

DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR FAMILY HEALTHCARE NETWORK CLINIC

MARCH 2023



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City of Hanford
317 North Douty Street
Hanford, CA, 93230

SECTION 1

CEQA Review Process

Project Title: Family Healthcare Network Clinic

1.1 California Environmental Quality Act Guidelines

Section 15063 of the California Environmental Quality Act (CEQA) Guidelines requires that the Lead Agency prepare an Initial Study to determine whether a discretionary project will have a significant effect on the environment. All phases of the project planning, implementation, and operation must be considered in the Initial Study. The purposes of an Initial Study, as listed under Section 15063(c) of the CEQA Guidelines, include:

- (1) *Provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or negative declaration;*
- (2) *Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;*
- (3) *Assist the preparation of an EIR, if one is required, by:*
 - (a) *Focusing the EIR on the effects determined to be significant,*
 - (b) *Identifying the effects determined not to be significant,*
 - (c) *Explaining the reasons for determining that potentially significant effects would not be significant, and*
 - (d) *Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.*
- (4) *Facilitate environmental assessment early in the design of a project;*
- (5) *Provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment*
- (6) *Eliminate unnecessary EIRs;*
- (7) *Determine whether a previously prepared EIR could be used with the project.*

1.2 Initial Study

The Initial Study provided herein covers the potential environmental effects of the construction and operation of a 15,000 square foot medical office on 1.8 gross acres. The site is zoned C-R by the City of Hanford zoning code. The City of Hanford will act as the Lead Agency for processing the Initial Study/Mitigated Negative Declaration pursuant to the CEQA Guidelines.

1.3 Environmental Checklist

The Lead Agency may use the CEQA Environmental Checklist Form [CEQA Guidelines, Section 15063(d)(3) and (f)] in preparation of an Initial Study to provide information for determination if there are significant

effects of the project on the environment. A copy of the completed Environmental Checklist is set forth in **Section Three**.

1.4 Notice of Intent to Adopt a Negative Declaration

The Lead Agency shall provide a Notice of Intent to Adopt a Negative Declaration (CEQA Guidelines, Section 15072) to the public, responsible agencies, trustee agencies and the County Clerk within which the project is located, sufficiently prior to adoption by the Lead Agency of the Negative Declaration to allow the public and agencies the review period. The public review period (CEQA Guidelines, Section 15105) shall not be less than 30 days when the Initial Study/Negative Declaration is submitted to the State Clearinghouse unless a shorter period, not less than 20 days, is approved by the State Clearinghouse.

Prior to approving the project, the Lead Agency shall consider the proposed Negative Declaration together with any comments received during the public review process, and shall adopt the proposed Negative Declaration only if it finds on the basis of the whole record before it, that there is no substantial evidence that the project will have a significant effect on the environment and that the Negative Declaration reflects the Lead Agency's independent judgment and analysis.

The written and oral comments received during the public review period will be considered by The City of Tulare prior to adopting the Negative Declaration. Regardless of the type of CEQA document that must be prepared, the overall purpose of the CEQA process is to:

- 1) Assure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns;
- 2) Provide for full disclosure of the project's environmental effects to the public, the agency decision-makers who will approve or deny the project, and the responsible trustee agencies charged with managing resources (e.g. wildlife, air quality) that may be affected by the project; and
- 3) Provide a forum for public participation in the decision-making process pertaining to potential environmental effects.

According to Section 15070(a) a public agency shall prepare or have prepared a proposed negative declaration for a project subject to CEQA when:

The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. Less than significant impacts with mitigation measures have been identified.

The Environmental Checklist Discussion contained in Section Three of this document has determined that the environmental impacts of the project are less than significant with mitigation measures and that a Mitigated Negative Declaration is adequate for adoption by the Lead Agency.

1.5 Negative Declaration or Mitigated Negative Declaration

The Lead Agency shall prepare or have prepared a proposed Negative Declaration or Mitigated Negative Declaration (CEQA Guidelines Section 15070) for a project subject to CEQA when the Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. The proposed Negative Declaration or Mitigated Negative Declaration circulated for public review shall include the following:

- (a) A brief description of the project, including a commonly used name for the project.
- (b) The location of the project, preferably shown on a map.
- (c) A proposed finding that the project will not have a significant effect on the environment.
- (d) An attached copy of the Initial Study documenting reasons to support the finding.
- (e) Mitigation measures, if any.

1.6 Intended Uses of Initial Study/Negative Declaration documents

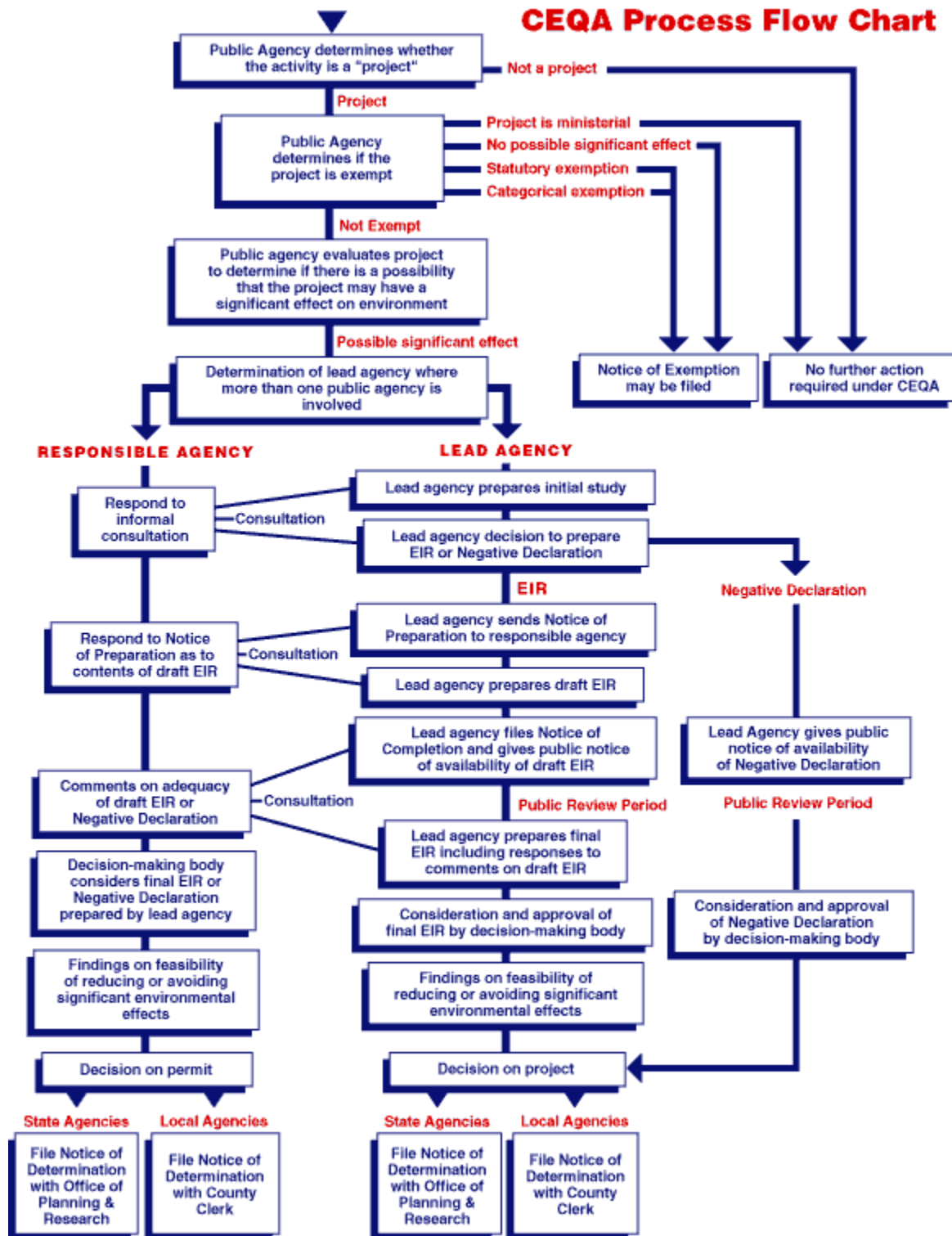
The Initial Study/Negative Declaration document is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed project. The environmental review process has been established to enable the public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency must balance any potential environmental effects against other public objectives, including economic and social goals. The City of Visalia, as Lead Agency, will make a determination, based on the environmental review for the Environmental Study, Initial Study and comments from the general public, if there are less than significant impacts from the proposed project and the requirements of CEQA can be met by adoption of a Mitigated Negative Declaration.

1.7 Notice of Determination (NOD)

The Lead Agency shall file a Notice of Determination within five working days after deciding to approve the project. The Notice of Determination (CEQA Guidelines, Section 15075) shall include the following:

- (1) An identification of the project including the project title as identified on the proposed negative declaration, its location, and the State Clearinghouse identification number for the proposed negative declaration if the notice of determination is filed with the State Clearinghouse.*
- (2) A brief description of the project.*
- (3) The agency's name and the date on which the agency approved the project.*
- (4) The determination of the agency that the project will not have a significant effect on the environment.*
- (5) A statement that a negative declaration or a mitigated negative declaration was adopted pursuant to the provisions of CEQA.*
- (6) A statement indicating whether mitigation measures were made a condition of the approval of the project, and whether a mitigation monitoring plan/program was adopted.*
- (7) The address where a copy of the negative declaration or mitigated negative declaration may be examined.*
- (8) The identity of the person undertaking a project which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies or the identity of the person receiving a lease, permit, license, certificate, or other entitlement for use from one or more public agencies.*

1.8 CEQA Process Flow Chart





City of Hanford

317 North Douty Street
Hanford, CA, 93230

SECTION 2 **Project Description**

Project Title: Family Healthcare Network Clinic

2.1 Project Description and Purpose

The Project proposes a 15,000 square foot medical clinic on 1.8 acres within the City of Hanford. The Project site's existing zoning is Regional Commercial (C-R) and no zone change is proposed. The project involves construction of the 15,000 sq. ft. medical clinic, 69 parking spaces, internal drive aisles, a bioswale for stormwater retention, new and relocated utilities, and infrastructure improvements along the frontage of 12th Avenue and Hayden Drive. There are no existing structures located onsite and no building demolition is required.

2.2 Project Location

The proposed project site is in the Southwest Planning Area of the City of Hanford within The County of Kings. The site is North of Hanford Arona Road, South of West Hayden Avenue, West of Ogden Street, and East of the 12th Avenue. The site is approximately 2 miles Southwest of the Hanford downtown. The Project involves construction on approximately 1.8 acres on parcel 011-060-057. The site is topographically flat and is bounded by agricultural uses to the North, commercial uses and a vacant lot to the South, commercial uses and single-family homes to the East, and a preschool and agricultural uses to the West. The site is zoned C-R by the City of Hanford and designated as Regional Commercial by the City of Hanford 2035 General Plan. The site is currently vacant with no uses.

2.3 Other Permits and Approvals

The following discretionary approvals are required from the City of Hanford for the proposed project:

- City of Hanford Conditional Use Permit
- San Joaquin Valley Air Pollution Control District (SJVAPCD). The proposed project is within the jurisdiction of the SJVAPCD and will be required to comply with Rule VIII, 3135, 4101, and 9510.
- Central Valley Regional Water Quality Control Board, SWPPP. The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater because of project construction



Figure 2-2. Vicinity Map



City of Hanford

317 North Douty Street
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SECTION 3

Evaluation of Environmental Impacts

Project Title: Family Healthcare Network Clinic

This document is the Initial Study/Mitigated Negative Declaration for the proposed construction and operation of a 15,000 square foot medical clinic on 1.8 acres within the City of Hanford. The City of Hanford will act as Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

3.1 PURPOSE

The purpose of this environmental document is to implement the California Environmental Quality Act (CEQA). Section 15002(a) of the CEQA Guidelines describes the basic purposes of CEQA as follows.

