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.8	24.7	23.0	40.3	0.0	44.7	159.3	0.0	21.3	40.0	0.0	43.5
LnGrp LOS	D	C	C	D		D	F		C	D		D
Approach Vol, veh/h		638			507			430			482	
Approach Delay, s/veh		26.3			44.4			92.9			43.2	
Approach LOS		C			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	33.0	8.5	31.9	13.0	28.9	10.9	29.5
Change Period (Y+Rc), s	4.2	6.0	4.2	* 6	4.2	* 6	4.2	6.0
Max Green Setting (Gmax), s	7.8	27.3	7.8	* 27	8.8	* 27	7.8	26.7
Max Q Clear Time (g_c+I1), s	3.8	9.2	3.6	14.4	10.8	21.7	5.9	22.5
Green Ext Time (p_c), s	0.0	0.9	0.0	2.1	0.0	1.2	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	48.6
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	142	34	39	1029	0	1117	179
Future Volume (veh/h)	142	34	39	1029	0	1117	179
Initial Q (Qb), veh	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	154	37	42	1118		1214	195
Peak Hour Factor	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	190	169	90	1481		2502	1115
Arrive On Green	0.11	0.11	0.05	0.80		0.71	0.71
Sat Flow, veh/h	1767	1572	1767	1856		3618	1571
Grp Volume(v), veh/h	154	37	42	1118		1214	195
Grp Sat Flow(s),veh/h/ln	1767	1572	1767	1856		1763	1571
Q Serve(g_s), s	9.5	2.4	2.6	34.3		17.1	4.6
Cycle Q Clear(g_c), s	9.5	2.4	2.6	34.3		17.1	4.6
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	190	169	90	1481		2502	1115
V/C Ratio(X)	0.81	0.22	0.47	0.76		0.49	0.17
Avail Cap(c_a), veh/h	626	557	170	1481		2502	1115
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	48.9	45.7	51.7	5.7		7.2	5.4
Incr Delay (d2), s/veh	8.1	0.6	3.8	3.6		0.7	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.2	1.2	9.2		5.3	1.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	56.9	46.3	55.4	9.4		7.9	5.7
LnGrp LOS	E	D	E	A		A	A
Approach Vol, veh/h	191			1160		1409	
Approach Delay, s/veh	54.9			11.0		7.6	
Approach LOS	D			B		A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		94.7		17.3	9.9	84.8
Change Period (Y+Rc), s		5.3		5.3	4.2	5.3
Max Green Setting (Gmax), s		47.7		39.7	10.8	46.7
Max Q Clear Time (g_c+I1), s		36.3		11.5	4.6	19.1
Green Ext Time (p_c), s		6.3		0.5	0.0	10.3

Intersection Summary	
HCM 7th Control Delay, s/veh	12.3
HCM 7th LOS	B

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	61	12	28	1007	1	983	168
Future Volume (veh/h)	61	12	28	1007	1	983	168
Initial Q (Qb), veh	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856		1856	1856
Adj Flow Rate, veh/h	68	13	31	1119		1092	187
Peak Hour Factor	0.90	0.90	0.90	0.90		0.90	0.90
Percent Heavy Veh, %	3	3	3	3		3	3
Cap, veh/h	113	101	76	1573		2704	1206
Arrive On Green	0.06	0.06	0.04	0.85		0.77	0.77
Sat Flow, veh/h	1767	1572	1767	1856		3618	1572
Grp Volume(v), veh/h	68	13	31	1119		1092	187
Grp Sat Flow(s),veh/h/ln	1767	1572	1767	1856		1763	1572
Q Serve(g_s), s	4.2	0.9	1.9	25.9		11.7	3.5
Cycle Q Clear(g_c), s	4.2	0.9	1.9	25.9		11.7	3.5
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	113	101	76	1573		2704	1206
V/C Ratio(X)	0.60	0.13	0.41	0.71		0.40	0.16
Avail Cap(c_a), veh/h	622	553	170	1573		2704	1206
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	51.0	49.5	52.2	3.3		4.4	3.5
Incr Delay (d2), s/veh	5.0	0.6	3.5	2.8		0.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.8	0.9	4.6		3.1	0.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	56.1	50.0	55.7	6.0		4.9	3.7
LnGrp LOS	E	D	E	A		A	A
Approach Vol, veh/h	81			1150		1279	
Approach Delay, s/veh	55.1			7.4		4.7	
Approach LOS	E			A		A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		100.2		11.8	9.0	91.2
Change Period (Y+Rc), s		5.3		4.6	4.2	5.3
Max Green Setting (Gmax), s		48.7		39.4	10.8	47.7
Max Q Clear Time (g_c+I1), s		27.9		6.2	3.9	13.7
Green Ext Time (p_c), s		9.2		0.2	0.0	9.6

Intersection Summary	
HCM 7th Control Delay, s/veh	7.5
HCM 7th LOS	A

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	127	35	2	96	7	43	130	6	18	81	41
Future Volume (veh/h)	59	127	35	2	96	7	43	130	6	18	81	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	66	141	39	2	107	8	48	144	7	20	90	46
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	174	507	430	8	306	23	139	378	18	68	202	103
Arrive On Green	0.10	0.27	0.27	0.00	0.18	0.18	0.08	0.22	0.22	0.04	0.17	0.17
Sat Flow, veh/h	1767	1856	1572	1767	1705	127	1767	1755	85	1767	1157	592
Grp Volume(v), veh/h	66	141	39	2	0	115	48	0	151	20	0	136
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1833	1767	0	1840	1767	0	1749
Q Serve(g_s), s	1.5	2.6	0.8	0.0	0.0	2.4	1.1	0.0	3.1	0.5	0.0	3.0
Cycle Q Clear(g_c), s	1.5	2.6	0.8	0.0	0.0	2.4	1.1	0.0	3.1	0.5	0.0	3.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.05	1.00		0.34
Lane Grp Cap(c), veh/h	174	507	430	8	0	328	139	0	396	68	0	306
V/C Ratio(X)	0.38	0.28	0.09	0.26	0.00	0.35	0.34	0.00	0.38	0.29	0.00	0.44
Avail Cap(c_a), veh/h	357	1211	1026	317	0	1124	317	0	1112	317	0	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	12.4	11.8	21.6	0.0	15.6	19.0	0.0	14.6	20.4	0.0	16.1
Incr Delay (d2), s/veh	1.4	0.3	0.1	17.5	0.0	0.6	1.5	0.0	0.6	2.4	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.2	0.1	0.0	0.8	0.4	0.0	1.0	0.2	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.7	12.7	11.9	39.1	0.0	16.3	20.4	0.0	15.2	22.7	0.0	17.1
LnGrp LOS	B	B	B	D		B	C		B	C		B
Approach Vol, veh/h		246			117			199			156	
Approach Delay, s/veh		14.5			16.7			16.5			17.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	15.4	4.4	17.9	7.6	13.6	8.5	13.8
Change Period (Y+Rc), s	4.2	6.0	4.2	* 6	4.2	* 6	4.2	6.0
Max Green Setting (Gmax), s	7.8	26.3	7.8	* 28	7.8	* 27	8.8	26.7
Max Q Clear Time (g_c+I1), s	2.5	5.1	2.0	4.6	3.1	5.0	3.5	4.4
Green Ext Time (p_c), s	0.0	0.6	0.0	0.8	0.0	0.6	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	16.1
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	363	200	31	76
Average Queue (ft)	157	97	4	32
95th Queue (ft)	320	198	19	62
Link Distance (ft)	2565		1307	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		250
Storage Blk Time (%)	50	4		
Queuing Penalty (veh)	86	5		

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	30	96	54	87	93	61	106	105	57	61	67	47
Average Queue (ft)	16	39	30	29	28	20	40	46	27	21	38	11
95th Queue (ft)	39	70	47	58	54	44	77	81	50	45	62	29
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	R
Maximum Queue (ft)	278	270	96	423	369	352	55
Average Queue (ft)	164	59	24	219	157	138	21
95th Queue (ft)	248	170	61	382	270	262	49
Link Distance (ft)		450		475	1256	1256	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	190		200				250
Storage Blk Time (%)	9	2		6	1	1	
Queuing Penalty (veh)	11	4		2	0	1	

Intersection: 4: Armstrong Avenue & California Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	R	UL	T	R	L	L
Maximum Queue (ft)	65	86	58	115	44	57	26	26
Average Queue (ft)	18	38	17	40	18	19	2	6
95th Queue (ft)	42	65	39	78	36	37	15	21
Link Distance (ft)		1964			794	794		
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250		120	250			70	230
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: Temperance Avenue & California Avenue

Movement	EB	EB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	L	T	U	T	T	R
Maximum Queue (ft)	193	107	31	323	26	250	237	53
Average Queue (ft)	96	40	6	147	2	76	83	12
95th Queue (ft)	165	81	24	278	14	184	199	38
Link Distance (ft)	1668	1668		1997		1276	1276	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			250		250			250
Storage Blk Time (%)				2		0	0	
Queuing Penalty (veh)				0		0	0	

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	T	T	R	L	TR	UL	T	R	UL	T	T
Maximum Queue (ft)	186	173	132	65	173	150	318	335	51	160	242	182
Average Queue (ft)	92	70	22	32	86	78	141	180	17	78	129	102
95th Queue (ft)	159	135	66	59	157	140	244	306	36	142	201	166
Link Distance (ft)		2479	2479			884		1067	1067		1880	1880
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215			115	200		240			240		
Storage Blk Time (%)			0				1	4			0	0
Queuing Penalty (veh)			0				3	10			0	0

Intersection: 6: Fowler Avenue & Church Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	97
Average Queue (ft)	41
95th Queue (ft)	82
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	170
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	L	TR
Maximum Queue (ft)	118	198	119	53	247	201	147	74	241
Average Queue (ft)	49	111	55	19	165	120	69	20	165
95th Queue (ft)	101	193	98	47	236	185	126	50	244
Link Distance (ft)		1619			2489		2616		632
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		250	250		250		250	
Storage Blk Time (%)					0				0
Queuing Penalty (veh)					0				0

Network Summary

Network wide Queuing Penalty: 124

Intersection: 1: Fowler Avenue & Hamilton Avenue

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	TR	L	T
Maximum Queue (ft)	136	111	51	93	29
Average Queue (ft)	42	49	5	44	1
95th Queue (ft)	91	86	24	76	10
Link Distance (ft)	2565		1307		1306
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		100		250	
Storage Blk Time (%)	2	1			
Queuing Penalty (veh)	2	0			

Intersection: 2: Armstrong Avenue & Hamilton Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	30	72	54	51	27	44	49	91	65	25	68	64
Average Queue (ft)	17	31	29	30	22	14	25	39	22	16	35	8
95th Queue (ft)	39	58	52	51	35	33	47	66	49	32	62	30
Link Distance (ft)		2565			1949			846			1262	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		175	200		200	150		150	200		100
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Temperance Avenue & Hamilton Avenue

Movement	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	R
Maximum Queue (ft)	134	64	289	510	300	301	54
Average Queue (ft)	79	16	37	238	153	125	28
95th Queue (ft)	130	43	123	476	272	248	50
Link Distance (ft)		450		475	1256	1256	
Upstream Blk Time (%)				1			
Queuing Penalty (veh)				6			
Storage Bay Dist (ft)	190		200				250
Storage Blk Time (%)				8	1	1	
Queuing Penalty (veh)				3	0	2	

Intersection: 4: Armstrong Avenue & California Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	R	UL	T	R	L	L	R
Maximum Queue (ft)	49	24	45	23	86	39	51	26	12
Average Queue (ft)	14	16	14	11	40	12	8	7	0
95th Queue (ft)	40	33	34	29	76	25	30	24	4
Link Distance (ft)		1970			794	794			
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		120	250			70	230	115
Storage Blk Time (%)							0		
Queuing Penalty (veh)							0		

Intersection: 5: Temperance Avenue & California Avenue

Movement	EB	EB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	L	T	U	T	T	R
Maximum Queue (ft)	104	19	96	474	25	288	292	55
Average Queue (ft)	25	3	31	167	1	74	80	18
95th Queue (ft)	59	14	75	408	8	221	242	48
Link Distance (ft)	1660	1660		1997		1277	1277	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			250		250			250
Storage Blk Time (%)				5		1	1	
Queuing Penalty (veh)				1		0	2	

Intersection: 6: Fowler Avenue & Church Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	T	T	R	L	TR	UL	T	R	UL	T	T
Maximum Queue (ft)	185	149	22	43	88	149	86	255	20	53	160	161
Average Queue (ft)	82	33	3	12	21	41	42	107	9	12	80	39
95th Queue (ft)	156	80	14	32	58	95	76	199	22	36	140	115
Link Distance (ft)		2479	2479			901		1067	1067		1880	1880
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215			115	200		240			240		
Storage Blk Time (%)								0				0
Queuing Penalty (veh)								0				0