- (1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.*
- (2) Identify the ways that environmental damage can be avoided or significantly reduced.*
- (3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.*
- (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.*

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). According to Section 15070, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- (b) The initial study identifies potentially significant effects, but:*
 - (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

3.2 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1. **Project Title:** Family Healthcare Network Clinic
2. **Lead Agency:** City of Hanford, Community Development Department
Gabrielle de Silva Myers, Senior Planner
317 North Douty Street
Hanford, CA 93230
Phone Number: (559) 585-2578
3. **Applicant:** Family Healthcare Network
4. **Project Location:** The proposed project site is in the Southwest Planning Area of the City of Hanford within The County of Kings. The site is North of Hanford Arona Road, South of West Hayden Avenue, West of Ogden Street, and East of the 12th Avenue. The site is approximately 2 miles Southwest of the Hanford downtown. The Project involves construction on approximately 1.8 acres on parcel 011-060-057. The site is topographically flat and is bounded by agricultural uses to the North, commercial uses, and a vacant lot to the South, commercial uses and single-family homes to the East, and a preschool and agricultural uses to the West. The site is zoned C-R by the City of Hanford and designated as Regional Commercial by the City of Hanford 2035 General Plan. The site is currently vacant with no uses.
5. **General Plan Designation:** The proposed project site is designated as Regional Commercial by the City of Hanford 2035 General Plan.
6. **Zoning Designation:** The site is zoned C-R by the City of Hanford.
7. **Project Description:** The Project proposes a 15,000 square foot medical clinic on 1.8 acres within the City of Hanford. The Project site's existing zoning is Regional Commercial (C-R). The proposed zoning is unchanged.

The project involves construction of the 15,000 sq. ft. medical clinic, 69 parking spaces, internal drive aisles, a bioswale for stormwater retention, new and relocated utilities, and infrastructure improvements along the frontage of 12th Avenue and Hayden Drive. There are no existing structures located onsite and no building demolition is required.

8. Surrounding Land Uses and Settings:

Direction	Current Land Use	Planned Land Use
North	Agricultural Uses	Commercial Uses
South	Commercial Uses, Vacant	Neighborhood Mixed-Use
East	Commercial Uses, Single-Family Homes	Commercial Uses, Single-Family Homes
West	Agricultural Uses, School	Medium Density Residential, Commercial Uses

Table 3-1. Surrounding Land Uses

9. **Required Approvals:** The following discretionary approvals are required from the City of Hanford for the proposed project:

- City of Hanford Conditional Use Permit
- City of Hanford Building and Encroachment Permits
- San Joaquin Valley Air Pollution Control District (SJVAPCD). The proposed project is within the jurisdiction of the SJVAPCD and will be required to comply with Rule VIII, 3135, 4101, and 9510.
- Central Valley Regional Water Quality Control Board, SWPPP. The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater because of project construction

10. Native American Consultation: 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.

Note: 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.

- 11. Parking and access:** Vehicular access to the project site will be via one right-in/right-out driveway on 12th Avenue and one driveway connecting to Hayden Drive. The project site will contain 69 parking spaces, including 65 standard spaces and four ADA spaces. During construction, workers will utilize temporary construction staging areas for parking of vehicles and equipment.
- 12. Landscaping and Design:** The landscape and design plans will be required during building permit submittal.
- 13. Utilities and Electrical Services:** The Project would result in onsite and offsite infrastructure improvements including new and relocated utilities. Water, sewer, and storm drain services will be provided by the City of Hanford via existing lines on Fargo Avenue. A bioswale for onsite water retention will be located on the West portion of the site. Electricity will be provided by Southern California Edison, and natural gas will be provided by Southern California Gas Company.

Acronyms

BMP	Best Management Practices
BAU	Business as Usual
CAA	Clean Air Act
CBC	California Building Code
CCAP	Climate Change Action Plan
CCR	California Code of Regulation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CRHR	California Register of Historic Places
CWA	California Water Act
DHS	Department of Health Services
FEIR	Final Environmental Impact Report
FMMP	Important Farmland Mapping and Monitoring Program
ISMND	Initial Study Mitigated Negative Declaration
ISR	Indirect Source Review
MCL	Maximum Contaminant Level
MEIR	Master Environmental Impact Report
NOI	Notice of Intent
ND	Negative Declaration
NAC	Noise Abatement Criteria
RCRA	Resource Conservation and Recovery Act of 1976
ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SHPO	State Historic Preservation Office
SJVAPCD	San Joaquin Valley Air Pollution Control District
SSJVIC	Southern San Joaquin Information Center
SWPPP	Storm Water Pollution Prevention Plan
TCR	Tribal Cultural Resource
UWMP	Urban Water Management Plan

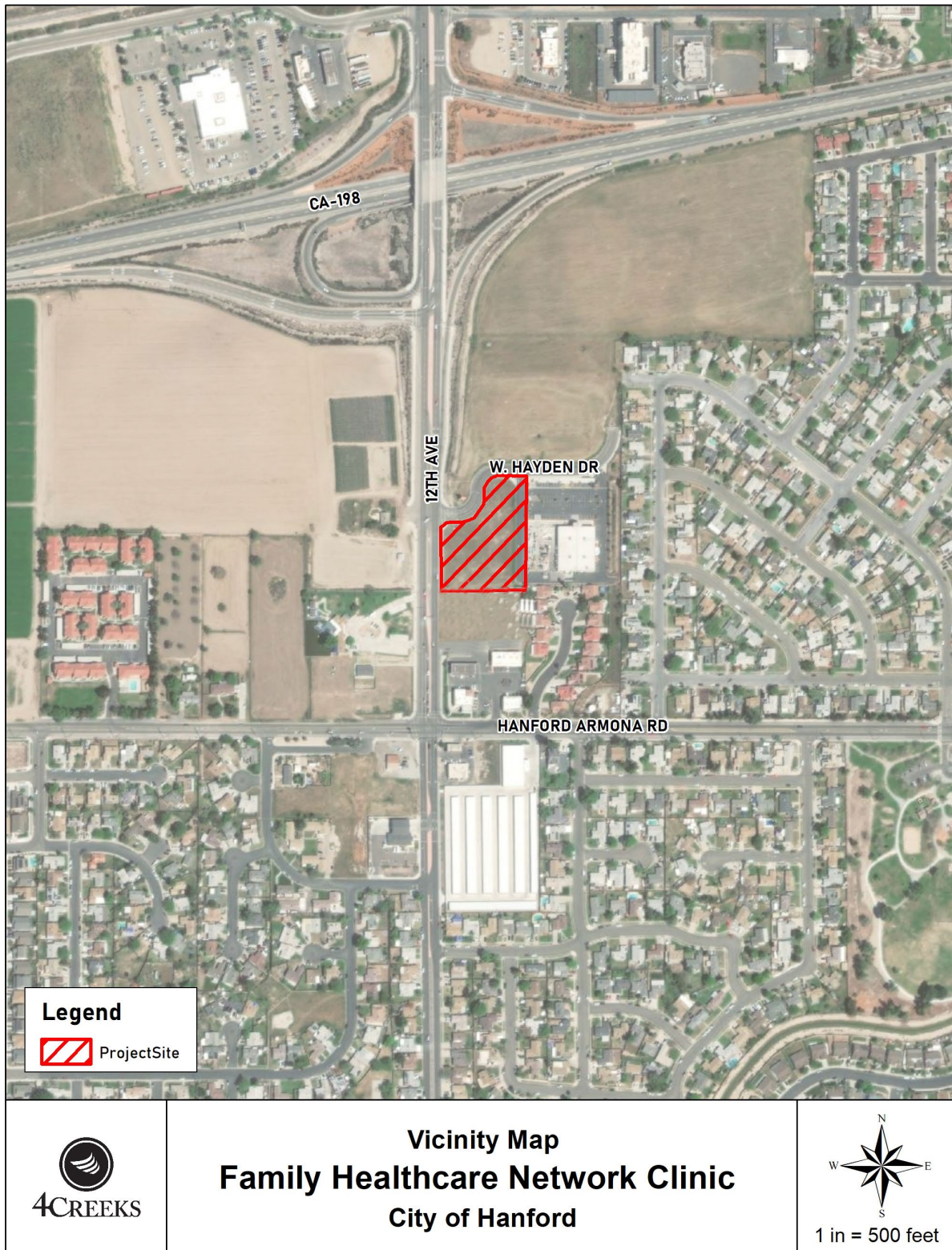


Figure 3-1. Vicinity Map

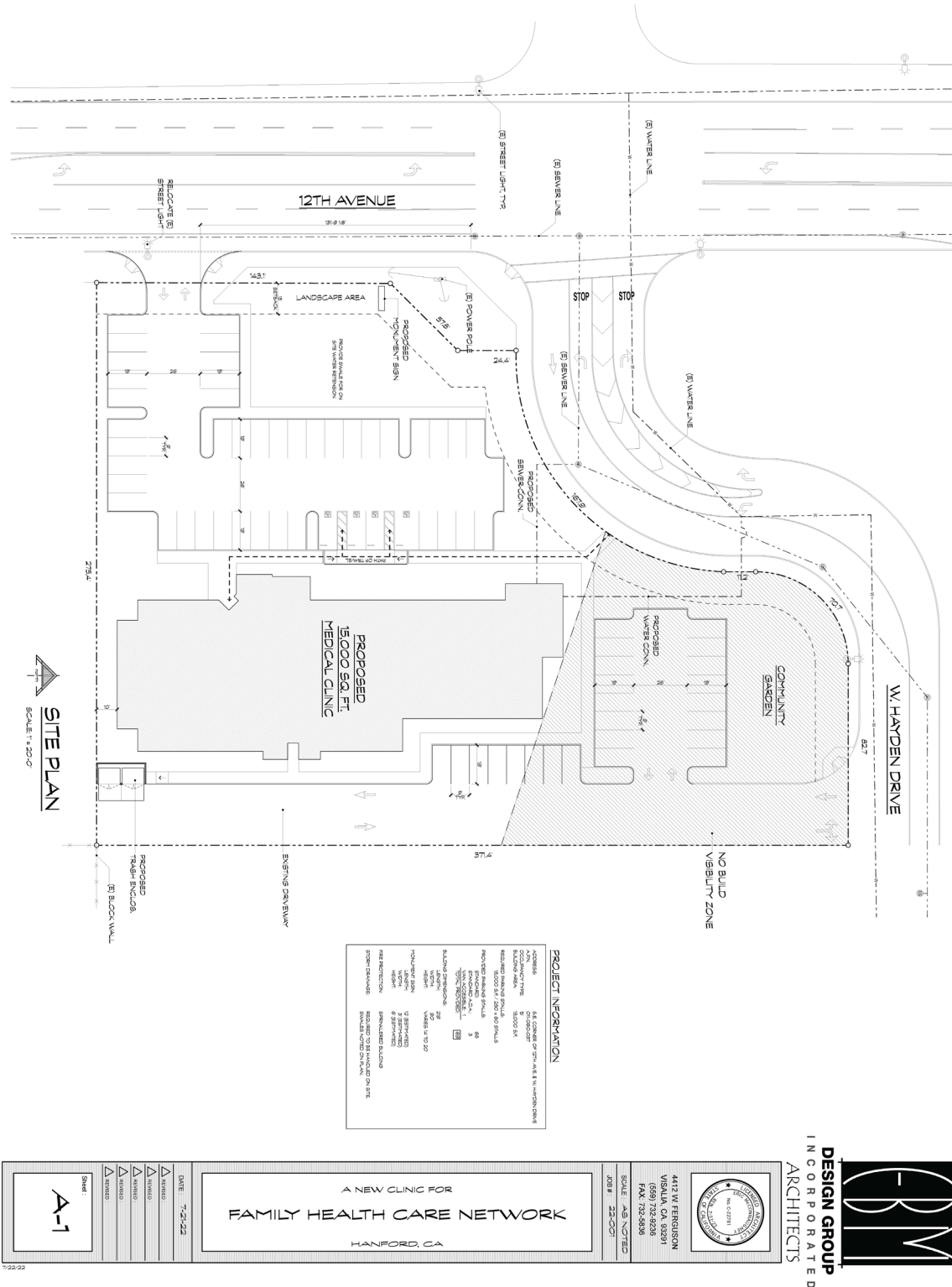


Figure 3-2: Site Plan

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

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

3.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities and Service System |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Geology and soils | <input type="checkbox"/> Population | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency) Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

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.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A Negative Declaration 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 requested.

SIGNATURE

DATE

PRINTED NAME

City of Hanford
AGENCY

3.5 ENVIRONMENTAL ANALYSIS

The following section provides an evaluation of the impact categories and questions contained in the checklist and identify mitigation measures, if applicable.

I. AESTHETICS

Except as provided in Public Resource Code Section 210999, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 a 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Scenic Resources

Scenic resources include landscapes and features that are visually or aesthetically pleasing. They contribute positively to a distinct community or region. These resources produce a visual benefit upon communities. The City of Hanford has a visual character of a mix of rural and built environments. Hanford is surrounded by natural open space agricultural land, characterized by uses such as grazing, open space, and cultivated agriculture. Downtown Hanford, characterized by brick, wood frame, and stucco structures, is the physical, cultural, and economic center. Downtown Hanford has many historical sites throughout the downtown. The large, open vistas create a small town feeling in Hanford. The goal of Hanford's General Plan regarding visual resources is to preserve and re-establish natural and manmade aesthetics to positively contribute to the city's identity.

Scenic Vistas

The Hanford General Plan has not designated any scenic vistas in the planning area.

Existing Visual Character

The following photos demonstrate the aesthetic character of the project area. As shown, the proposed project site area is in a relatively flat area characterized by agricultural uses.



Photo 1: Southwest Site Boundary (View Northeast) Source: Google Maps 2021

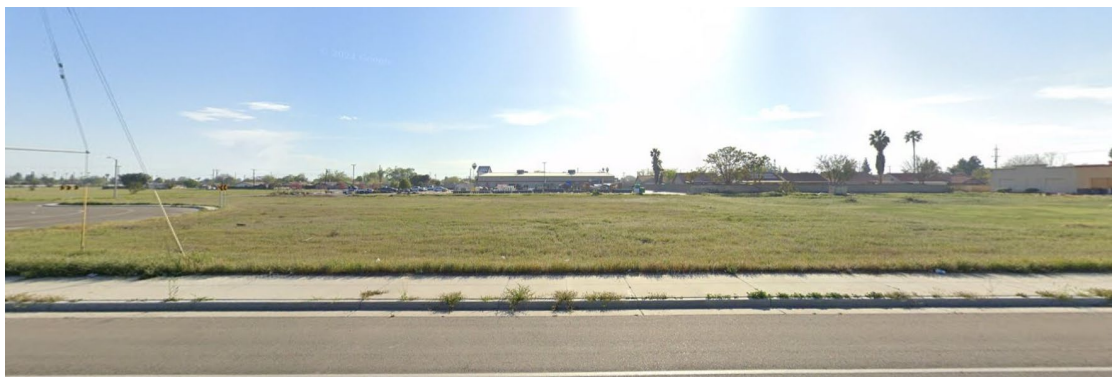


Photo 2: West Site Boundary (View East) Source: Google Maps 2021



Photo 3: East Site Boundary (View West) Source: Google Maps 2021



Photo 4: North Site Boundary (View South) Source: Google Maps 2021

Regulatory Setting

Scenic Roadways

The California Scenic Highway Program was established in 1963 by the State Legislature for the purpose of protecting and enhancing the natural beauty of California highways and adjacent corridors through conservation strategies. The State Scenic Highway System includes a list of highways that have either been officially designated or are eligible for designation. State laws affiliated with governing the scenic highway program can be found in Sections 260-263 in The Street and Highways Code.

State Scenic Highways

According to the California Department of Transportation mapping of State Scenic Highways, the City of Hanford does not have officially designated State Scenic Highways. However, the City has one eligible State Scenic Highway. Highway 198, from Highway 101 to Sequoia National Park, runs through the center of Hanford. Highway 198 is approximately 2.5 miles South of the proposed site.

City of Hanford General Plan

The 2035 General Plan includes the goals and policies related to aesthetic resources that correlate to the proposed project:

- *Policy L47. Purpose of Regional Commercial Land Use Designation:* Establish the Regional Commercial land use designation to provide a variety of commercial goods, entertainment, and services in large format shopping centers for both the Hanford community and the larger region outside of Hanford.
- *Policy L113. Infill Development in Neighborhoods:* Protect the pattern and character of existing neighborhoods by requiring new infill developments to have complimentary building forms and site features.

City of Hanford Zoning Ordinance

The Hanford Zoning Ordinance governs the distribution and intensity of land uses, sets the principles for evaluating development and guides the development and growth of the City. The Zoning Ordinance establishes specific development criteria for each zoning district (i.e. parking requirements, walls, fencing, setbacks, building height, etc.).

Hanford Municipal Code

Hanford Municipal Code (HMC) *Section 17.50.140 – Outdoor Lighting Standards* contains specific, enforceable requirements and/or restrictions for all new development, including the proposed development, intended to prevent light and glare impacts:

D. General Outdoor Lighting Standards. The following requirements and standards shall apply in all zone districts for the installation and use of outdoor lighting fixtures.

1. All lights and light fixtures, except public streetlights, shall be located, aimed, or shielded so as to minimize light trespassing across property boundaries or skyward.
2. No lights or light fixtures shall flash, revolve, blink, or otherwise resemble a traffic control signal or operate in such a fashion to create a hazard for passing traffic.
3. Building mounted lighting fixtures shall be attached only to the walls of the building. The top of a light fixture attached to a building wall shall not be higher than the top of the building parapet or the top of the roof eave, whichever is lower.
4. Canopy ceiling light fixtures shall be recessed, or the sides of the lens area shall be shielded in order to eliminate emission of horizontal light.
5. The height of freestanding light fixtures including freestanding parking lot fixtures shall be measured from the top of a light fixture to the adjacent grade at the base of the support for that light fixture and shall not exceed the following:
 - a. Eighteen (18) feet in height, when located within fifty (50) feet of any residential zone district; and
 - b. Twenty-five (25) feet in height when located within fifty-one (51) to one hundred fifty (150) feet of any residential zone district; and
 - c. Thirty (30) feet in height when located more than one hundred fifty (150) feet from any residential zone district; and
 - d. Fifty (50) feet in height when located in the RC regional commercial zone or freestanding light fixtures for public outdoor recreational facilities.

Discussion

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

Less than Significant Impact: A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. The Hanford General Plan does not identify or designate scenic vistas within the City or Sphere of Influence. In addition, the Project site does not contain any visual features or historic resources as identified in the General Plan. The project would not alter views from the surrounding community. There is *no impact*.

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

No Impact: There are no officially designated State Scenic Highways located in the City of Hanford or nearby the site. The proposed project would not damage any scenic resources within a state scenic highway and there is *no impact*.

- c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from a 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?**

No Impact: The proposed project site is in an urbanized area within the City of Hanford. The materials, signage, fencing, landscaping, and building materials used in the construction of the project will be selected based on their ability to improve the overall visual character of the area. The proposed project will comply with all applicable zoning and other regulations governing scenic quality. There is *no impact*.

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

Less than Significant Impact: The proposed project would result in new lighting sources on the project site consistent with adjacent commercial and residential development. New lighting sources would include interior lighting from commercial uses, street lighting, and security lighting. All street and landscape lighting will be consistent with the City's lighting standards, which are developed to minimize impacts related to excessive light and glare. In addition, the Project would be required to comply with Title 24 lighting requirements which would also reduce and mitigate impacts related to nighttime light. The Title 24 lighting requirements cover outdoor spaces including regulations for mounted luminaires (i.e., high efficacy, motion sensor controlled, time clocks, energy management control systems, etc.) Although the project will introduce new light sources to the area, all lighting will be consistent with adjacent residential land uses and the City's lighting standards. The impacts are *less than significant*.

II. AGRICULTURE AND FOREST RESOURCES:

<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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 the Forest Protocols adopted by the California Air Resources Board. Would the project:</p>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Central California is one of the world's premier growing regions. Agriculture is an important economic resource for Hanford and the surrounding Kings County. 823,918 acres, or 92 percent, of Kings County is agricultural land, producing fruit and nut crops, vegetables, nursery products (trees), apiary products (honey), seed crops (cotton), industrial crops (timber), field crops (alfalfa, barley, corn), and livestock.

The proposed project site is located within the City of Hanford. The proposed project site is not under Williamson Act Contract or a Farmland Security Zone contract. The proposed site is designated as Prime Farmland under the Important Farmland Mapping and Monitoring Program (FMMP). Nearby to the North and West are currently Prime Farmland. To the South and East is built single family homes.

Regulatory Setting

California Land Conservation Act of 1965

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, allows local governments to enter into contracts with private landowners to restrict the activities on specific parcels of land to agricultural or open space uses. The landowners benefit from the contract by receiving greatly reduced property tax assessments. The California Land Conservation Act is overseen by the California Department of Conservation; however local governments are responsible for determining specific allowed uses and enforcing the contract.

Right to Farm Ordinance

Kings County adopted a "Right to Farm Ordinance", to protect the rights of commercial farming operations, while promoting a "good neighbor policy" between these uses. Under this ordinance, property owners and residents are made aware that they may experience inconveniences due to commercial agricultural operations.

California Farmland Mapping and Monitoring Program (FMMP)

The FMMP is implemented by the California Department of Conservation (DOC) to conserve and protect agricultural lands within the State. Land is included in this program based on soil type, annual crop yields, and other factors that influence the quality of farmland. The FMMP mapping categories for the most important statewide farmland are as follows:

- **Prime Farmland** has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years prior to classification and can produce sustained yields. 15% of Kings County is classified as Prime Farmland.
- **Farmland of Statewide Importance** has also been used for irrigated production in the four years prior to classification and is only slightly poorer quality than Prime Farmland. 44% of Kings County is classified as Farmland of Statewide Importance.
- **Unique Farmland** has been cropped in the four years prior to classification and does not meet the criteria for Prime Farmland or Farmland of Statewide Importance but has produced specific crops with high economic value. 2% of Kings County is classified as Unique Farmland.
- **Farmland of Local Importance** encompasses farmland that does not meet the criteria for the previous three categories. These may lack irrigation, produce major crops, be zoned as agricultural, and/or support dairy. 1% of Kings County is classified as Farmland of Local Importance.