Intersection: 6: Fowler Avenue & Church Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	96
Average Queue (ft)	38
95th Queue (ft)	73
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	170
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Armstrong Avenue & Church Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	L	TR
Maximum Queue (ft)	95	53	52	31	76	68	90	54	124
Average Queue (ft)	40	30	16	4	43	21	44	21	44
95th Queue (ft)	74	58	42	19	76	47	84	53	88
Link Distance (ft)		1602			2489		2616		632
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250		250	250		250		250	
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 17

HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Cumulative Year 2046 plus Project Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	AM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	487	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.85	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	52.8

Vehicle Results

Average Speed, mi/h	52.8	Percent Followers, %	54.1
Segment Travel Time, minutes	1.14	Follower Density, followers/mi/ln	5.0
Vehicle LOS	C		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	5.0	C

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HCS7 Two-Lane Highway Report

Project Information

Analyst	JLB Traffic Engineering, Inc.	Date	12/3/2024
Agency	JLB Traffic Engineering, Inc.	Analysis Year	Cumulative Year 2046 plus Project Traffic Conditions
Jurisdiction	City of Fresno	Time Analyzed	PM Peak
Project Description	Armstrong Avenue between Geary Avenue and Church Avenue	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5280
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	218	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.90	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	55.2
Speed Slope Coefficient	3.55202	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33477	PF Power Coefficient	0.74803
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	53.7

Vehicle Results

Average Speed, mi/h	53.7	Percent Followers, %	34.7
Segment Travel Time, minutes	1.12	Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	1.4	A

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Appendix J: Traffic Signal Warrants

Signal Warrant Analysis

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet

				COUNT DATE		09/17/24	
006	Fresno	N/A	N/A	CALC	DC	DATE	10/07/24
DIST	CO	RTE	KPM	CHK	AB	DATE	10/07/24

Major St:	**Fowler Ave**	Critical Approach Speed	45	MPH
Minor St:	**Hamilton Ave**	Critical Approach Speed	45	MPH

Critical speed of major street traffic > 64 km/h (40 mph)..... ☑ or ☐ RURAL (R)

In built up area of isolated community of < 10,000 population ..... ☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED** **YES** ☑ **NO** ☐

(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** **YES** ☑ **NO** ☐

80 % SATISFIED **YES** ☑ **NO** ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R									
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Hour
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	945 945	810 810	735 735	794 794	961 961	1101 1101	1142 1142	911 911	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	262 262	165 165	122 122	147 147	144 144	147 147	165 165	154 154	

Condition B - Interruption of Continuous Traffic **100% SATISFIED** **YES** ☑ **NO** ☐

80 % SATISFIED **YES** ☑ **NO** ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R									
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Hour
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	945 945	810 810	735 735	794 794	961 961	1101 1101	1142 1142	911 911	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	262 262	165 165	122 122	147 147	144 144	147 147	165 165	154 154	

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Combination of Conditions A & B **SATISFIED** **YES** ☑ **NO** ☐

REQUIREMENT	WARRANT		FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☑ No ☐
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

JLB TRAFFIC ENGINEERING, INC.

www.JLBtraffic.com

info@JLBtraffic.com

516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
(559) 570 - 8991

Signal Warrant Analysis

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet

				COUNT DATE		06/04/24	
006	Fresno	N/A	N/A	CALC	DC	DATE	07/05/24
DIST	CO	RTE	KPM	CHK	AB	DATE	07/05/24

Major St:	**Armstrong Ave**	Critical Approach Speed	40	MPH
Minor St:	**Hamilton Ave**	Critical Approach Speed	45	MPH

Critical speed of major street traffic > 64 km/h (40 mph)..... ☑
or
In built up area of isolated community of < 10,000 population ..... ☐ } RURAL (R)
☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED** **YES** ☐ **NO** ☑
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** **YES** ☐ **NO** ☑
80 % SATISFIED **YES** ☐ **NO** ☑

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R	7:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
APPROACH LANES	1		2 or More									Hour
Both Approaches Major Street	500	350	600	420	486	359	283	325	390	371	339	292
	(400)	(280)	(480)	(336)	486	359	283	325	390	371	339	292
Highest Approach Minor Street	150	105	200	140	160	131	87	132	168	170	157	122
	(120)	(84)	(160)	(112)	160	131	87	132	168	170	157	122

Condition B - Interruption of Continuous Traffic **100% SATISFIED** **YES** ☐ **NO** ☑
80 % SATISFIED **YES** ☐ **NO** ☑

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R	7:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
APPROACH LANES	1		2 or More									Hour
Both Approaches Major Street	750	525	900	630	486	359	283	325	390	371	339	292
	(600)	(420)	(720)	(504)	486	359	283	325	390	371	339	292
Highest Approach Minor Street	75	53	100	70	160	131	87	132	168	170	157	122
	(60)	(42)	(80)	(56)	160	131	87	132	168	170	157	122

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Combination of Conditions A & B **SATISFIED** **YES** ☐ **NO** ☑

REQUIREMENT	WARRANT		FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☑
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

JLB TRAFFIC ENGINEERING, INC.
www.JLBtraffic.com
info@JLBtraffic.com
516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
(559) 570 - 8991

Signal Warrant Analysis

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet

				COUNT DATE		06/04/24	
006	Fresno	N/A	N/A	CALC	DC	DATE	07/05/24
DIST	CO	RTE	KPM	CHK	AB	DATE	07/05/24

Major St:	**Temperance Ave**	Critical Approach Speed	45	MPH
Minor St:	**Hamilton Ave**	Critical Approach Speed	45	MPH

Critical speed of major street traffic > 64 km/h (40 mph)..... ☑
or
In built up area of isolated community of < 10,000 population ..... ☐ } RURAL (R)
☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED** **YES** ☑ **NO** ☐
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** **YES** ☑ **NO** ☐
80 % SATISFIED **YES** ☑ **NO** ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	536 536	418 418	380 380	439 439	591 591	628 628	576 576	400 400
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	346 346	188 188	108 108	107 107	147 147	129 129	133 133	132 132

Hour

Condition B - Interruption of Continuous Traffic **100% SATISFIED** **YES** ☐ **NO** ☑
80 % SATISFIED **YES** ☐ **NO** ☑

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	536 536	418 418	380 380	439 439	591 591	628 628	576 576	400 400
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	346 346	188 188	108 108	107 107	147 147	129 129	133 133	132 132

Hour

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Combination of Conditions A & B **SATISFIED** **YES** ☐ **NO** ☑

REQUIREMENT	WARRANT		FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☑
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

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Fresno, CA 93704
(559) 570 - 8991

Signal Warrant Analysis

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet

				COUNT DATE		06/04/24	
006	Fresno	N/A	N/A	CALC	DC	DATE	07/11/24
DIST	CO	RTE	KPM	CHK	AB	DATE	07/11/24

Major St:	**Armstrong Ave**	Critical Approach Speed	45	MPH
Minor St:	**California Ave**	Critical Approach Speed	35	MPH

Critical speed of major street traffic > 64 km/h (40 mph)..... ☑
or
In built up area of isolated community of < 10,000 population ..... ☐ } RURAL (R)
☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED** **YES** ☐ **NO** ☑
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** **YES** ☐ **NO** ☑
80 % SATISFIED **YES** ☐ **NO** ☑

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS) 1 U	1 R	2 or More U	2 or More R	7:00 AM	8:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	6:00 PM	Hour
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	383 383	317 317	317 317	252 252	303 303	472 472	368 368	292 292	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	262 262	142 142	142 142	91 91	106 106	97 97	78 78	77 77	

Condition B - Interruption of Continuous Traffic **100% SATISFIED** **YES** ☐ **NO** ☑
80 % SATISFIED **YES** ☐ **NO** ☑

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS) 1 U	1 R	2 or More U	2 or More R	7:00 AM	8:00 AM	8:00 AM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	6:00 PM	Hour
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	383 383	317 317	317 317	252 252	303 303	472 472	368 368	292 292	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	262 262	142 142	142 142	91 91	106 106	97 97	78 78	77 77	

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Combination of Conditions A & B **SATISFIED** **YES** ☐ **NO** ☑

REQUIREMENT	WARRANT		FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☑
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

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(559) 570 - 8991

Signal Warrant Analysis

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet

				COUNT DATE		06/04/24	
006	Fresno	N/A	N/A	CALC	DC	DATE	07/05/24
DIST	CO	RTE	KPM	CHK	AB	DATE	07/05/24

Major St:	**Fowler Ave**	Critical Approach Speed	45	MPH
Minor St:	**Church Ave**	Critical Approach Speed	45	MPH

Critical speed of major street traffic > 64 km/h (40 mph)..... ☑ or ☐ RURAL (R)

In built up area of isolated community of < 10,000 population ..... ☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED** **YES** ☑ **NO** ☐

(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** **YES** ☑ **NO** ☐

80 % SATISFIED **YES** ☑ **NO** ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Both Approaches	500	350	600	420	677	773	522	444	548	670	648	603
Major Street	(400)	(280)	(480)	(336)	677	773	522	444	548	670	648	603
Highest Approach	150	105	200	140	354	233	139	148	184	253	233	201
Minor Street	(120)	(84)	(160)	(112)	354	233	139	148	184	253	233	201

Hour

Condition B - Interruption of Continuous Traffic **100% SATISFIED** **YES** ☐ **NO** ☑

80 % SATISFIED **YES** ☑ **NO** ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Both Approaches	750	525	900	630	677	773	522	444	548	670	648	603
Major Street	(600)	(420)	(720)	(504)	677	773	522	444	548	670	648	603
Highest Approach	75	53	100	70	354	233	139	148	184	253	233	201
Minor Street	(60)	(42)	(80)	(56)	354	233	139	148	184	253	233	201

Hour

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Combination of Conditions A & B **SATISFIED** **YES** ☑ **NO** ☐

REQUIREMENT	WARRANT		FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☑ No ☐
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

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Signal Warrant Analysis

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet

				COUNT DATE		06/04/24	
006	Fresno	N/A	N/A	CALC	DC	DATE	07/05/24
DIST	CO	RTE	KPM	CHK	AB	DATE	07/05/24

Major St:	**Armstrong Ave**	Critical Approach Speed	45	MPH
Minor St:	**Church Ave**	Critical Approach Speed	45	MPH

Critical speed of major street traffic > 64 km/h (40 mph)..... ☑ or ☐ RURAL (R)

In built up area of isolated community of < 10,000 population ..... ☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED** **YES** ☐ **NO** ☑

(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** **YES** ☐ **NO** ☑

80 % SATISFIED **YES** ☐ **NO** ☑

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	9:00 AM	12:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Both Approaches	500	350	600	420	629	304	223	172	342	352	238	228
Major Street	(400)	(280)	(480)	(336)	629	304	223	172	342	352	238	228
Highest Approach	150	105	200	140	230	141	40	91	123	153	103	77
Minor Street	(120)	(84)	(160)	(112)	230	141	40	91	123	153	103	77

Hour

Condition B - Interruption of Continuous Traffic **100% SATISFIED** **YES** ☐ **NO** ☑

80 % SATISFIED **YES** ☐ **NO** ☑

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00 AM	8:00 AM	9:00 AM	12:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Both Approaches	750	525	900	630	629	304	223	172	342	352	238	228
Major Street	(600)	(420)	(720)	(504)	629	304	223	172	342	352	238	228
Highest Approach	75	53	100	70	230	141	40	91	123	153	103	77
Minor Street	(60)	(42)	(80)	(56)	230	141	40	91	123	153	103	77

Hour

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Combination of Conditions A & B **SATISFIED** **YES** ☐ **NO** ☑

REQUIREMENT	WARRANT		FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☑
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

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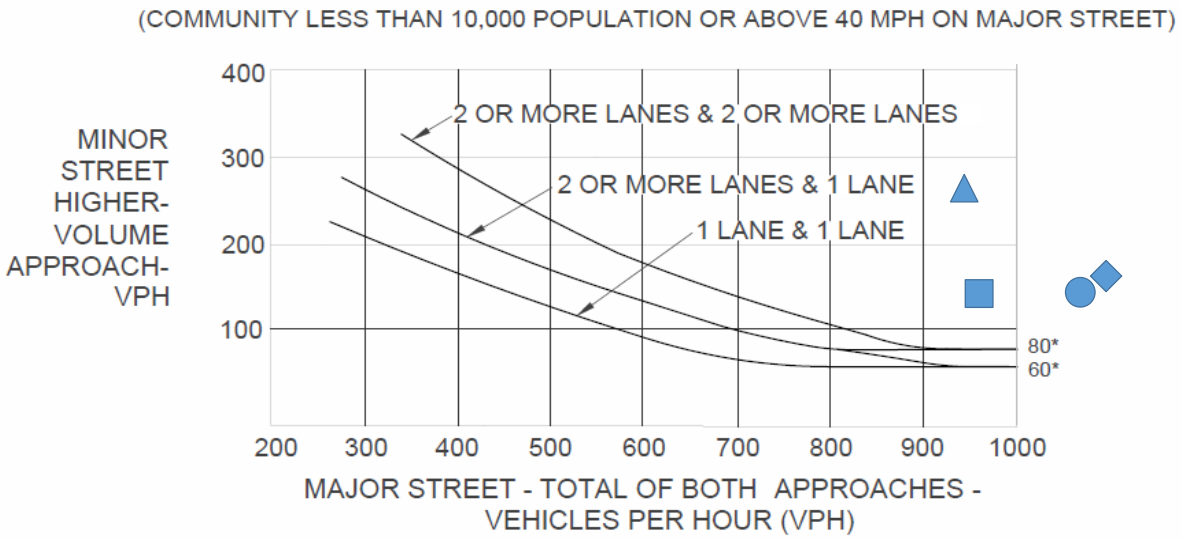
(559) 570 - 8991

Warrant 2: Four-Hour Vehicular Volume (Rural)

Existing Traffic Conditions

1. Fowler Ave / Hamilton Ave



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.