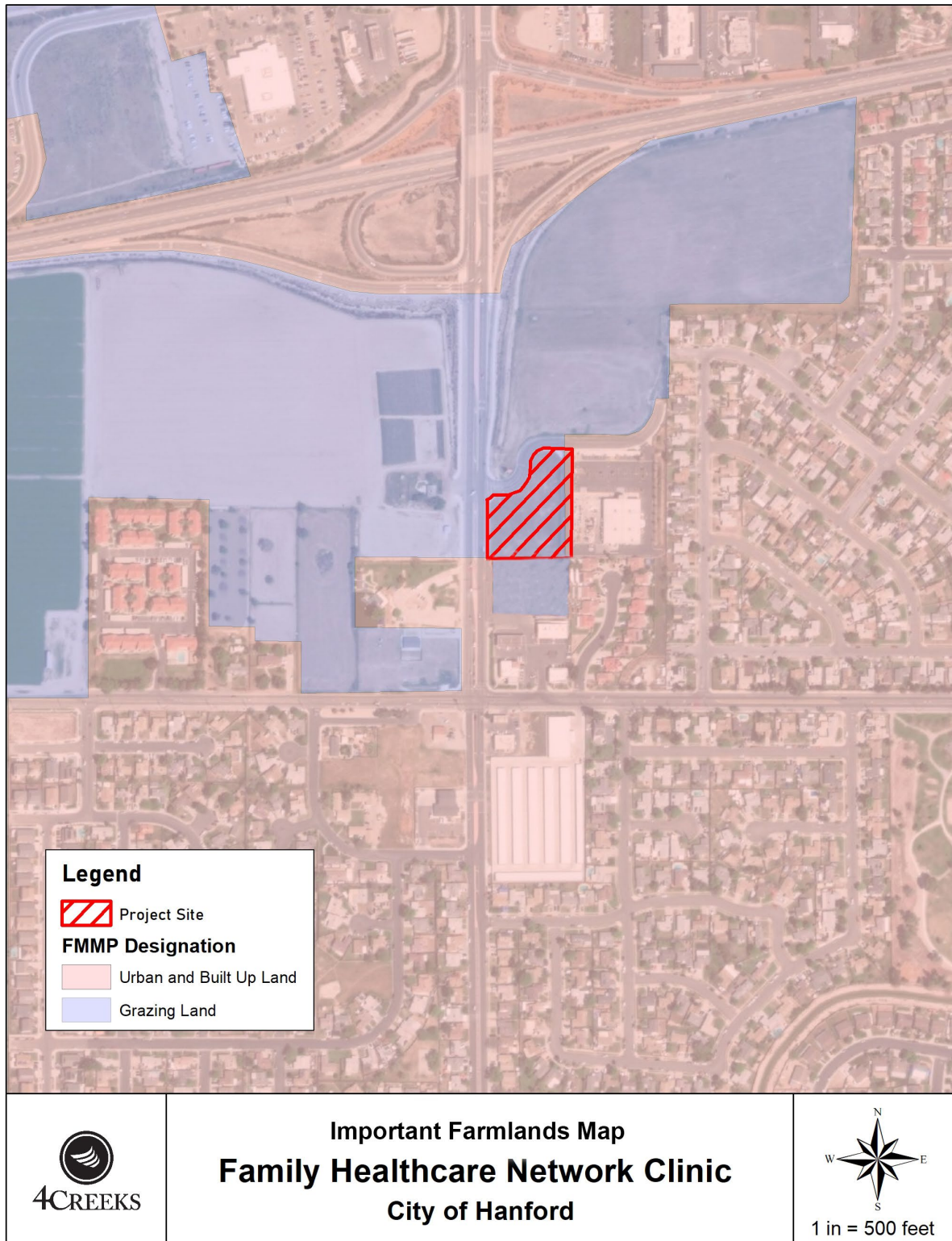


Figure 3-3: Important Farmlands Map

Discussion

- a) **Would the project 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?**

No Impact: The project site is currently vacant and designated as Grazing Land. The project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). Therefore, there is *no impact*.

- b) **Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?**

No Impact: The site is not zoned for agriculture by the City of Hanford. It currently has a General Plan designation of Regional Commercial that would suit the proposed project. The project site is not under a Williamson Act Contract. There is *no impact*.

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

No Impact: The project site is not zoned for forest or timberland production. Therefore, *no impacts* would occur.

- d) **Would the project result in the loss of forestland or conversion of forest land to non-forest use?**

No Impact: No conversion of forestland, as defined under Public Resource Code or General Code, will not occur as a result of the project and there would be *no impacts*.

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

Less Than Significant Impact: The project does not include any features which could result in the conversion of forestland to non-forest use. There is *no impact*.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Air pollution is directly related to regional topography. Topographic features can either stimulate the movement of air or restrict air movement. California is divided into regional air basins based on topographic air drainage features. The proposed project site is within the San Joaquin Valley Air Basin, which is bordered by the Sierra Nevada Mountains to the East, Coastal Ranges to the West, and the Tehachapi Mountains to the South.

The mountain ranges surrounding the San Joaquin Valley Air Basin (SJVAB) serve to restrict air movement and prevent the dispersal of pollution. As a result, the SJVAB is highly susceptible to pollution accumulation over time. As shown in the Table 3-2, the SJVAB is in nonattainment for several pollutant standards. The primary pollutants of concern in the San Joaquin Valley are ozone (O3) and PM10.

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – One hour	No Federal Standard ^f	Nonattainment/Severe
Ozone – Eight hour	Nonattainment/Extreme ^e	Nonattainment
PM 10	Attainment ^c	Nonattainment
PM 2.5	Nonattainment ^d	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment
^a See 40 CFR Part 81 ^b See CCR Title 17 Sections 60200-60210 ^c On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.		

^d The Valley is designated nonattainment for the 1997 PM_{2.5} NAAQS. EPA designated the Valley as nonattainment for the 2006 PM_{2.5} NAAQS on November 13, 2009 (effective December 14, 2009).

^e Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

^f Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

Table 3-2. San Joaquin Valley Attainment Status; Source: SJVAPCD

Valley Fever

Valley Fever is an illness caused by a fungus (*Coccidioides immitis* and *C. posadasii*) that grows in soils under certain conditions. Favorable conditions for the Valley Fever fungus include low rainfall, high summer temperatures, and moderate winter temperatures. In California, the counties with the highest incident of Valley Fever are Fresno, Kern and Kings counties. When soils are disturbed by wind or activities like construction and farming, Valley Fever fungal spores can become airborne. The spores present a potential health hazard when inhaled. Individuals in occupations such as construction, agriculture, and archaeology have a higher risk of exposure due to working in areas of disturbed soils which may have the Valley Fever fungus.

Regulatory Setting

City of Hanford General Plan

The 2035 General Plan includes the policies related to air quality that correlate to the proposed project:

- *Policy AQ 4.1:* Assess and mitigate project air quality impacts using analysis methods and significance thresholds recommended by the San Joaquin Valley Air Pollution Control District.
- *Policy AQ 4.3:* Ensure that air quality and climate change impacts identified during California Environmental Quality Act review are minimized and consistently and fairly mitigated to the greatest extent feasible.
- *Policy AQ 4.6:* Work with the San Joaquin Valley Air Pollution Control District and developers to ensure that funds collected under Rule 9510 – Indirect Source Review mitigation fees are used in Hanford and Kings County whenever possible to maximize local benefits to air quality and the economy.
- *Policy AQ 4.7:* Work with the San Joaquin Valley Air Pollution Control District to ensure implementation of particulate emission controls required by Regulation VIII – Fugitive PM₁₀ for construction and grading activities.
- *Policy AQ 9.1:* Coordinate with the San Joaquin Valley Air Pollution Control District to ensure that construction, grading, excavation and demolition activities within City’s jurisdiction are regulated and controlled to reduce particulate emissions to the maximum extent feasible.
- *Policy AQ 9.2:* Require all access roads, driveways, and parking areas serving new commercial and industrial development are constructed with materials that minimize particulate emissions and are appropriate to the scale and intensity of use.
- *Policy AQ 9.3:* Develop a street cleaning and soil track out cleanup program to reduce PM₁₀ emissions from City maintained roads to the maximum extent feasible.

Federal Clean Air Act

The 1977 Federal Clean Air Act (CAA) authorized the establishment of the National Ambient Air Quality Standards (NAAQS) and set deadlines for their attainment. The Clean Air Act identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and an attainment demonstration, and incorporates more stringent sanctions for failure to meet interim milestones. The U.S. EPA is the federal agency charged with administering the Act and other air quality-related legislation. EPA's principal functions include setting NAAQS; establishing minimum national emission limits for major sources of pollution; and promulgating regulations. Under CAA, the NCCAB is identified as an attainment area for all pollutants.

California Clean Air Act

California Air Resources Board coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, California Air Resources Board monitors existing air quality, establishes California Ambient Air Quality Standards, and limits allowable emissions from vehicular sources. Regulatory authority within established air basins is provided by air pollution control and management districts, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The project is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District.

The state and federal standards for the criteria pollutants are presented in Section 8.4 of The San Joaquin Valley Unified Air Pollution Control District's 2015 "Guidance for Assessing and Mitigating Air Quality Impacts". These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation and other aspects of general welfare. The U.S. EPA revoked the national 1-hour ozone standard on June 15, 2005, and the annual PM₁₀ standard on September 21, 2006, when a new PM_{2.5} 24-hour standard was established.

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet 8 Hour Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.075 ppm (147 µg/m ³)		
Respirable Particulate Matter (PM₁₀)	24 Hour	50 µg/m	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	20 µg/m ³		--		
Fine Particulate Matter (PM_{2.5})	24 Hour		Gravimetric or Beta Attenuation	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	12 µg/m ³		15 µg/m ³		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	--	Non-Dispersive Infrared Photometry (NDIR)

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		--	--	
Nitrogen Dioxide (NO ₂) ⁸	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	--	Gas Phase Annual Chemiluminescence
	Arithmetic Mean	0.030 ppm (57 µg/m ³)		53 ppb (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ⁹	--	
	Annual Arithmetic Mean	--		0.030 ppm (for certain areas) ⁹	--	
Lead ^{10,11}	30 Day Average	1.5 µg/m ³	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m ³ (for certain areas) ¹¹	Same as Primary Standard	
	Rolling 3-Month Average	--		0.15 µg/m ³		
Visibility Reducing Particles ¹²	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standard		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹⁰	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
<p>3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.</p> <p>4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.</p> <p>5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.</p> <p>6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.</p> <p>8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.</p> <p>9. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.</p> <p>10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.</p> <p>12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.</p>						

Table 3-3. Ambient Air Quality Standards; Source: SJVAPCD

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The SJVAPCD is responsible for enforcing air quality standards in the project area. To meet state and federal air quality objectives, the SJVAPCD adopted the following thresholds of significance for projects:

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
CO	100	100	100
Nox	10	10	10
ROG	10	10	10
SOx	27	27	27
PM10	15	15	15
PM2.5	15	15	15

Table 3-4. SJVAPCD Thresholds of Significance for Criteria Pollutants; Source: SJVAPCD

The following SJVAPCD rules and regulations may apply to the proposed project:

- **Rule 3135:** Dust Control Plan Fee. All projects which include construction, demolition, excavation, extraction, and/or other earth moving activities as defined by Regulation VIII (Described below) are required to submit a Dust Control Plan and required fees to mitigate impacts related to dust.

- **Rule 4101:** Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color and/or have the potential to obstruct visibility.
- **Rule 9510:** Indirect Source Review (ISR). This rule reduces the impact PM10 and NOx emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development projects in order to reduce emissions through onsite mitigation, offsite SJVAPCD administered projects, or a combination of the two. This project will submit an Air Impact Assessment (AIA) application in accordance with Rule 9510's requirements.
- **Regulation VIII:** Fugitive PM10 Prohibitions. Regulation VIII is composed of eight rules which together aim to limit PM10 emissions by reducing fugitive dust. These rules contain required management practices to limit PM10 emissions during construction, demolition, excavation, extraction, and/or other earth moving activities.

Discussion

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

Less Than Significant Impact: The proposed project is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and would result in air pollutant emissions that are regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in the City of Hanford into compliance with federal and state air quality standards. The Air District has Particulate Matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plan for the basin.

Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards. The SJVAPCD adopted the Indirect Source Review (ISR) Rule in order to fulfill the District's emission reduction commitments in its PM10 and Ozone (NOx) attainment plans and has since determined that implementation and compliance with ISR would reduce the cumulative PM10 and NOx impacts anticipated in the air quality plans to a less than significant level.