	1 Lane & 1 Lane	2 or More Lanes & 1 Lane	2 or More Lanes & 2 or More Lanes	▲ 7:00 AM Volume	■ 3:00 PM Volume	● 4:00 PM Volume	◆ 5:00 PM Volume
Major Street (Total of Both Approaches)	☑	☐	☐	945	961	1101	1142
Minor Street (Higher Volume Approach)				262	144	147	165

Satisfied: ☑ **Yes** ☐ **No**

Calculated By: DC Date: 10/07/24
Checked By: AB Date: 10/07/24

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
Chapter 4C: Traffic Control Signal Needs Studies
Part 4: Highway Traffic Signals
November 7, 2014

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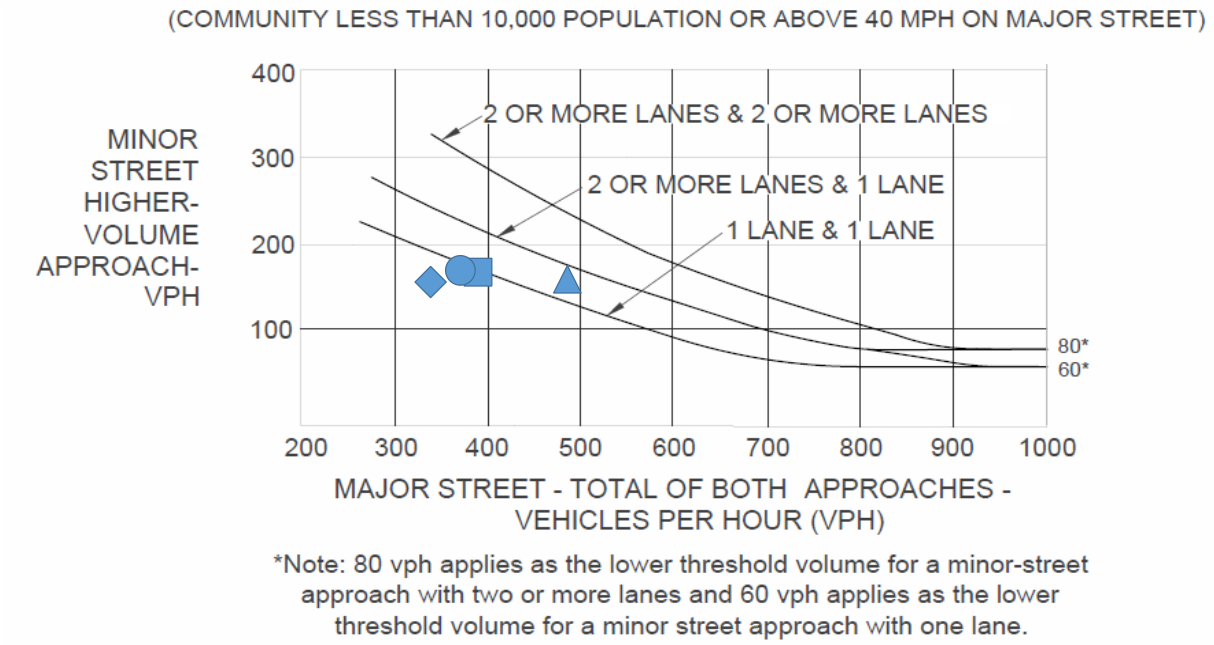
Warrant 2: Four-Hour Vehicular Volume (Rural)

Existing Traffic Conditions

2. Armstrong Ave / Hamilton Ave



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.

	1 Lane & 1 Lane	2 or More Lanes & 1 Lane	2 or More Lanes & 2 or More Lanes	▲ 7:00 AM Volume	■ 3:00 PM Volume	● 4:00 PM Volume	◆ 5:00 PM Volume
Major Street (Total of Both Approaches)	☐	☑	☐	486	390	371	339
Minor Street (Higher Volume Approach)				160	168	170	157

Satisfied: ☐ **Yes** ☑ **No**

Calculated By: DC Date: 07/05/24
Checked By: AB Date: 07/05/24

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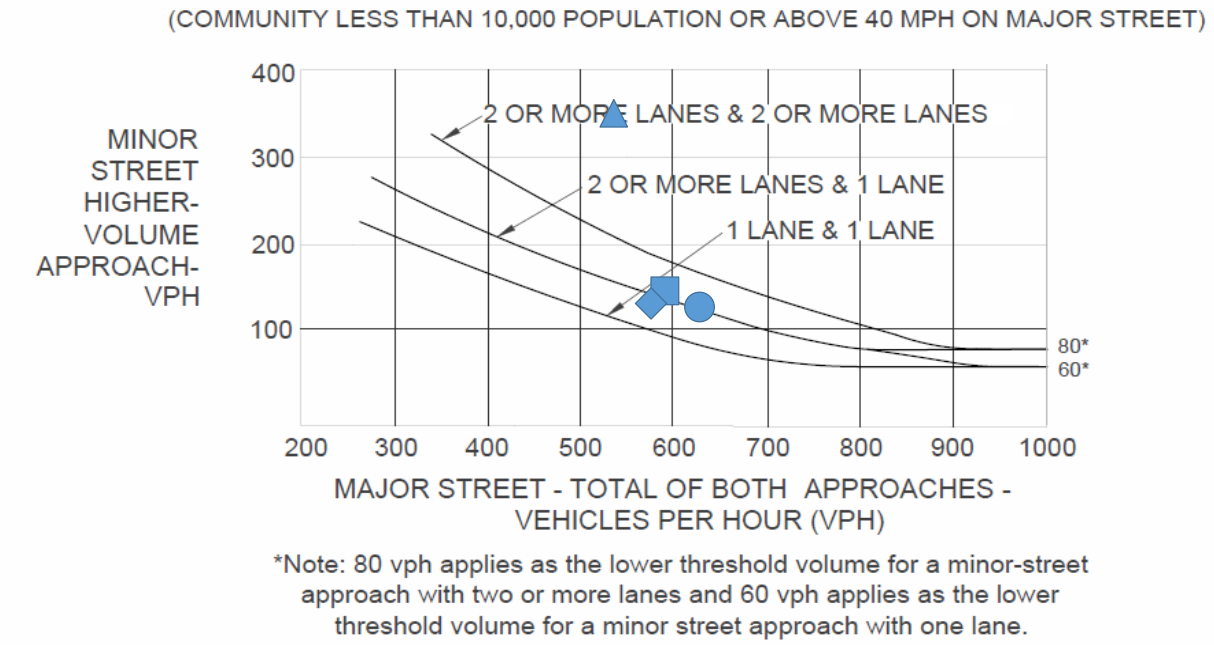
Warrant 2: Four-Hour Vehicular Volume (Rural)

Existing Traffic Conditions

3. Temperance Ave / Hamilton Ave



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.

	1 Lane & 1 Lane	2 or More Lanes & 1 Lane	2 or More Lanes & 2 or More Lanes	▲ 7:00 AM Volume	■ 3:00 PM Volume	● 4:00 PM Volume	◆ 5:00 PM Volume
Major Street (Total of Both Approaches)	☑	☐	☐	536	591	628	576
Minor Street (Higher Volume Approach)				346	147	129	133

Satisfied: ☑ **Yes** ☐ **No**

Calculated By: DC Date: 07/05/24
Checked By: AB Date: 07/05/24

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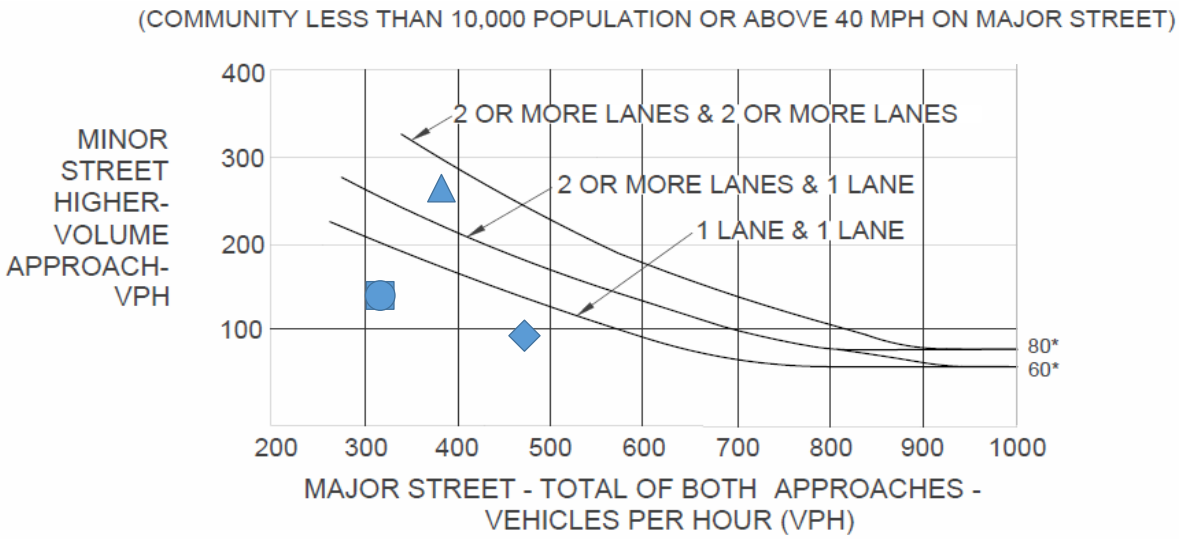
Warrant 2: Four-Hour Vehicular Volume (Rural)

Existing Traffic Conditions

4. Armstrong Ave / California Ave



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.

	1 Lane & 1 Lane	2 or More Lanes & 1 Lane	2 or More Lanes & 2 or More Lanes	▲ 7:00 AM Volume	■ 8:00 AM Volume	● 8:00 AM Volume	◆ 3:00 PM Volume
Major Street (Total of Both Approaches)	☑	☐	☐	383	317	317	472
Minor Street (Higher Volume Approach)				262	142	142	97

Satisfied: ☐ **Yes** ☑ **No**

Calculated By: DC Date: 07/11/24
Checked By: AB Date: 07/11/24

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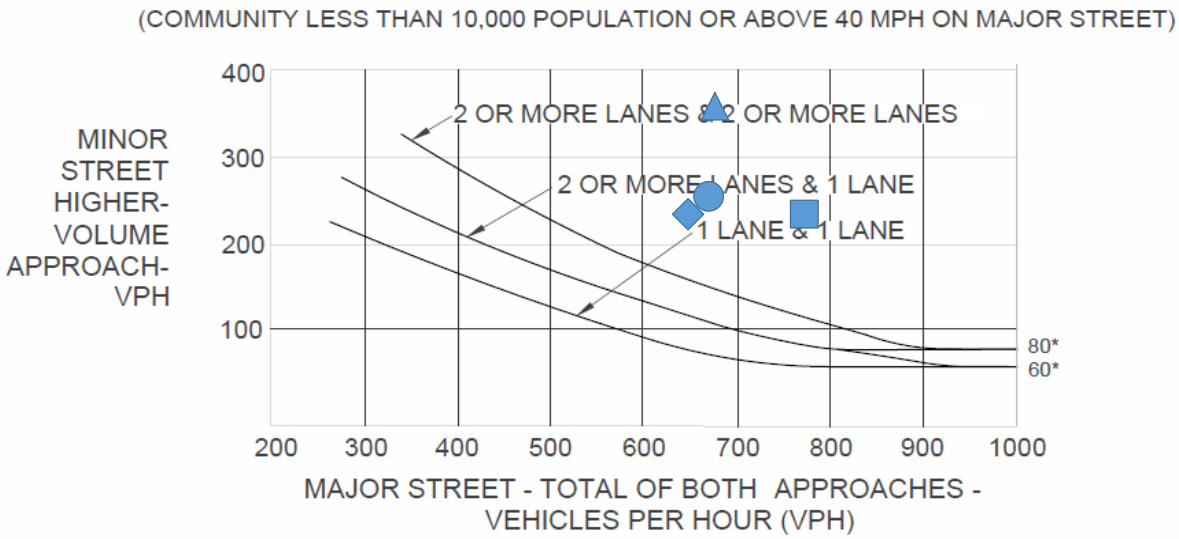
Warrant 2: Four-Hour Vehicular Volume (Rural)

Existing Traffic Conditions

6. Fowler Ave / Church Ave



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.

	1 Lane & 1 Lane	2 or More Lanes & 1 Lane	2 or More Lanes & 2 or More Lanes	▲ 7:00 AM Volume	■ 8:00 AM Volume	● 3:00 PM Volume	◆ 4:00 PM Volume
Major Street (Total of Both Approaches)	☑	☐	☐	677	773	670	648
Minor Street (Higher Volume Approach)				354	233	253	233

Satisfied: ☑ **Yes** ☐ **No**

Calculated By: DC Date: 07/05/24
Checked By: AB Date: 07/05/24

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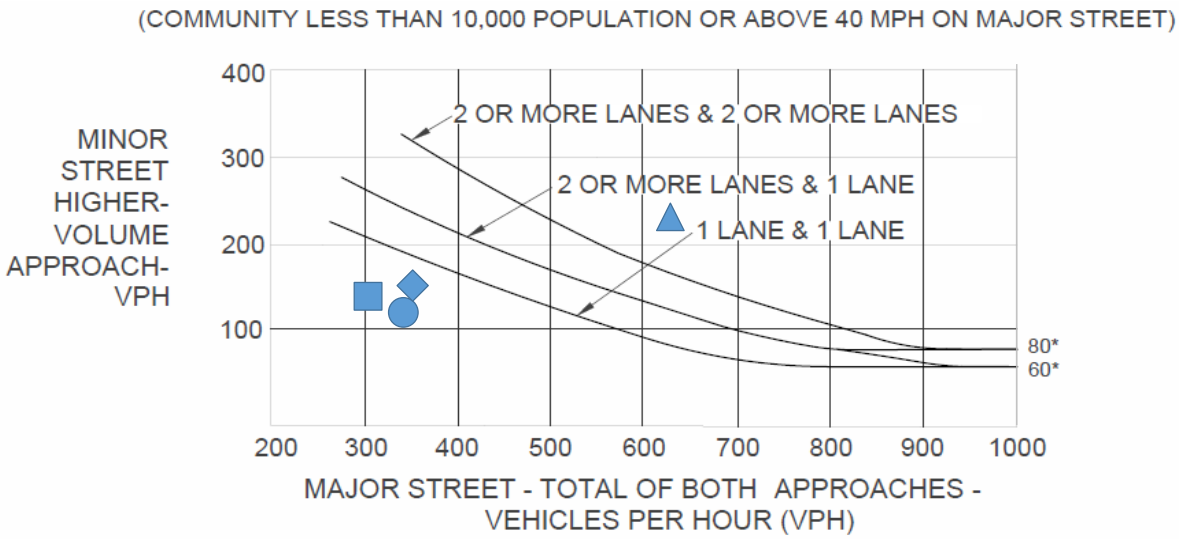
Warrant 2: Four-Hour Vehicular Volume (Rural)

Existing Traffic Conditions

7. Armstrong Ave / Church Ave



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.

	1 Lane & 1 Lane	2 or More Lanes & 1 Lane	2 or More Lanes & 2 or More Lanes	▲ 7:00 AM Volume	■ 8:00 AM Volume	● 2:00 PM Volume	◆ 3:00 PM Volume
Major Street (Total of Both Approaches)	☑	☐	☐	629	304	342	352
Minor Street (Higher Volume Approach)				230	141	123	153

Satisfied: ☐ **Yes** ☑ **No**

Calculated By: DC Date: 07/05/24
Checked By: AB Date: 07/05/24

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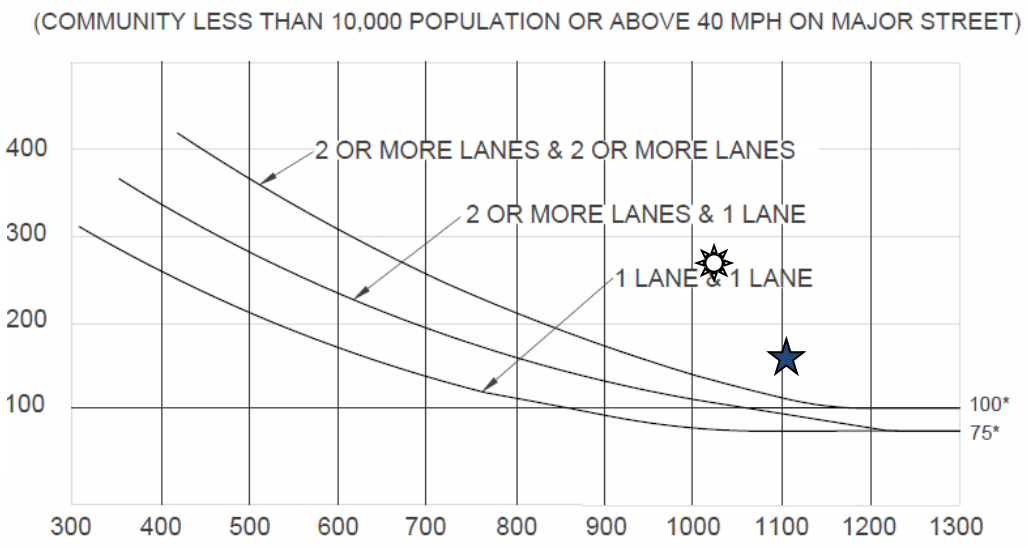
Warrant 3: Peak Hour (Rural)

Existing Traffic Conditions
1. Fowler Avenue / Hamilton Avenue
AM (PM) Peak Hour

Hamilton Avenue Highest Approach Volume = 272 (164) VPH



Fowler Avenue Total of Both Approaches =

1027 (1101) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Met

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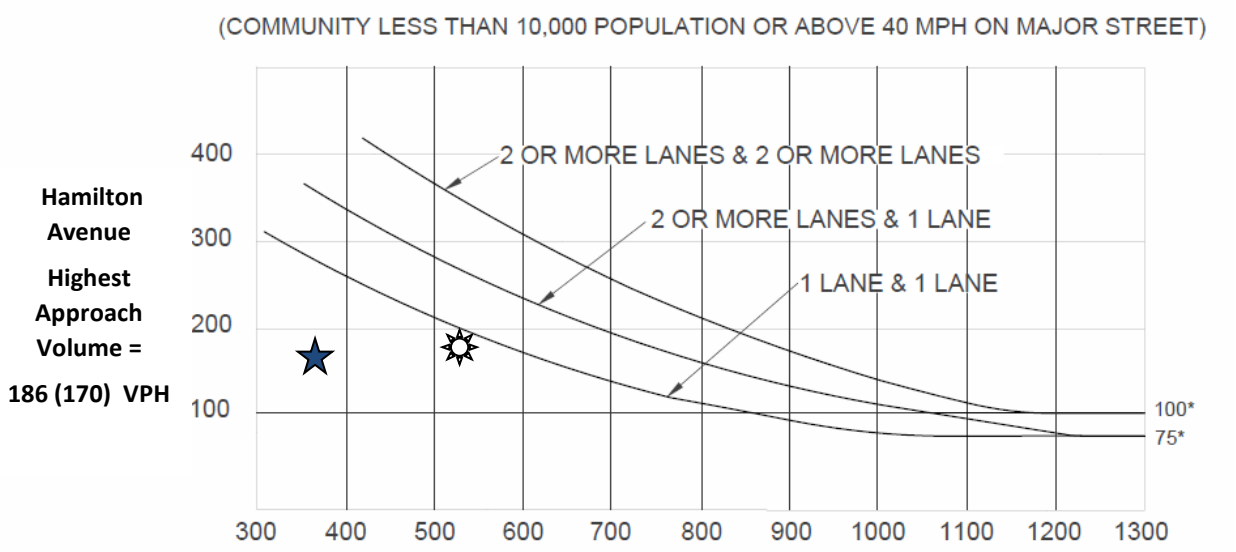
Warrant 3: Peak Hour (Rural)

Existing Traffic Conditions
2. Armstrong Avenue / Hamilton Avenue
AM (PM) Peak Hour



Armstrong Avenue Total of Both Approaches =

525 (371) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Not Met

PM Peak Hour – Signal Warrant is Not Met

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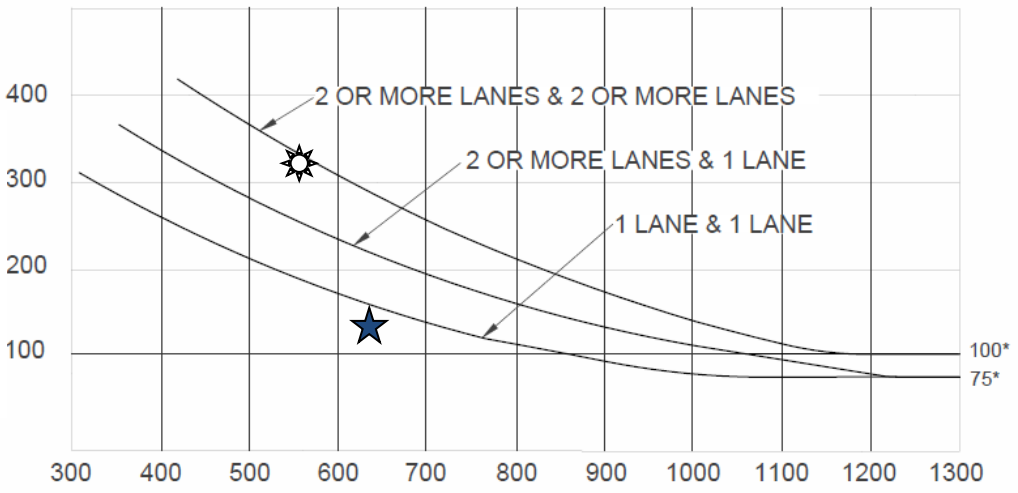
Warrant 3: Peak Hour (Rural)

Existing Traffic Conditions
3. Temperance Avenue / Hamilton Avenue
AM (PM) Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

Hamilton Avenue Highest Approach Volume = 334 (130) VPH



Temperance Avenue Total of Both Approaches =

556 (628) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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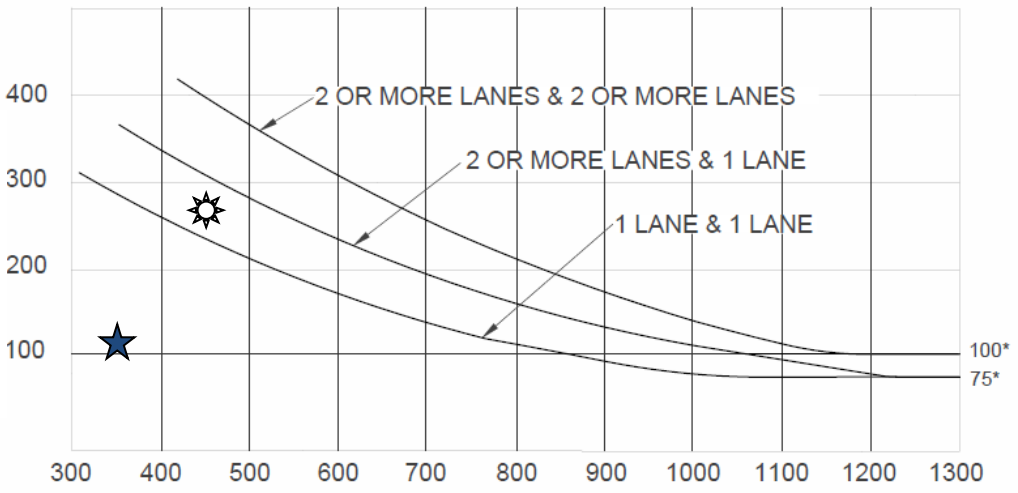
Warrant 3: Peak Hour (Rural)

Existing Traffic Conditions
4. Armstrong Avenue / California Avenue
AM (PM) Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