Construction Phase. Project construction would generate pollutant emissions from the following construction activities: demolition, site preparation, grading, building construction, application of architectural coatings, and paving. The construction related emissions from these activities were calculated using CalEEMod. The full CalEEMod Report can be found in Appendix A. As shown in Table 3-5 below, project construction related emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Construction	0.4492	0.1521	0.00082	0.3977	0.0342	0.0227
SJVAPCD Air Quality Thresholds of Significance	100	10	27	10	15	15
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-5. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Construction; Source: SJVAPCD, CalEEMod (v. 2020.4.0) Analysis (Appendix A)

Operational Phase. Implementation of the proposed project would result in long-term emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. Operational emissions from these factors were calculated using CalEEMod. The Full CalEEMod Report can be found in Appendix A. As shown in Table 3-6 below, the project's operational emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Operational Emissions (Dry Years)	1.0373	0.2184	0.0021	0.2234	0.1879	0.0521
SJVAPCD Air Quality Thresholds of Significance	100	10	27	10	15	15
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-6. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Operations; Source: SJVAPCD, CalEEMod (v. 2020.4.0) Analysis (Appendix A)

Because the emissions from both construction and operation of the proposed project would be below the thresholds of significance established by the SJVAPCD, the project would not conflict with or obstruct implementation of an applicable air quality plan and there is *a less than significant impact*.

- b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

Less Than Significant Impact: The SJVAPCD is responsible for bringing air quality in the City of Hanford into compliance with federal and state air quality standards. The significance thresholds and rules developed by the SJVAPCD are designed to prevent projects from violating air quality standards or significantly contributing to existing air quality violations. As discussed above, neither construction-related emissions nor operation-related emissions will exceed thresholds established by the SJVAPCD. The project will comply with all applicable SJVAPCD rules and regulations, which will further reduce the potential for any significant impacts related to air quality as a result of project implementation. Because these thresholds and regulations are designed to achieve and/or maintain federal and state air quality standards, and the project is compliant with these thresholds and regulations, the project will not violate an air quality standard or significantly contribute to an existing air quality violation. The impact is *less than significant*.

- c) Would the project expose sensitive receptors to substantial pollutant concentrations?**

Less than Significant Impact: The single-family residences located to the Southwest and, in the future, to the West of the project site are the closest sensitive receptors. The project does not include any project components identified by the California Air Resources Board that could potentially impact any sensitive receptors. These include heavily traveled roads, distribution centers, fueling stations, and dry-cleaning operations. The project would not expose sensitive receptors to substantial pollutant concentrations. The impact would 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 project will create temporary localized odors during project construction. The proposed project will not introduce a conflicting land use (surrounding land includes residential neighborhoods) to the area and will not have any component that would typically emit odors. The project would not create objectionable odors affecting a substantial number of people. Therefore, impacts would be *less than significant*.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 & Game or U.S. fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion for this section originates from the Biological Resource Review that was prepared for this project by Live Oak Associates, Inc. to identify biological resources present or potentially present on the project site and assess the significance of project impacts on such resources per provisions of the California Environmental Quality Act (CEQA), the Federal Clean Water Act (CWA), the state and federal endangered species acts (FESA and CESA respectively), California Fish and Game Code, and California Water Code. The research included the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), and the California Native Plant Society (CNPS) Online Rare Plant Inventory. The full document can be found in Appendix B.

Environmental Setting

The project site is located in the San Joaquin Valley which has, for decades, experienced intensive agricultural disturbances and more recently intensive urban development. The project site is situated in Kings County within the City of Hanford. Land use surrounding the project site is best described as vacant land to the north, commercial/residential to the east and south, and agriculture/residential to the west. Current agricultural endeavors in the region include row crops, pasture, and dairies.

The project site is near the southwest city limits and beyond this the land use is dominated by agriculture. Like most of California, the San Joaquin Valley has a Mediterranean climate. Native plant and animal species once abundant in the region have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

Regulatory Setting

Federal Endangered Species Act (FESA): defines an *endangered species* as “any species or subspecies that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712): FMBTA prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States, even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs. Although the USFWS and its parent administration, the U.S. Department of the Interior, have traditionally interpreted the FMBTA as prohibiting incidental as well as intentional “take” of birds, a January 2018 legal opinion issued by the Department of the Interior now states that incidental take of migratory birds while engaging in otherwise lawful activities is permissible under the FMBTA. However, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities.

Birds of Prey (CA Fish and Game Code Section 3503.5): Birds of prey are protected in California under provisions of the Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

Clean Water Act: Section 404 of the Clean Water Act of (1972) is to maintain, restore, and enhance the physical, chemical, and biological integrity of the nation’s waters. Under Section 404 of the Clean Water Act, the US Army Corps of Engineers (USACE) regulates discharges of dredged and fill materials into “waters of the United States” (jurisdictional waters). Waters of the US including navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

California Endangered Species Act (CESA): prohibits the take of any state-listed threatened and endangered species. CESA defines *take* as “any action or attempt to hunt, pursue, catch, capture, or kill any listed species.” If the proposed project results in a take of a listed species, a permit pursuant to Section 2080 of CESA is required from the CDFG.

City of Hanford Oak Tree Ordinance: The City of Hanford has an oak tree ordinance that protects valley oak trees with a diameter at breast height (dbh) of 2 inches or greater. Under this ordinance, removal or encroachment within the drip-line of or damage to valley oak trees is prohibited. Removal requires a permit from the city manager and mitigation either by replacement in-kind or payment of an in-lieu fee to be used for oak tree planting.

City of Hanford General Plan: The City of Hanford General Plan contains the following policies related to the preservation of biological resources that may be considered relevant to the proposed Project’s environmental review:

- *Policy O35. Impacts from Development:* Ensure that potential impacts to biological resources and sensitive habitat are carefully evaluated when considering development projects.
- *Policy O37. Mature Trees:* Promote the preservation of existing mature trees and encourage the planting of appropriate shade trees in new developments.
- *Policy O38. Native Tree Species and Drought Tolerant Vegetation:* Encourage the planting of native tree species and drought-tolerant vegetation.

Discussion

- a) **Would the project 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 & Game or U.S. fish and Wildlife Service?**

Less Than Significant Impact: Two special status animals, the loggerhead shrike (*Lanius ludovicianus*) and Swainson’s hawk, have the potential to forage on the site from time to time as transients but do not have suitable breeding habitat on site (see Table 1). Potential foraging habitat on the project site is not uniquely important for these species, and similar or higher quality foraging habitat is relatively abundant in the region. The loggerhead shrike or Swainson’s hawk would not be vulnerable to construction related mortality, as they would simply move away from any construction activity on site. Even if one or more individuals were to occur on the site during construction, their high level of mobility would allow them to easily evade any construction activity. For these reasons, project impacts to the special status species that may occur on the site are considered *less than significant*.

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

No Impact: There are no CNDDDB-designated “natural communities of special concern” recorded within the proposed Project area or surrounding lands. The Hanford General Plan identifies Grasslands, Valley Oak Riparian Woodland, Valley Oak Woodland, Vernal Pools, and Wetlands as

vegetation communities to protect. There are no wetlands or jurisdictional waters on the project site. There would be *no impact*.

- c) **Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director removal, filling, hydrological interruption, or other means?**

No Impact: There are no existing state or federally protected wetlands on the project site. 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: The project site has the potential to be used for nesting by a variety of native avian species protected by the Migratory Bird Treaty Act and related state laws. Birds can nest in the taller grasses and herbs, Russian thistle, burrows, on the ground, or within the existing electrical infrastructure. Raptors and other migratory birds could nest on power poles within and adjacent to the site, as well as trees in the vicinity of the site. If project construction takes place during the nesting season (generally February 1- August 31), birds nesting on the site could be injured or killed by construction activities or disturbed such that they would abandon their nests. Significant construction-related disturbance is also a possibility for birds nesting adjacent to the project site. Project-related injury, mortality, or disturbance of nesting birds that results in nest abandonment are potentially significant adverse environmental effects of the project. To avoid and minimize the potential for construction-related mortality/disturbance of nesting raptors and migratory birds, mitigation measures BIO-1a, BIO-1b, and BIO-1c will be implemented. Therefore, the impact is *potentially significant with mitigation incorporation*.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No Impact: The proposed Project would comply with the goals and policies of the Hanford General Plan. There are few trees on the site, but the project will follow the Hanford Tree Ordinance. There would be *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?**

No Impact: There are no known habitat conservation plans or Natural Community Conservation Plans (NCCP) in the proposed Project area. There would be *no impact*.

Mitigation Measures for Biological Resources:

Mitigation Measure BIO-1: Mitigation Measures for Migratory and Nesting Birds

- **Mitigation Measure BIO-1a:** Construction Timing. If feasible, project construction will occur entirely outside the avian nesting season, typically defined as February 1- August 31.

- **Mitigation Measure BIO-1b:** Preconstruction Surveys. If construction is to occur between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for active bird nests within 10 days prior to the start of construction. The survey area will encompass the site and accessible surrounding lands within 250 feet for nesting migratory birds and 500 feet for raptors (i.e., birds of prey).
- **Mitigation Measure BIO-1c:** Avoidance. Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing and will be maintained until the biologist has determined that the young have fledged and are capable of foraging independently.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The California Office of Historic Preservation (OHP) and California Historical Resources Information System (CHRIS) performed a cultural resources assessment for the Family Healthcare Network Project in the City of Hanford, Kings County, California. The Project proposes to construct a 15,000 sq ft medical clinic on 1.8 acres. The Project is subject to the California Environmental Quality Act (CEQA).

Environmental Setting

The Project area is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley and located between the Kings River and the north shore of Tulare Lake. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts. The Project area is likely within the Telamni and Wukchamni Yokuts territory.

The San Joaquin Valley did not experience contact with Europeans until the late 1700s. The earliest exploration of the San Joaquin Valley by Europeans was likely by the Spaniards when in the fall of 1772 a group known as the Catalanian Volunteers entered the valley through Tejon Pass in search of deserters from the Southern California Missions. However, the group only made it as far north as Buena Vista Lake in modern day Kern County before turning around due to the extensive swamps. Initial settlement within the valley by Europeans in the 1830s was largely either by trappers or horse thieves. With the end of the Mexican American War and the beginning of the gold rush in 1848, the San Joaquin Valley became more populated with ranchers and prospectors. By 1850, California became a state, Kings County was established in 1893, and Hanford was formed in 1891. During the first few decades, Hanford was a supply center for nearby gold rushes, and had an agricultural economy based on livestock.

On October 10, 2022, the Southern San Joaquin Valley Information Center completed a records search for the project area. The results include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP 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.

According to the information on file, there have been two previous cultural resource studies conducted within the project area: KI-00042, 00192. There have been seven cultural resource studies conducted within the one-half mile radius: KI-00028, 00109, 00110, 00111, 00203, 00310, & 00320. It should be noted that the cultural resources studies conducted within the project area are greater than five years in age, with the most current report being greater than 15 years in age. Additionally, there are no recorded resources within the project area, and it is unknown if any exist there. There are two recorded resources in the one-half mile radius: P-16-000122, 000246. These resources consist of a railroad, and historic ditch. There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

Regulatory Setting

Cultural resources within the context of this report are defined as a historical or prehistorical archaeological site, or a historical structure, object, or building. Consistent with 36 CFR 60.3, the term “historical” in this report applies to archaeological features and artifacts, and additionally to buildings, objects, or structures that are at least 50 years old. While exceptions to the 50-year criterion occur, they are relatively rare. The significance or importance of a cultural resource is dependent upon whether the resource qualifies for inclusion at the local or state in the California Register of Historical Places (CRHR). Cultural resources that are determined to be eligible for inclusion in the CRHR are called “historical resources” (CCR 15064.5[a]). Under this statute the determination of eligibility is partially based on the consideration of the criteria of significance as defined in 14 CCR 15064.5(a)(3).