California Avenue Highest Approach Volume = 274 (102) VPH



Armstrong Avenue Total of Both Approaches =

449 (357) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Not Met

PM Peak Hour – Signal Warrant is Not Met

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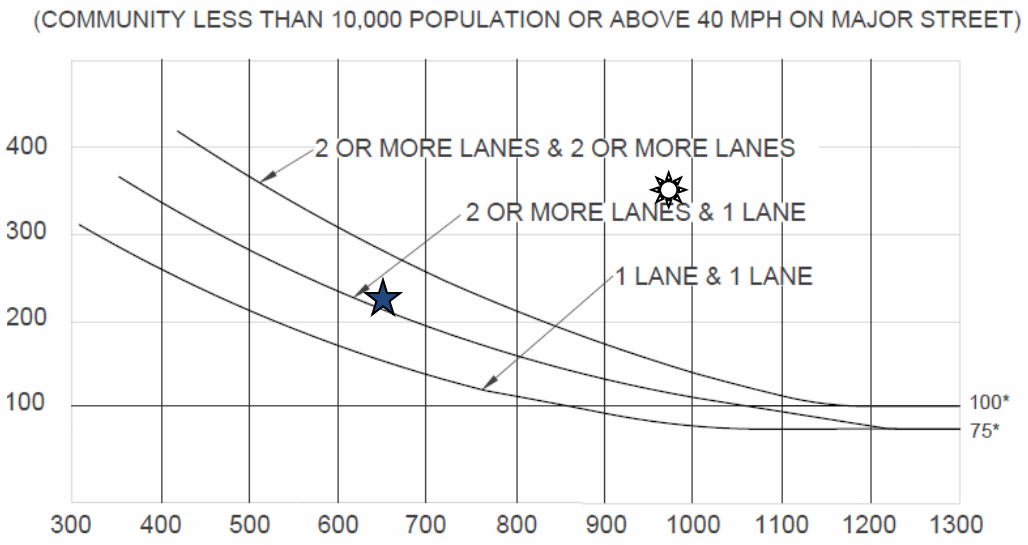
Warrant 3: Peak Hour (Rural)

Existing Traffic Conditions
6. Fowler Avenue / Church Avenue
AM (PM) Peak Hour

Church Avenue Highest Approach Volume = 353 (223) VPH



Fowler Avenue Total of Both Approaches =

982 (648) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Met

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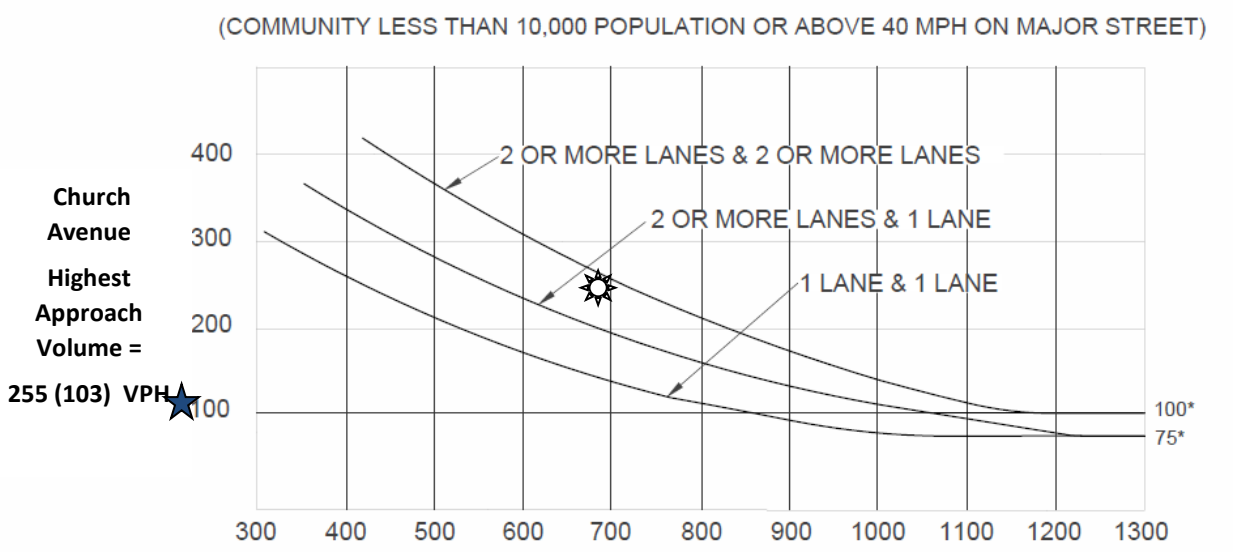
Warrant 3: Peak Hour (Rural)

Existing Traffic Conditions
7. Armstrong Avenue / Church Avenue
AM (PM) Peak Hour



Armstrong Avenue Total of Both Approaches =

697 (238) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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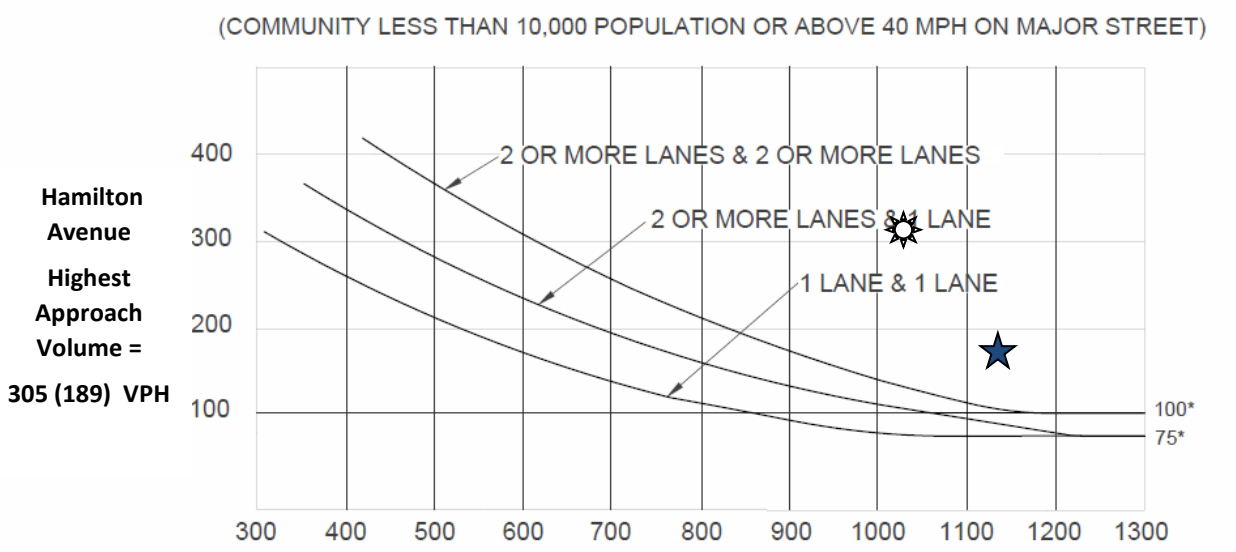
Warrant 3: Peak Hour (Rural)

Existing plus Project Traffic Conditions
1. Fowler Avenue / Hamilton Avenue
AM (PM) Peak Hour



Fowler Avenue Total of Both Approaches =

1043 (1134) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Met**

★ **PM Peak Hour – Signal Warrant is Met**

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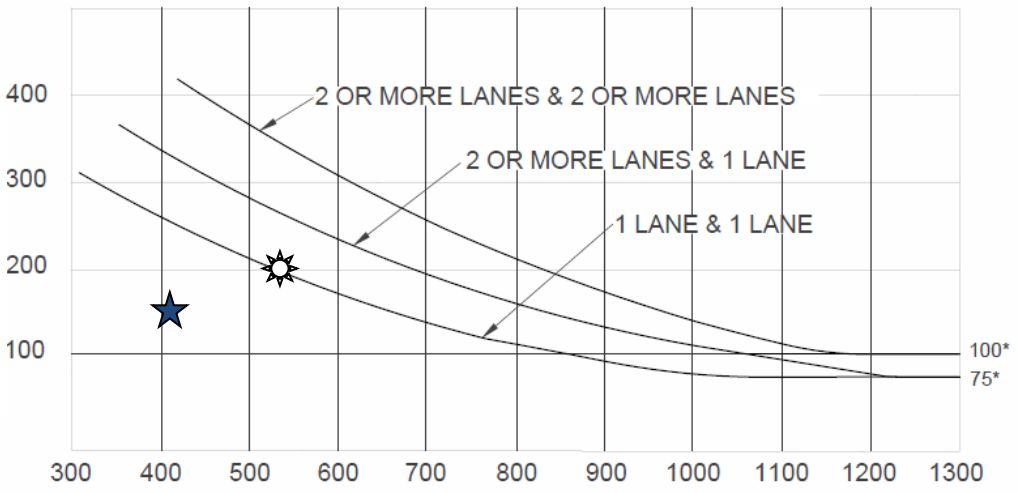
Warrant 3: Peak Hour (Rural)

Existing plus Project Traffic Conditions
2. Armstrong Avenue / Hamilton Avenue
AM (PM) Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

Hamilton Avenue Highest Approach Volume = 200 (148) VPH



Armstrong Avenue Total of Both Approaches =

543 (404) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Not Met

PM Peak Hour – Signal Warrant is Not Met

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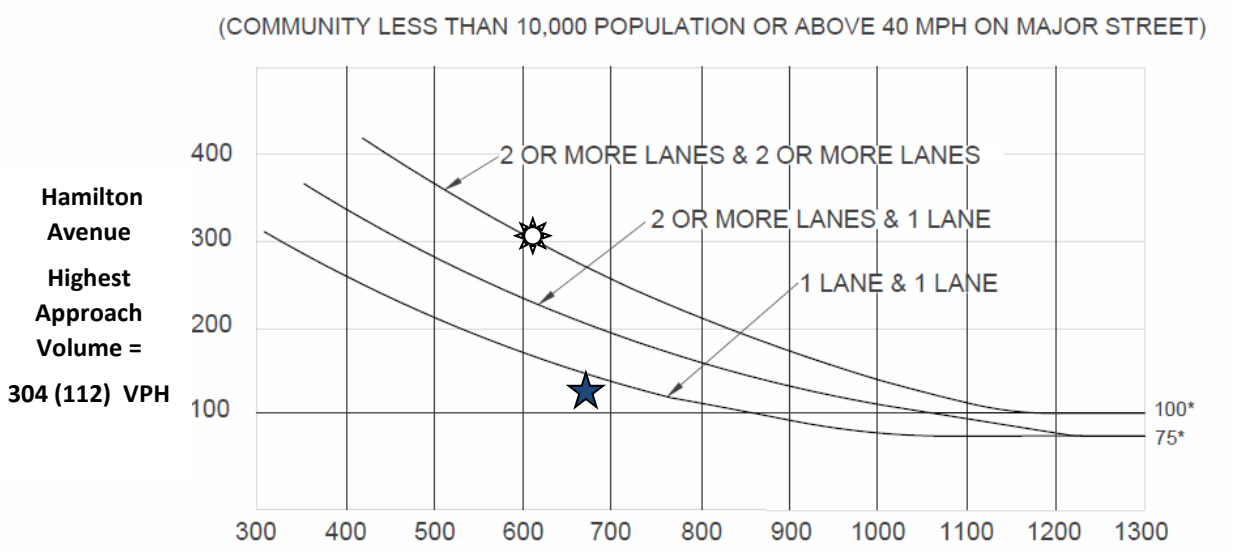
Warrant 3: Peak Hour (Rural)

Existing plus Project Traffic Conditions
3. Temperance Avenue / Hamilton Avenue
AM (PM) Peak Hour



Temperance Avenue Total of Both Approaches =

614 (688) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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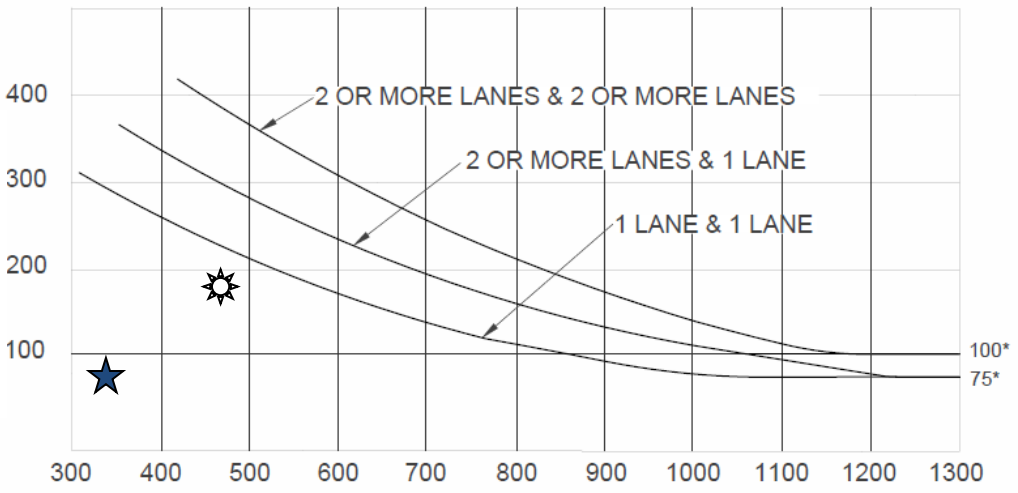
Warrant 3: Peak Hour (Rural)

Existing plus Project Traffic Conditions
4. Armstrong Avenue / California Avenue
AM (PM) Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

California Avenue Highest Approach Volume = 185 (88) VPH



Armstrong Avenue Total of Both Approaches =

471 (344) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Not Met

PM Peak Hour – Signal Warrant is Not Met

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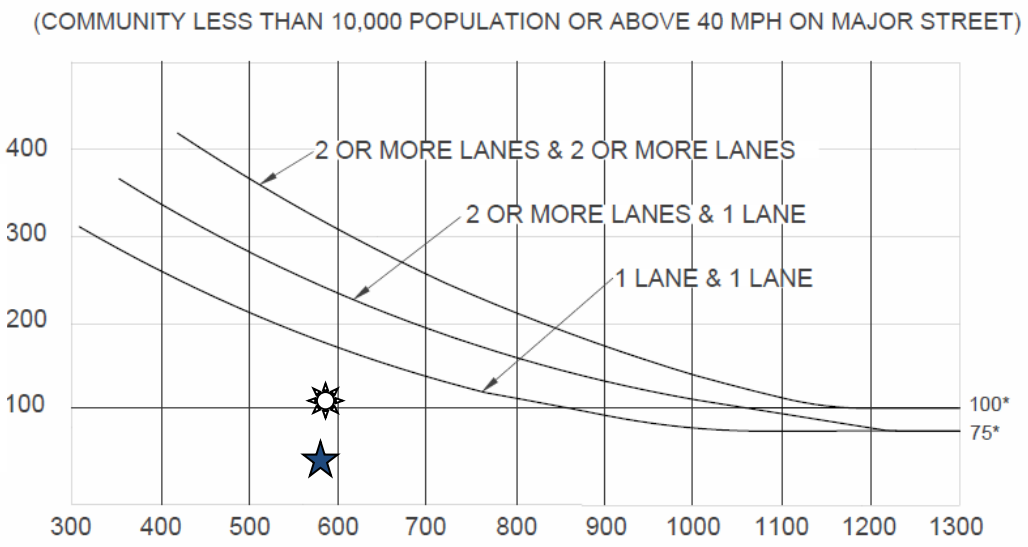
Warrant 3: Peak Hour (Rural)

Existing plus Project Traffic Conditions
5. Temperance Avenue / California Avenue
AM (PM) Peak Hour

California Avenue Highest Approach Volume = 106 (40) VPH



Temperance Avenue Total of Both Approaches =

585 (581) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Not Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

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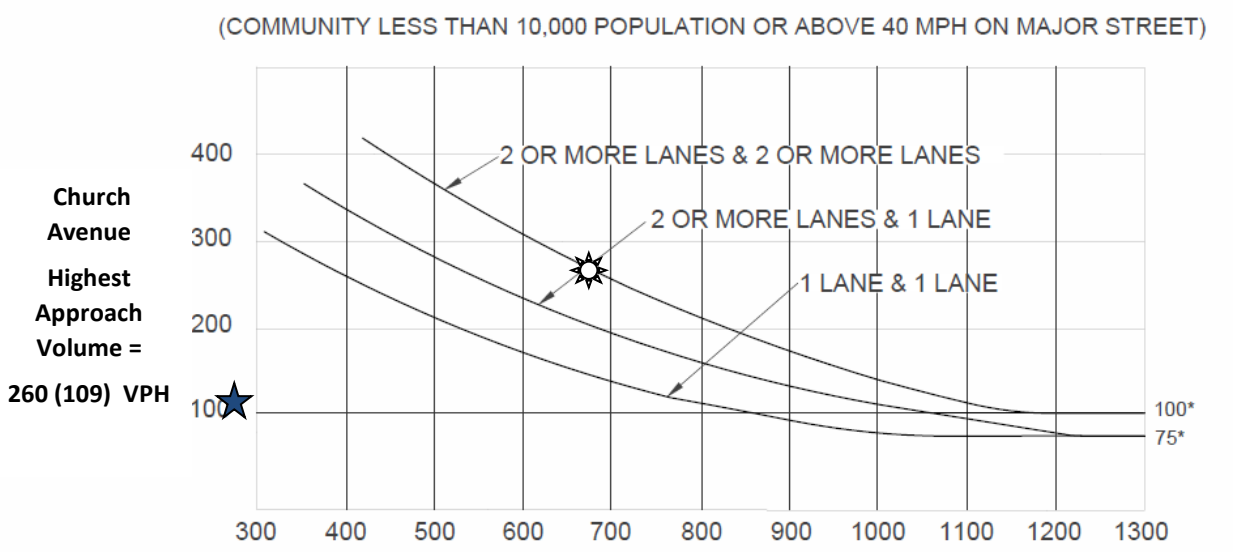
Warrant 3: Peak Hour (Rural)

Existing plus Project Traffic Conditions
7. Armstrong Avenue / Church Avenue
AM (PM) Peak Hour



Armstrong Avenue Total of Both Approaches =

685 (261) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
Chapter 4C: Traffic Control Signal Needs Studies
Part 4: Highway Traffic Signals
November 7, 2014

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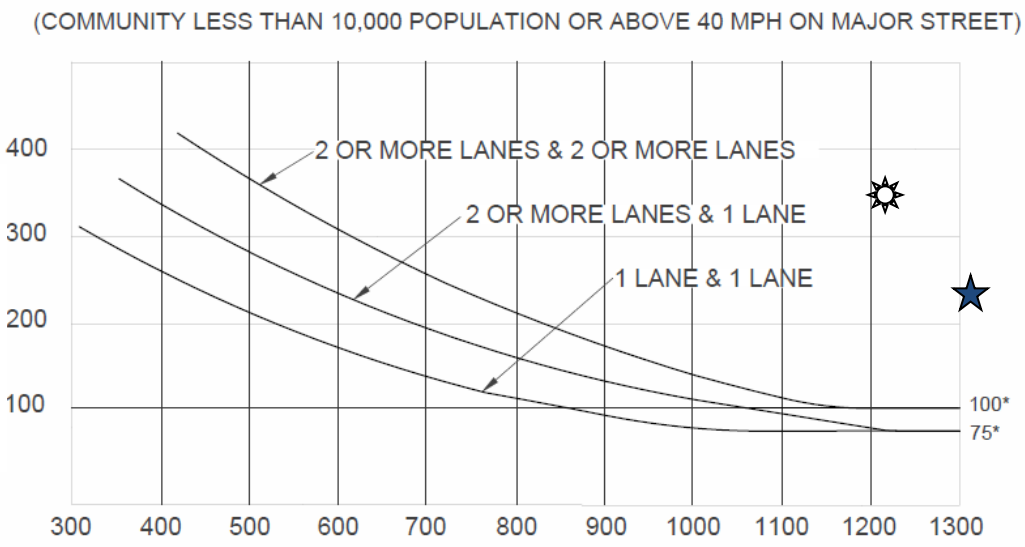
(559) 570-8991

Warrant 3: Peak Hour (Rural)

Near Term plus Project Traffic Conditions
1. Fowler Avenue / Hamilton Avenue
AM (PM) Peak Hour

Hamilton Avenue Highest Approach Volume = 342 (222) VPH



Fowler Avenue Total of Both Approaches =

1218 (1334) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Met**

★ **PM Peak Hour – Signal Warrant is Met**

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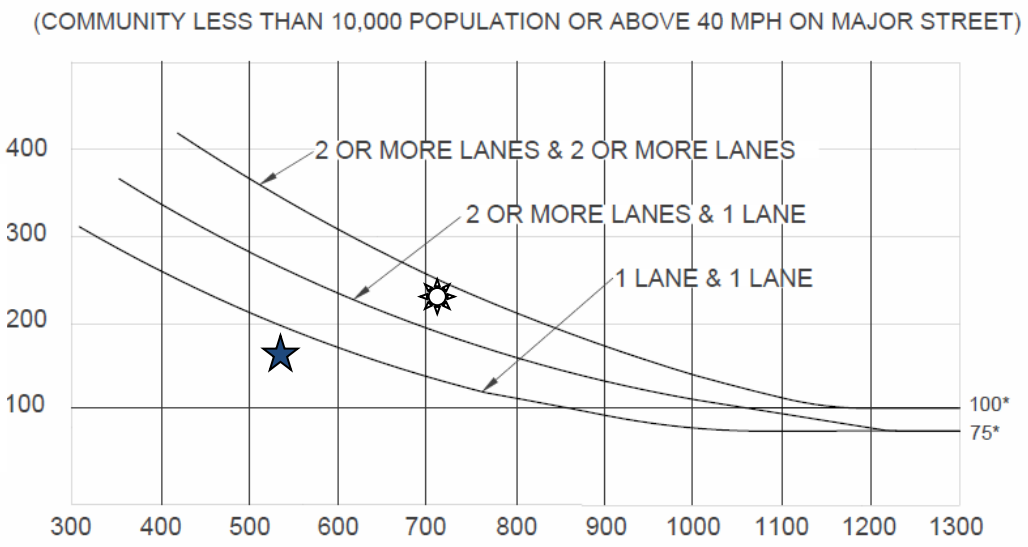
Warrant 3: Peak Hour (Rural)

Near Term plus Project Traffic Conditions
2. Armstrong Avenue / Hamilton Avenue
AM (PM) Peak Hour

Hamilton Avenue Highest Approach Volume = 217 (185) VPH



Armstrong Total of Both Approaches =

716 (524) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

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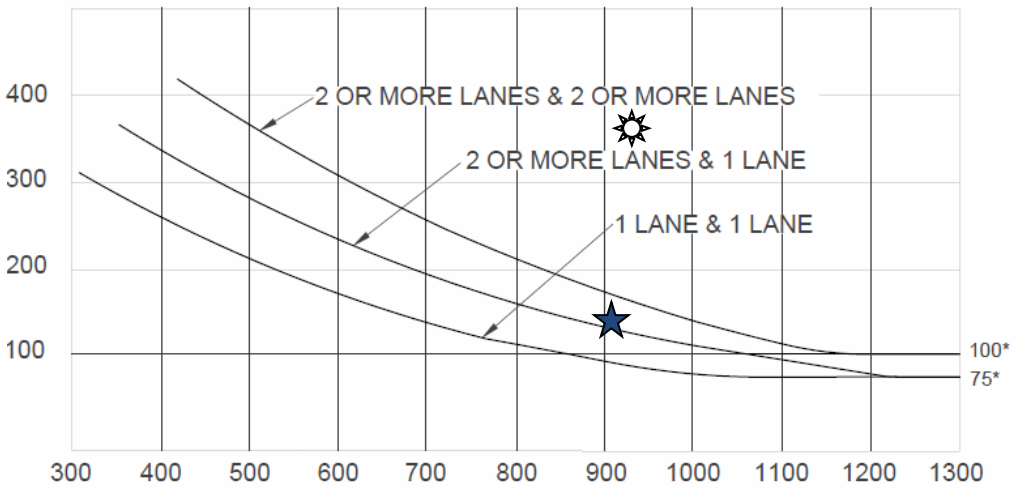
Warrant 3: Peak Hour (Rural)

Near Term plus Project Traffic Conditions
3. Temperance Avenue / Hamilton Avenue
AM (PM) Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