National Historic Preservation Act

The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register

The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. Historical resources may include, but are not limited to, “any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically or archaeologically significant” (PRC §5020.1[j]). In addition, a resource included in a local register of historical resources or identified as significant in a local survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1.

According to CEQA guidelines §15064.5 (a)(3), criteria for listing on the California Register of Historical Resources includes the following:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- Is associated with the lives of persons important in our past.

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

City of Hanford General Plan

The 2035 General Plan includes the policies related to cultural resources that correlate to the proposed project:

- *Policy O46. Archaeological Site Consultation:* Consult with appropriate Native America associations about potential archaeological sites in the beginning stages of the development review process.
- *Policy O47. Archaeological Site Study:* Require archaeological studies by a certified archeologist in areas of archeological potential significance prior to approval of development projects.
- *Policy O48. Cultural Site Consultation:* Consult with the California Archaeological Inventory Southern San Joaquin Valley at California State University, Bakersfield about potential cultural sites on projects that could have an impact on cultural resources.
- *Policy O49. Cultural Site Discovery:* Halt construction at a development site if cultural resources are encountered unexpectedly during construction.

Discussion

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

Less Than Significant Impact with Mitigation: A records search was conducted on behalf of the Applicant from the SSJVIC of the CHRIS at California State University in Bakersfield, California, to determine if historical or archaeological sites had previously been recorded within the study area, if the project area had been systematically surveyed by archaeologists prior to the initial study, and/or whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive.

According to the SSJVIC records search, there has been two previous cultural resource investigations within the Project area. There has been seven cultural resource study conducted withing a 0.5-mile radius of the project. There are no cultural resources recorded within the Project area, and two cultural resources recorded within the 0.5-mile radius. These resources consist of a railroad, and historic ditch. There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

Although no cultural resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that impacts to this checklist item will be *less than significant with mitigation* incorporation.

- b) **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

Less Than Significant Impact with Mitigation: There are no known archaeological resources located within the project area. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that potential impact to unknown archeological resources will be *less than significant with mitigation*.

- c) **Would the project disturb any human remains, including those interred outside of formal cemeteries?**

Less Than Significant Impact with Mitigation: There are no known human remains buried in the project vicinity. If human remains are unearthed during project construction, there is a potential for a significant impact. As such, implementation of Mitigation Measure CUL-2 will ensure that impacts remain *less than significant with mitigation incorporation*.

Mitigation Measures for Impacts to Cultural Resources

Mitigation Measure 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 resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution.

Mitigation Measure CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission. The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

VI. ENERGY

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

Environmental Setting

Southern California Edison (SCE) provides electricity services to the City of Hanford. SCE serves approximately 15 million people in a 50,000 square-mile area of Central, Coastal, and Southern California. SCE supplies electricity to its customers through a variety of renewable and nonrenewable sources. Table 3-7 below shows the proportion of each energy resource sold to California consumers by SCE in 2019 as compared to the statewide average.

Fuel Type		SCE Power Mix	California Power Mix
Coal		0%	2.7%
Large Hydroelectric		7.9%	12.2%
Natural Gas		16.1%	37%
Nuclear		8.2%	9.3%
Other (Oil/Petroleum Coke/Waste Heat)		0.1%	0.2%
Unspecified Sources of Power ¹		32.6%	5.4%
Eligible Renewables	Biomass	0.6%	2.5%
	Geothermal	5.9%	4.9%
	Small Hydro	1%	1.4%
	Solar	16%	13.2%
	Wind	11.5%	11.1%
	Total Eligible Renewable	35.1%	33.1%
1. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.			

Table 3-7. 2019 SCE and 2020 State average power resources; Source: Southern California Edison, California Energy Commission

SCE also offers Green Rate Options, which allow consumers to indirectly purchase up to 100% of their energy from renewable sources. To accomplish this, SCE purchases the renewable energy necessary to meet the needs of Green Rate participants from solar renewable developers.

Southern California Gas (SoCalGas) Company provides natural gas services to the project area. Natural gas is an energy source developed from fossil fuels composed primarily of methane (CH₄). Approximately 45% of the natural gas burned in California is used for electricity generation, while 21% is consumed by the residential sector, 25% is consumed by the industrial sector, and 9% is consumed by the commercial sector.

Regulatory Setting

California Code of Regulations, Title 20

Title 20 of the California Code of Regulations establishes standards and requirements for appliance energy efficiency. The standards apply to a broad range of appliances sold in California.

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations is a broad set of standards designed to address the energy efficiency of new and altered homes and commercial buildings. These standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Title 24 requirements are enforced locally by the City of Selma Building Department.

California Green Building Standards Code (CALGreen)

CalGreen is a mandatory green building code that sets minimum environmental standards for new buildings. It includes standards for volatile organic compound (VOC) emitting materials, water conservation, and construction waste recycling.

SB 100

SB 100, passed in 2018, set a deadline in 2045 for 100% of energy to be renewable. Additionally, by 2035, 60% of all energy must be renewable. California is targeting this goal through solar and other renewable sources.

AB 178

For California to meet its renewable goals, AB 178 was passed in 2018. AB 178 states that starting in 2020 all new low rise residential buildings must be built with solar power.

City of Hanford General Plan

The 2035 General Plan includes the policies related to energy use that correlate to the proposed project:

- *Policy O13. Solar Power Generation:* Support and encourage solar generation facilities that support residential, commercial, and industrial uses.
- *Policy O14. Alternative Fuels and Renewable Energy:* Promote and encourage the use of alternative fuels and renewable energy.
- *Policy O15. Energy-efficient Design Features:* Require that new development incorporate energy-efficient design features for HVAC, lighting systems, and insulation that meet or exceed California Code of Regulations Title 24.

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 proposed project includes the construction and operation of a medical office. During project construction there would be an increase in energy consumption related to worker trips and operation of construction equipment. This increase in energy use would be temporary and limited to the greatest extent possible through compliance with local, state, and federal regulations. Vehicle fuel consumption during project construction was estimated based on the assumed construction schedule, vehicle trip lengths, and the number of workers per construction phase as provided by CalEEMod, and Year 2023 gasoline/diesel MPG factors provided by the EMFAC2017. To simplify the estimation process, it was assumed that all worker vehicles used gasoline as a fuel source and all vendor vehicles used diesel as a fuel source. Table 3-8, below, provides gasoline and diesel fuel used by construction and on-road sources during each phase of project construction.

Construction Phase	# of Days	Daily Worker Trips ¹	Daily Vendor Trips ¹	Daily Hauling Trips ¹	Total Gasoline Fuel Use (gallons) ²	Total Diesel Fuel Use (gallons) ²
Demolition	10	10	0	0	570	0
Site Preparation	1	5	0	0	48	0
Grading	2	8	0	0	138	0
Building Construction	100	16	7	0	5,905	606
Paving	5	18	0	0	267	0
Architectural Coating	5	3	0	0	64	0
Total	123	N/A	N/A	N/A	6,992	606
1. Data provided by CalEEMod (Appendix A) 2. See Appendix D						

Table 3-8. On-Road Mobile Fuel Use Generated by Construction Activities. Source: CalEEMod (v. 2020.4.0); EMFAC2014

While construction of the proposed project will result in additional energy consumption, this energy use is not unnecessary or inefficient. This energy use is justified by the energy-efficient nature of the proposed project and would be limited to the greatest extent possible through compliance with local, state, and federal regulations. Once construction is complete, the project is expected to achieve net zero energy consumption. The proposed project is subject to the California New Residential Zero Net Energy Action Plan 2015-2020. This plan establishes a goal for all residential buildings built after January 1, 2020, to be zero net energy. The California Energy Commission is responsible for the development and enforcement of specific strategies to achieve this goal. These strategies are implemented through Title 24, Part 6 of the California Building Code, which requires developers to include certain measures (including solar panels on all new residential buildings) to achieve required building efficiency standards.

Total Annual Operational VMT ¹	Annual Fuel Use (Gasoline)	Annual Fuel Use (Diesel)	Average MPG
491,388 Miles	18,827 Gallons	2,113 Gallons	23.5
1. Data Provided by CalEEMod 2. See Appendix D			

Table 3-9. On-Road Mobile Fuel Use Generated by Operational Activities. Source CalEEMod (v. 2020.4.0); EMFAC2014

During project operations, the proposed project is not anticipated to result in wasteful fuel consumption. This is due to the distance of the project site to the commercial, recreational, and denser residential uses, resulting in less of a reliance on personal vehicles.

Because construction-related energy use would be temporary and limited to the greatest extent feasible through consistency with Federal, State, and local policies related to energy conservation, and operation of the project will comply with all energy efficiency standards required under Title 24, Section 6, and these standards were specifically developed to achieve net zero energy for residential projects, it can be presumed that the project will achieve net zero energy. The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. The impact is *less than significant*.

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

No Impact: The proposed project will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. The proposed project will comply with all state and local policies related to energy efficiency and there is *no impact*.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct and indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Geologic Stability and Seismic Activity

- **Seismicity**

Neither the City of Hanford nor Kings County have any known major fault systems within their boundaries. There are small faults in the Southern San Joaquin Valley, approximately 30 miles South, though none of them are known to be active. According to the Kings County Multi-Jurisdictional Local Hazard Mitigation Plan, there is no history of earthquakes in the city of Hanford and the peak ground acceleration is low. The greatest potential for seismic activity

in City of Hanford is posed by the San Andreas Fault, approximately 45 miles West of the site, or the White Wolf Fault, located over 100 miles South of the site.

- **Liquefaction**

Liquefaction is a phenomenon whereby unconsolidated and/or near saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil, which can result in landslides and lateral spreading. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction hazards may exist in and around wetland areas and creeks, though soil types in Hanford are generally too coarse or too high in clay content. The Hanford General Plan states that there is minimal liquification potential due to a stable geological formation. Further, the Seismic Safety Map from the 2035 Kings County General Plan states that liquification is rare in the County due to the nature of the underlying soils, relatively deep-water table, and a history of low ground shaking potential.

- **Landslides**

Landslides refer to a wide variety of processes that result in the downward and outward movement of soil, rock, and vegetation under gravitational influence. Landslides are caused by both natural and human-induced changes in slope stability and often accompany other natural hazard events, such as floods, wildfire, or earthquake. Due very little elevation changes throughout the planning area, including the proposed project site, it is considered a low landslide hazard area.

- **Subsidence**

Land Subsidence refers to the vertical sinking of land because of either manmade or natural underground voids. Subsidence has occurred throughout the Central Valley because of groundwater, oil, and gas withdrawal. According to the Kings County Multi-Jurisdictional Hazard Mitigation Plan, land subsidence in the region rarely occurs and its impacts are not significant.

Soils Involved in Project

The proposed project involves construction on two soil types. The properties of the soil are described briefly below:

- **Nord Complex:** The Nord series consists of very deep, well drained soils that formed in mixed alluvium dominantly from granitic and sedimentary rocks. Nord soils occur on alluvial fans and flood plains. Slopes are 0 to 2 percent. They are well drained, have negligible to low runoff, moderate permeability, but have moderately slow permeability in saline-sodic phases. There is available water storage of 11.21 cm.
- **Cajon Sandy Loam:** The Cajon series consists of very deep, somewhat excessively drained soils that formed in sandy alluvium from dominantly granitic rocks. Cajon soils are on alluvial fans, fan aprons, fan skirts, inset fans and river terraces. Slopes are 0 to 15 percent. Somewhat excessively

drained; negligible to low runoff; rapid permeability. Cajon soils with sandy loam surface textures have moderately rapid over rapid permeability. Flooding is none to rare.