Hamilton Avenue Highest Approach Volume = 367 (122) VPH



Temperance Avenue Total of Both Approaches =

921 (904) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Met**

★ **PM Peak Hour – Signal Warrant is Met**

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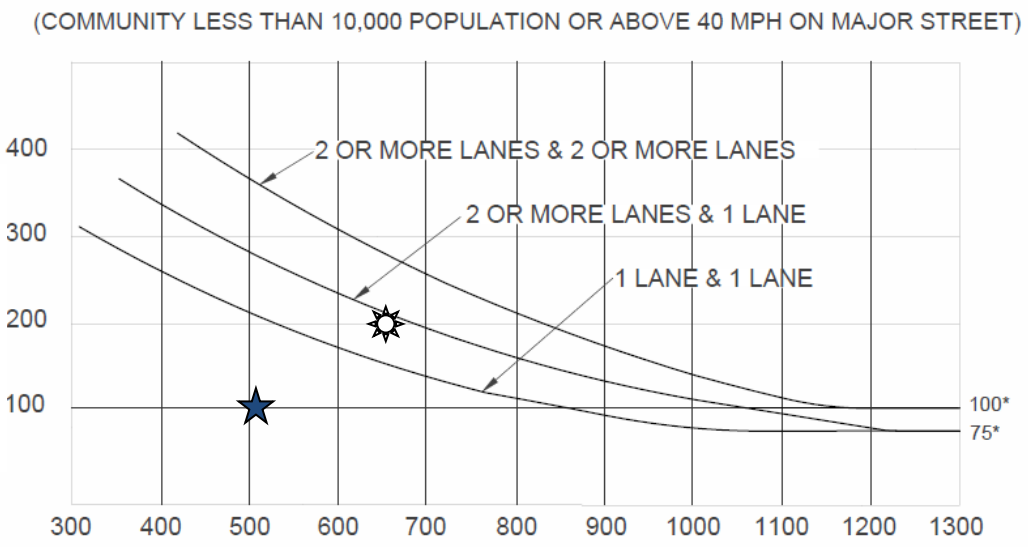
Warrant 3: Peak Hour (Rural)

Near Term plus Project Traffic Conditions
4. Armstrong Avenue / California Avenue
AM (PM) Peak Hour

California Avenue Highest Approach Volume = 200 (103) VPH



Armstrong Avenue Total of Both Approaches =

664 (510) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Not Met

PM Peak Hour – Signal Warrant is Not Met

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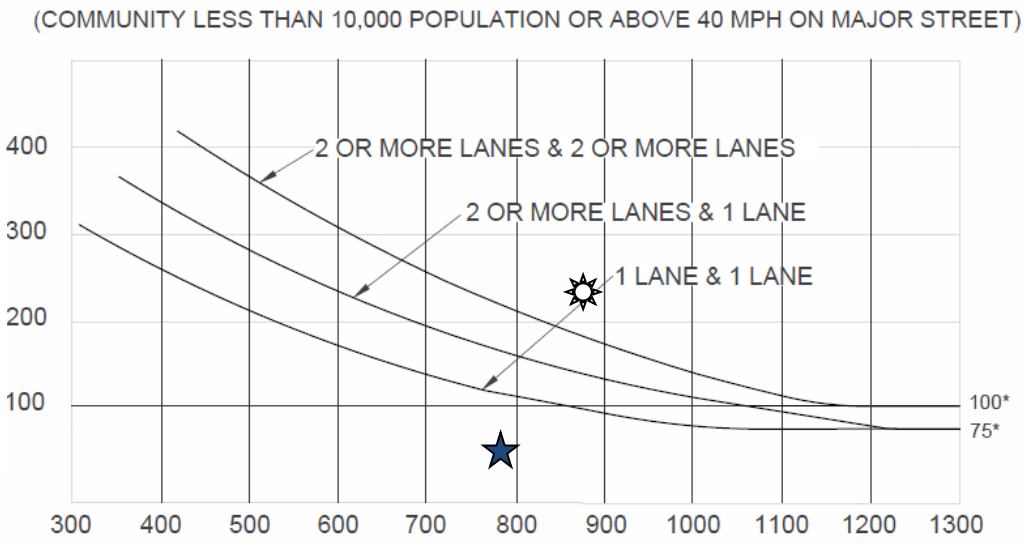
Warrant 3: Peak Hour (Rural)

Near Term plus Project Traffic Conditions
5. Temperance Avenue / California Avenue
AM (PM) Peak Hour

California Avenue Highest Approach Volume = 226 (49) VPH



Temperance Avenue Total of Both Approaches =

886 (785) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

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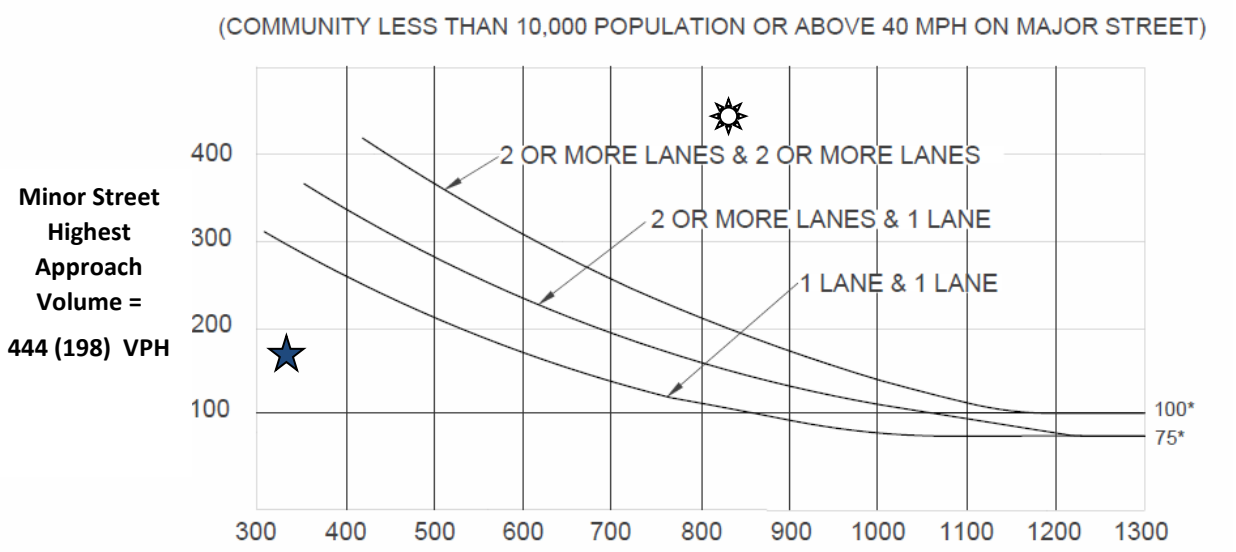
Warrant 3: Peak Hour (Rural)

Near Term plus Project Traffic Conditions
7. Armstrong Avenue / Church Avenue
AM (PM) Peak Hour



Major Street Total of Both Approaches =

837 (337) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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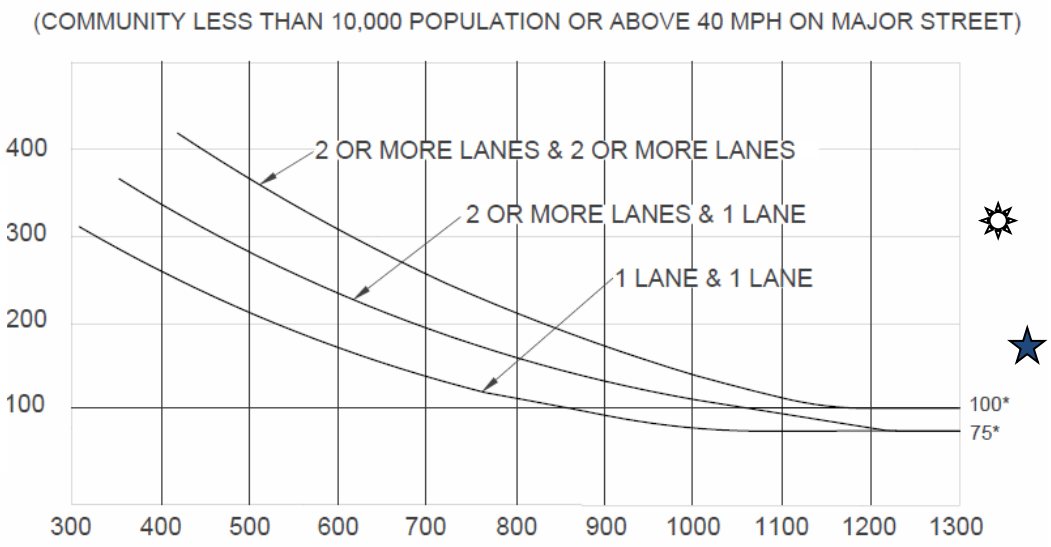
Warrant 3: Peak Hour (Rural)

Cumulative Year 2046 plus Project Traffic Conditions
1. Fowler Avenue / Hamilton Avenue
AM (PM) Peak Hour

Hamilton Avenue Highest Approach Volume = 320 (182) VPH



Fowler Avenue Total of Both Approaches =

1399 (1425) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Met**

★ **PM Peak Hour – Signal Warrant is Met**

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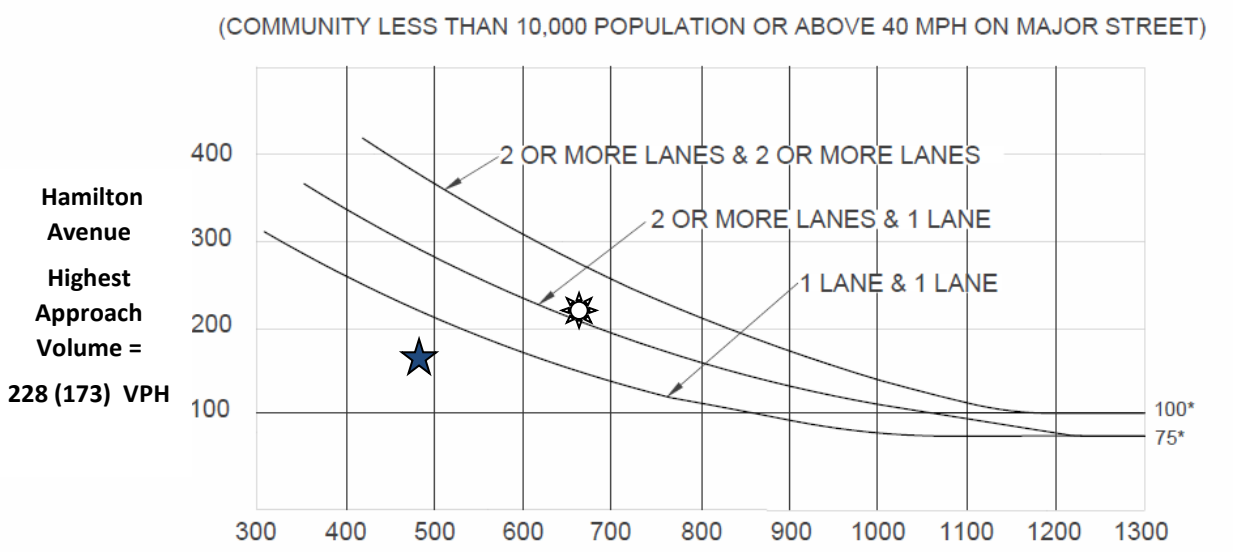
Warrant 3: Peak Hour (Rural)

Cumulative Year 2046 plus Project Traffic Conditions
2. Armstrong Avenue / Hamilton Avenue
AM (PM) Peak Hour



Armstrong Avenue Total of Both Approaches =

655 (489) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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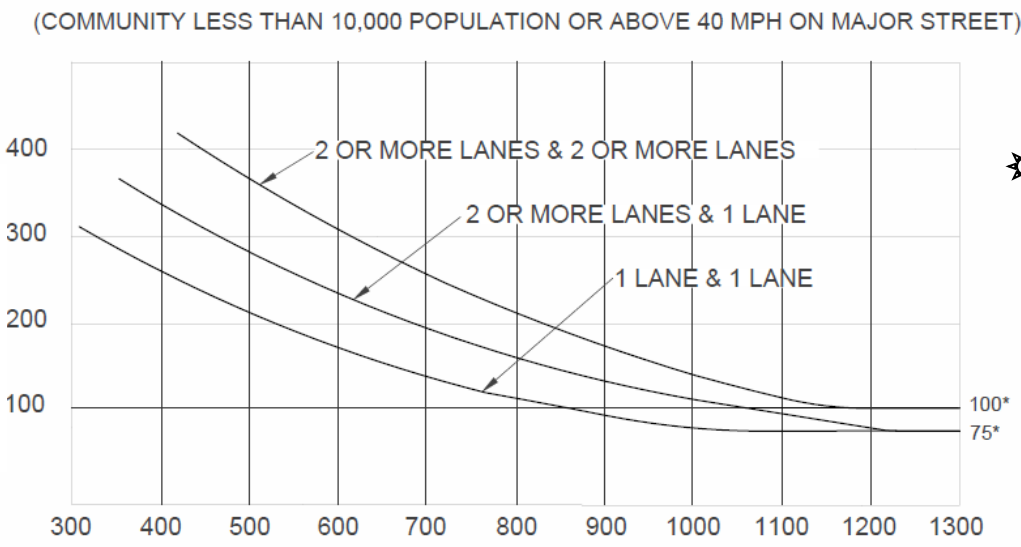
Warrant 3: Peak Hour (Rural)

Cumulative Year 2046 plus Project Traffic Conditions
3. Temperance Avenue / Hamilton Avenue
AM (PM) Peak Hour

Hamilton Avenue Highest Approach Volume = 373 (176) VPH



Temperance Avenue Total of Both Approaches =

2186 (2364) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Met

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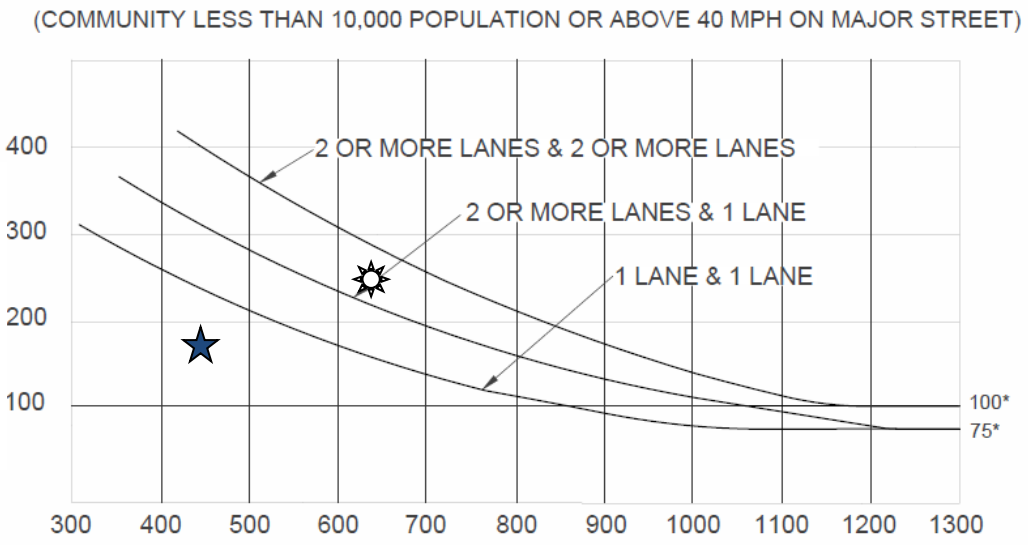
Warrant 3: Peak Hour (Rural)

Cumulative Year 2046 plus Project Traffic Conditions
4. Armstrong Avenue / California Avenue
AM (PM) Peak Hour

California Avenue Highest Approach Volume = 246 (179) VPH



Armstrong Avenue Total of Both Approaches =

627 (448) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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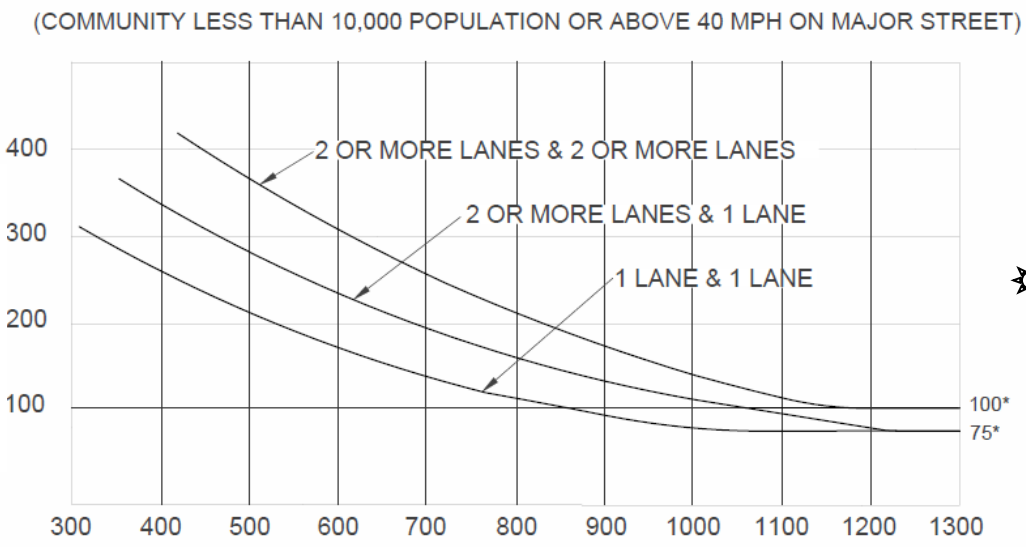
Warrant 3: Peak Hour (Rural)

Cumulative Year 2046 plus Project Traffic Conditions
5. Temperance Avenue / California Avenue
AM (PM) Peak Hour

California Avenue Highest Approach Volume = 247 (73) VPH



Temperance Avenue Total of Both Approaches =

2051 (2187) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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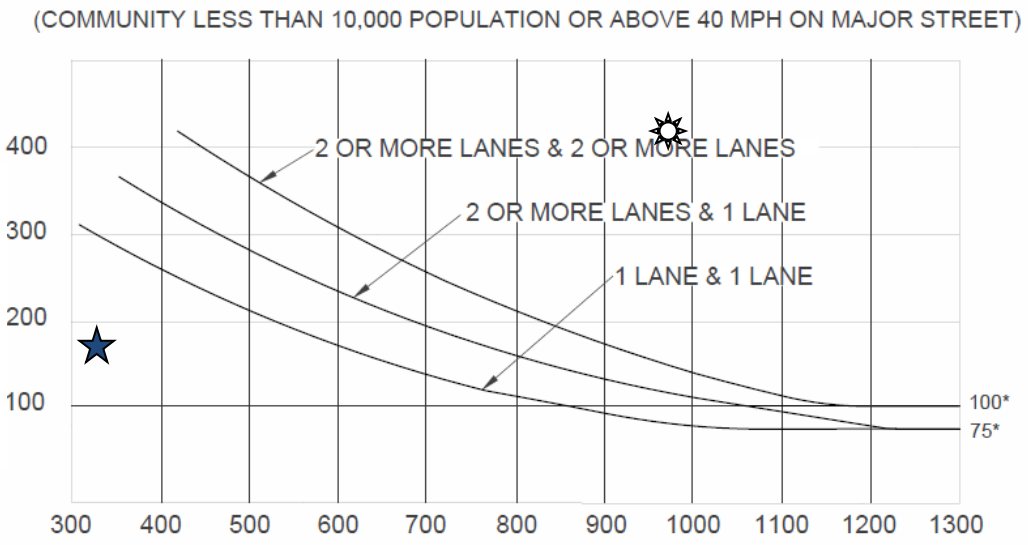
Warrant 3: Peak Hour (Rural)

Cumulative Year 2046 plus Project Traffic Conditions
7. Armstrong Avenue / Church Avenue
AM (PM) Peak Hour

Armstrong Avenue Highest Approach Volume = 414 (179) VPH



Church Avenue Total of Both Approaches =

985 (326) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

AM Peak Hour – Signal Warrant is Met

PM Peak Hour – Signal Warrant is Not Met

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City of Fresno
URBAN FORM VMT CALCULATOR

Basic Information

Project Name:	Simonian Property	
Applicant/Developer:	Bonadelle Neighborhoods	
Major Cross Streets:	California and Armstrong	
Project Address:		
APN(s):	31616016,17,43,59 and 61	
Gross Project Site Area:	38.76	acres
Baseline VMT from COG Calculator:	16.9	per capita
Calculation Run By:	DKB	
Date of Calculation:	9/6/2024	

Land Use Information

Area dedicated to internal streets *(including major streets which are entirely within the project site)* :	13.8	acres
Area of park space or other public open space:	0.5	acres
Area of landscaping outlots and other space that will not be available for residential and commercial uses:	1.4	acres
Net area of the project site *(land avaialble for residential and commercial uses)* :	23.1	acres
Number of single family dwellings *(attached and detached)* :	202.0	units
Number of multifamily dwellings *(including ADUs and duplexes)* :	0.0	units
Total number of dwellings:	202.0	units
Number of affordable/BMR dwellings *(including single-family and multifamily)* :	0.0	units
Total office space within project:	0.0	square feet
Total retail and other non-residential space within the project *(excluding office and industrial*):	0.0	square feet
Average Front Setback of Residential Structures:	13.0	feet
Average Front Setback of Non-Residential Structures:	0.0	feet
Number of driveways serving residential uses:	202.0	driveways
Number of driveways serving non-residential uses	0.0	driveways
Number of dwelling units without dedicated parking:	0.0	units
Number of single family dwelling units with alley loaded parking:	0.0	units
Number of single family dwelling units with recessed garages	202.0	units
Number of pedestrian entrances into project buildings which face a street and are located within 20 feet of a sidewalk:	202.0	entrances

Project Perimeter and Major Street Connections

Length of project frontage that is adjacent to major streets *(including major streets adjacent to the project or within the project)* :	2,598.0	feet
Length of project perimeter that is adjacent to other sites *(developed or undeveloped)* :	3,920.0	feet
Total Length of project perimeter:	6,518.0	feet
Are there residential uses adjacent to non-residential uses *(including those inside and at the edge of the project, and including instances where a non-major street is the boundary)* :	No	
Length of the boundary between residential uses non-residential uses *(including those inside and at the edge of the project, and including instances where a non-major street is the boundary)* :		feet
Length of project perimeter that is adjacent to major streets that is occupied by residential uses:	2,598.0	
Length of project perimeter that is adjacent to major streets that is occupied by non-residential uses:	0.0	
Total number of ungated pedestrian connections *(a single street with 2 sidewalks counts as 1)* from residential part of project to adjacent non-residential use (including those inside and outside of the project):	0.0	connections
Total number of ungated automobile connections from the residential part of project to adjacent non-residential uses *(including those inside and outside of the project)* :	0.0	connections
Total number of ungated pedestrian connections *(a single street with 2 sidewalks counts as 1)* from project to adjacent development sites:	4.0	connections
Total number of ungated automobile connections from project to adjacent development sites:	4.0	connections
Total number of ungated pedestrian connections (a single street with 2 sidewalks counts as 1) from project to adjacent major streets:	6.0	connections
Total number of ungated automobile connections from project to adjacent major streets:	6.0	connections
Total number of controlled intersections on adjacent major streets:	1.0	intersections
Distance between the transit stop serving the project and the nearest pedestrian connection to the project *(following safe and legal pedestrian paths, not as the crow flies)* .	300.0	feet

Total length of all major streets within the project *(if applicable)* :	1,323.0	feet
Total length of all major streets, within the project and at the perimeter:	3,921.0	feet
Length of major street frontage with tall fencing *(over 4 feet in height)* or soundwalls:	3,241.0	feet
Average width of sidewalks on major streets, within the project and at the perimeter:	12.0	feet
Total length in feet of all protected bike lanes and off-street trails:	3,921.0	feet

Internal System of Minor Streets

Does the project have internal minor streets *(include public and private streets)* ?	Yes	

If "No" leave the remaining cells blank and scroll down to see results of Urban Form VMT analysis.

Total length of internal streets *(excluding intersections, and excluding major streets)* :	8,857.0	feet
Total length of Residential Lot Frontage Facing Internal Streets:	11,363.0	feet
Total length of Non-Residential Lot Frontage Facing Internal Streets:	0.0	feet
Total length of all Lot Frontage Facing Internal Streets:	11,363.0	feet
Average block length *(This is based on streets, not frontages. Measure the length of each block along the centerline of each street between intersections. To count as an intersection there must be at least three approaches—elbows do not count. Streets which stub off at the border of the subdivision cannot be counted as a block because the distance to the n ext intersection is unknown)* :	273.0	feet
Average local street roadway width:	36.0	feet
Total number of intersections in project *(including those that connect to adjacent major streets)* :	24.0	intersections
Length of internal streets with two sidewalks:	8,857.0	feet
Length of internal streets with one sidewalk:	0.0	feet
Length of internal streets with no sidewalks:	0.0	feet
Total length of all sidewalks within project:	17,714.0	feet
Average residential sidewalk width:	6.0	feet
Average non-residential sidewalk width:	12.0	feet
Length of internal streets with parkway strips *(4 feet or wider)* :	2,267.0	feet
Total number of street trees *(only include those planted within the street right of way)* :	360.0	trees
Average diameter of street tree canopy, or *spread,* at maturity:	40.0	feet
Total number of pedestrian-scaled street lights *(18' feet high or less, within street right of way but not projecting over the roadway)* :	54.0	lights

Results of Urban Form VMT Analysis

Type of Project:	Residential Project	
Baseline VMT For this Location (from COG model):	16.90	per capita
The urban form of this project warrants a VMT reduction of:	17.17%	
The adjusted VMT for this project is:	14.00	per capita
The the regional VMT threshold is:	14.01	per capita
This project exceeds exceeds the local VMT threshold by:	0.00	per capita
After analysis of its urban form, does this project still have a VMT impact which must be mitigated through a fee or other meaasure?	**NO**	