- **Kimberlina Fine Sandy Loam:** The Kimberlina series consists of very deep, well drained soils on flood plains and recent alluvial fans. These soils formed in mixed alluvium derived dominantly from igneous and/or sedimentary rock sources. Slope is 0 to 9 percent. Well drained; negligible to medium runoff; moderately rapid and moderate permeability, however saline-sodic phases and soils with sandy clay loam substratums have moderately slow permeability.
- **Wasco Sandy Loam:** The Wasco series consists of very deep, well drained soils on recent alluvial fans and flood plains. These soils formed in mixed alluvium derived mainly from igneous and/or sedimentary rock sources. Slope is 0 to 5 percent slopes. Well drained; negligible or very low runoff; moderately rapid permeability.

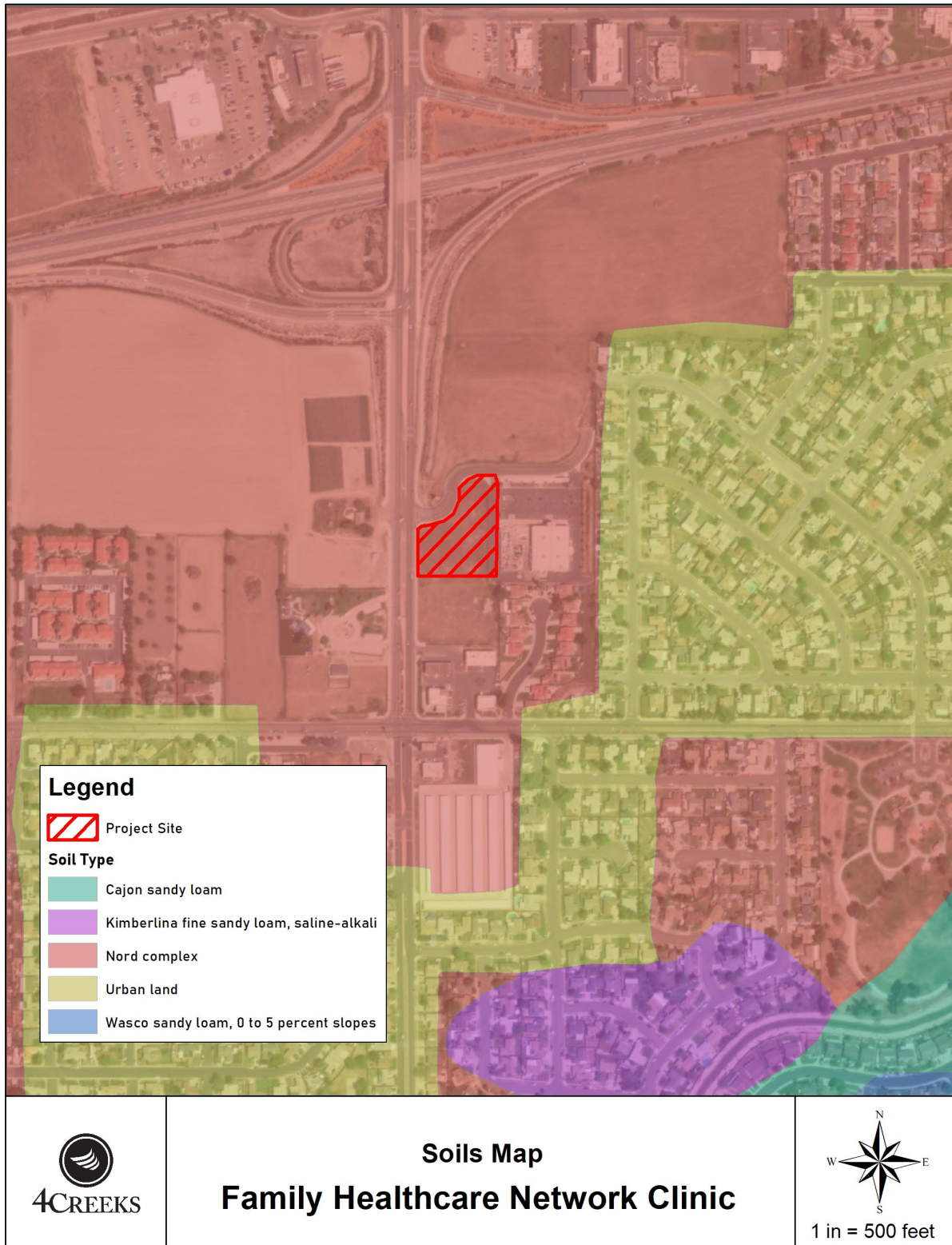


Figure 3-4: Soils Map

Regulatory Setting

California Building Code

The California Building Code (CBC) contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures and certain equipment.

City of Hanford Municipal Code (California Building Code)

The City of Hanford Municipal Code has incorporated and adopted the CBC, 2016 Edition, as promulgated by the California Building Standards Commission, which incorporates the adoption of the 2015 edition of the of the International Building Code, as amended with necessary California amendments and the 2015 International Building Code of the International Code Council.

City of Hanford General Plan

The 2035 General Plan includes the policies related to geology and soils that correlate to the proposed project:

- *Policy H15. Building Codes and Standards for Earthquakes:* Maintain and enforce current buildings codes and standards to reduce the potential for structural failure caused by ground shaking and other geologic hazards.
- *Policy H17. Geologic and Soils Studies:* Require geologic and soils studies to identify potential hazards as part of the approval process for all new development prior to grading activities where questionable conditions exist.

Discussion

a) **Would the project 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: Although the project is located in an area of relatively low seismic activity, the project site has a low chance of being affected by ground shaking from distant faults. The potential for strong seismic ground shaking on the project site is not a significant environmental concern due to the infrequent seismic activity of the area and distance to the faults. The project does not propose any components which could cause substantial adverse effects in the event of an earthquake. Additionally, the project has no potential to cause the rupture of an earthquake fault indirectly or directly. Therefore, there is a *less than significant impact* related to the risk of loss, injury or death involving a rupture of a known earthquake fault.

ii. **Strong seismic ground shaking?**

Less Than Significant Impact: The project site is in an area of low seismic activity. The proposed project does not include any activities or components which could feasibly cause strong seismic ground shaking, either directly or indirectly. There is a *less than significant impact*.

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

Less Than Significant Impact: The risk of liquefaction within the Hanford Planning Area is low because it has a stable geologic formation. The area's low potential for seismic activity would further reduce the likelihood of liquefaction occurrence. Because the project site is within an area of low seismic activity, and there is a stable geologic formation, the impact is *less than significant*.

iv. **Landslides?**

Less Than Significant Impact: The Planning Area of Hanford is considered at low risk of small landslides. Additionally, the project site is generally flat and there are no hill slopes in the area. No geologic landforms exist on or near the site that would result in a landslide event. As a result, there is very low potential for landslides. There would be a *less than significant impact*.

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

Less Than Significant Impact: Because the project site is relatively flat, the potential for erosion is low. However, construction-related activities and increased impermeable surfaces can increase the probability for erosion to occur. Construction-related impacts related to erosion will be temporary and subject to best management practices (BMPs) required by SWPPP, which are developed to prevent significant impacts related to erosion from construction. Because impacts related to erosion would be temporary and limited to construction, and because required best management practices would prevent significant impacts related to erosion, the impact will remain *less than significant*.

c) **Would the project 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?**

No Impact: The soils associated with the project site are considered stable and have a low capacity for landslides, lateral spreading, subsidence, liquefaction, or collapse. Because the project area is stable, and this project would not result in a substantial grade change to the topography to the point that it would increase the risk of landslides, lateral spreading, subsidence, liquefaction or collapse, there is *no impact*.

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

No Impact: The proposed project site is not in an area with expansive soils. Because the soils associated with the project do not exhibit shrink swell behavior, implementation of the project will pose no risk to life or property caused by expansive soils and there is *no impact*.

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

No Impact: The proposed project would not include the use of septic tanks or any other alternative wastewater disposal systems. The proposed buildings will tie into the Hanford's existing sewer services. Therefore, there would be *no impact*.

- f) **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less Than Significant Impact with Mitigation: There are no unique geologic features and no known paleontological resources located within the project area. However, there is always the possibility that paleontological resources may exist below the ground surface. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that any impacts resulting from project implementation remain less than significant with mitigation incorporation.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Natural processes and human activities emit greenhouse gases. The presence of GHGs in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34°C cooler. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The effect of greenhouse gasses on earth's temperature is equivalent to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydro chlorofluorocarbons, and hydro fluorocarbons, per fluorocarbons, sulfur and hexafluoride. Some gases are more effective than others. The Global Warming Potential (GWP) has been calculated for each greenhouse gas to reflect how long it remains in the atmosphere, on average, and how strongly it absorbs energy. Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to global warming. For example, one pound of methane is equivalent to twenty-one pounds of carbon dioxide.

GHGs as defined by AB 32 include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs as defined by AB 32 are summarized in Table 3-10. Each gas's effect on climate change depends on three main factors. The first being the quantity of these gases are in the atmosphere, followed by how long they stay in the atmosphere and finally how strongly they impact global temperatures.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Methane (CH ₄)	Is a flammable gas and is the main component of natural gas	12 years	21	Emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
Carbon dioxide (CO ₂)	An odorless, colorless, natural greenhouse gas.	30-95 years	1	Enters the atmosphere through burning fossil fuels (coal, natural gas and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
Chloro-fluorocarbons	Gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are non-toxic nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	55-140 years	3,800 to 8,100	Were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone.
Hydro-fluorocarbons	A man-made greenhouse gas. It was developed to replace ozone-depleting gases found in a variety of appliances. Composed of a group of greenhouse gases containing carbon, chlorine and at least one hydrogen atom.	14 years	140 to 11,700	Powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases.
Nitrous oxide (N ₂ O)	Commonly known as laughing gas, is a chemical compound with the formula N ₂ O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effects.	120 years	310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Pre-fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	An inorganic, odorless, colorless, and nontoxic nonflammable gas.	3,200 years	23,900	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing and as a tracer gas.

Table 3-10. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

Regarding the quantity of these gases are in the atmosphere, we first must establish the amount of the particular gas in the air, known as Concentration, or abundance, which are measured in parts per million, parts per billion and even parts per trillion. To put these measurements in more relatable terms, one part per million is equivalent to one drop of water diluted into about 13 gallons of water, roughly a full tank of gas in a compact car. Therefore, it can be assumed larger emission of greenhouse gases lead to a higher concentration in the atmosphere.

Each of the designated gases described above can reside in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All these gases remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world regardless of the source of the emission.

Regulatory Setting

AB 32

AB 32 set the 2020 greenhouse gas emissions reduction goal into law. It directed the California Air Resources Board to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. The reduction measures to meet the 2020 target are to be adopted by the start of 2011.

SB 1078, SB 107 and Executive Order S-14-08

SB 1078, SB 107, and Executive Order S-14-08 require California to generate 20% of its electricity from renewable energy by 2017. SB 107 then changes the 2017 deadline to 2010. Executive Order S-14-08 required that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

San Joaquin Valley Air Pollution Control District

SJVAPCD adopted a Climate Change Action Plan (CCAP) in August 2008. While the plan does not have regulatory powers, it directs SJVAPCD to develop guidance to assist District staff, valley businesses, land-use agencies, and other permitting agencies in addressing GHG emissions as part of the CEQA process.

City of Hanford Climate Action Plan (CAP)

Hanford's draft 2013 CAP includes a baseline GHG emissions inventory of municipal and community emissions, identification, and analysis of existing and proposed GHG reduction measures, and reduction targets to help Hanford work toward the State's goal of an 80 percent reduction below baseline emissions by 2050. The plan sets 2020 and 2035 reduction targets, and includes reduction actions for energy, transportation, and waste and resource conservation.

City of Hanford Climate Change Initiatives

In January 2007, Hanford's mayor signed the "Cool Cities" pledge, part of the U.S. Mayors Climate Protection Agreement. By entering into this agreement, the City has adopted the goal of reducing citywide GHG emissions to 7% below 1990 levels by 2012. As detailed in the CAP, this goal was subsequently expanded in response to ARB's recommended reduction target of 15% below the 2005 baseline, and the City added a 2035 mitigation target to correlate with the 2035 General Plan Update and the goal of achieving an 80% reduction by 2050.

Discussion

- a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

Less Than Significant Impact: The SJVAPCD does not provide numeric thresholds to assess the significance of greenhouse gas emissions. Instead, the SJVAPCD "Guidance for Valley Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA" states that projects which achieve a 29% GHG emission reduction compared to Business as Usual (BAU) would be determined to have a less than significant individual and cumulative impact for GHG. "Business as usual" (BAU) conditions are defined based on the year 2005 building energy efficiency, average vehicle emissions, and electricity energy conditions. The BAU conditions assume no improvements in energy efficiency, fuel efficiency, or renewable energy generation beyond that existing today. The 2005 BAU conditions were estimated using CalEEMod.

Implementation of the proposed project would result in long-term greenhouse gas emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. The GHG emissions were estimated using CalEEMod (Appendix A).

	CO2 (MT/Year)	CH4 (MT/Year)	N2O (MT/Year)	CO2e (MT/Year)
Operational Emissions	246	2.0	.02	302
2005 BAU	477	2.1	.05	543
% Reduction From BAU				44%

Table 3-11: Projected Project Operational GHG Emissions Compared to 2005 BAU; Source: (CalEEMod, V.2020.4.0)

The project's operational GHG are estimated to be 241 CO2e MT lower than the 2005 BAU. This is a reduction of 44%, higher than the 29% threshold. Therefore, the impact is considered *less than significant*.

- b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

Less Than Significant Impact: The SJVAPCD states that individual and cumulative GHG emissions are considered less than significant if a project complies with an approved GHG emission reduction plan or GHG mitigation program within the geographic area in which the project is located. The City of Hanford Climate Action Plan meets the requirements for a Qualified Greenhouse Gas Reduction Strategy. Therefore, the proposed project's GHG emissions would not be considered a significant impact if the proposed Project would be consistent with the City's GHG Reduction Strategy. Table 3-12, below, evaluates the proposed project's consistency with the applicable measures, both existing and proposed, in the GHG reduction plan.

Climate Action Plan Policies	Project Consistency with Strategy
Policy TL-2.5: Support land use planning that will promote pedestrian and bicyclist access to and from new development by encouraging land use and subdivision designs that provide safe bicycle and pedestrian circulation, including bicycle parking facilities and internal bicycle and pedestrian routes, where feasible.	Consistent. The proposed project provides enhanced pedestrian access throughout the project site.
Policy T-1.1: Provide tree planting guidelines that address the types of trees appropriate to plant in the region, with emphasis placed on native, drought-tolerant trees.	Consistent. The proposed project incorporates street trees.
Policy TL-2.2: Incorporate multi-modal improvements into pavement resurfacing, restriping, and signalization operations where safety and convenience of users can be improved within the scope of work.	Consistent. The proposed project will improve the streets in and around the project site.
Policy TL-1.4: Through the development review process, evaluate development projects based on consistency with applicable general plan policies, zoning regulations, and design guidelines, including the Kings County Smart Growth Principles and Kings County and San Joaquin Valley Blueprint.	Consistent. The proposed project will comply with all general plan policies and guidelines.

Table 3-12. Project Consistency with Climate Action Plan Strategies.

As discussed above, the proposed project is consistent with the City of Hanford Climate Action Plan. The proposed project will comply with all Federal, State, and Local rules pertaining to the regulation of greenhouse gas emissions and the project will implement Best Performance Standards developed by the SJVAPCD. The project will have a *less than significant impact*.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 or excessive noise to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The proposed project site is located on 12th Avenue, about 250 feet, from the nearest school (Early Head Start Preschool) and approximately 2.4 miles West of the nearest public airport (Hanford Municipal Airport).

The Department of Toxic Substances Control's (DTSC's) Envirostor was used to identify any sites known to be associated with releases of hazardous materials or wastes within the project area. This research confirmed that the project would not be located on or nearby a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Regulatory Setting

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S. Code [U.S.C.] §9601 et seq.). The Comprehensive Environmental Response, Compensation, and Liability Act

(CERCLA, or the Superfund Act) authorizes the President to respond to releases or threatened releases of hazardous substances into the environment.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) sets and enforces Occupational Safety and Health Standards to assure safe working conditions. OSHA provides training, outreach, education, and compliance assistance to promote safe workplaces. The proposed Project would be subject to OSHA requirements during construction, operation, and maintenance.

Toxic Substances Control Act of 1976 (15 U.S.C. §2601 et seq.).

The Toxic Substance Control Act was enacted by Congress in 1976 and authorizes the EPA to regulate any chemical substances determined to cause an unreasonable risk to public health or the environment.

Hazardous Waste Control Law, Title 26.

The Hazardous Waste Control Law creates hazardous waste management program requirements. The law is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which contains requirements for the following aspects of hazardous waste management:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

California Code of Regulations, Title 22, Chapter 11.

Title 22 of the California Code of Regulations contains regulations for the identification and classification of hazardous wastes. The CCR defines a waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, and/or toxicity.

California Emergency Services Act

The California Emergency Services Act created a multi-agency emergency response plan for the state of California. The Act coordinates various agencies, including CalEPA, Caltrans, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

City of Hanford General Plan

The 2035 General Plan includes policies related to hazards and hazardous materials that correlate to the proposed project:

- *Policy H30. Industrial Hazardous Materials:* Require industrial uses that rely extensively on the use of hazardous materials to adopt an acceptable use, storage, disposal, and emergency response program that has been approved by appropriate agencies.

- *Policy H31. Adequate Separation from Sensitive Uses:* Require adequate separation between industrial areas where hazardous materials are present and sensitive uses such as schools, residential areas, parks, and public facilities.
- *Policy H32. Project Review Evaluation:* Evaluate the risks involving the disposal, transport, manufacture, storage, and handling of hazardous material in Hanford in the project review process.
- *Policy H34. Sensitive Receptors:* Avoid siting uses with new sensitive receptors near existing industrial facilities that use or produce hazardous material or may emit toxic air contaminants.

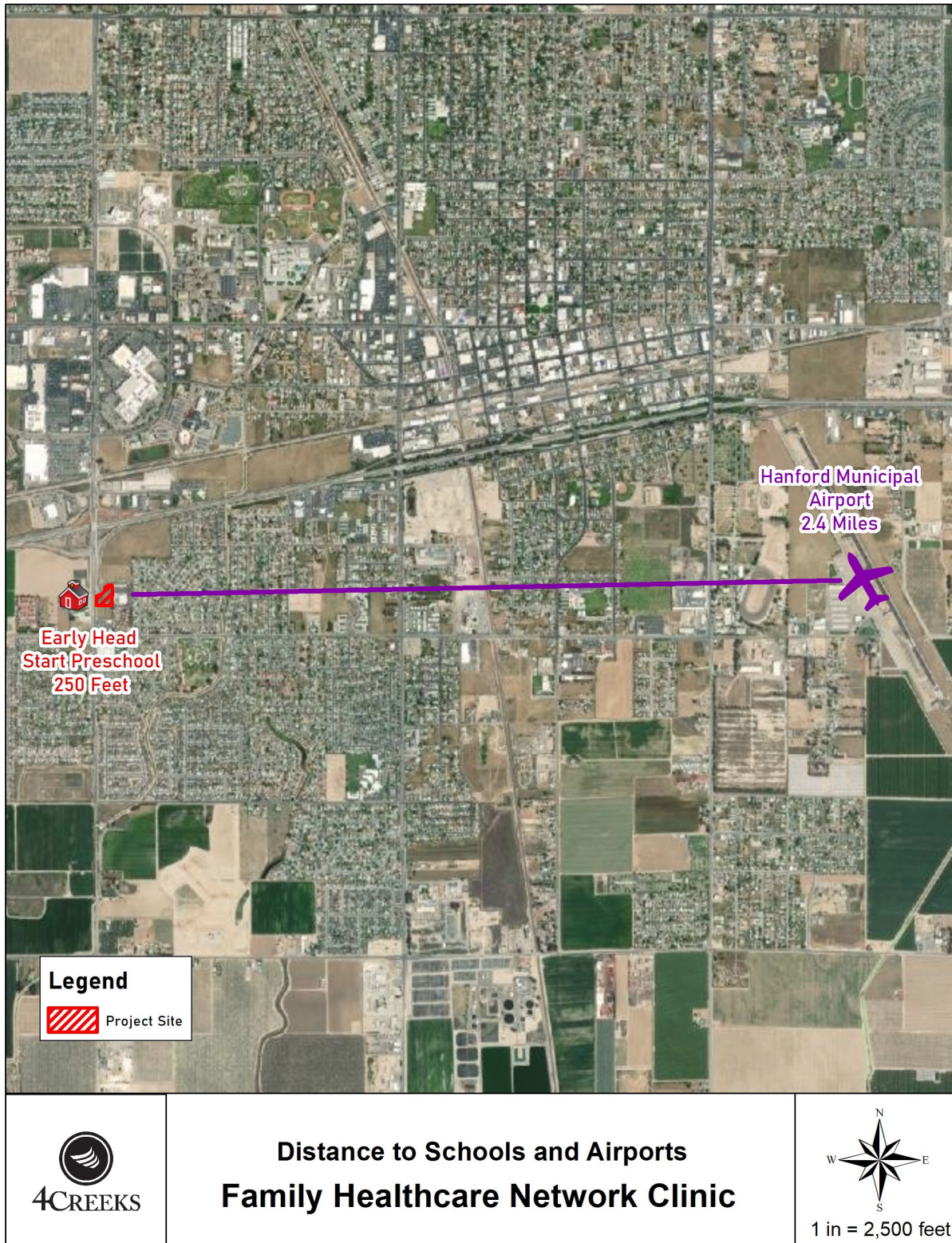


Figure 3-5: Distance to Schools and Airports

Discussion

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

Less than Significant Impact: Project construction activities may involve the use, storage, and transport of hazardous materials. During construction, the contractor will use fuel trucks to refuel onsite equipment and may use paints and solvents to a limited degree. The storage, transport, and use of these materials will comply with Local, State, and Federal regulatory requirements. There is the potential for small leaks due to refueling of construction equipment, however standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for the release of construction related fuels and other hazardous materials by controlling runoff from the site and requiring proper disposal or recycling of hazardous materials. In operation, the Project will consist of residential and commercial uses. The type of hazardous materials that would be associated with the Project are those typical of residential developments: household cleaners, landscape maintenance, soaps, pesticides for pest control, etc. Because of the use, it is not expected that the Project would routinely transport, use, or dispose of hazardous materials other than those typical of residential uses and such materials would not be of the type or quantity that would pose a significant hazard to the public. The impact is *less than significant*.

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

Less than Significant Impact: There is no reasonably foreseeable condition or incident involving the project that could result in release of hazardous materials into the environment, other than any potential accidental releases of standard fuels, solvents, or chemicals encountered during typical construction of a residential subdivision. Should an accidental hazardous release occur or should the project encounter hazardous soils, existing regulations for handling hazardous materials require coordination with the California Department of Toxic Substances Control for an appropriate plan of action, which can include studies or testing to determine the nature and extent of contamination, as well as handling and proper disposal. Therefore, potential impacts are *less than significant*.

- c) **Would the project 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: The project is located across 12th Avenue from an existing preschool. The project does not involve the use or storage of hazardous substances other than small amounts of pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping. The project would not emit hazardous emissions or involve the handling of acutely hazardous materials or waste. Therefore, there would be *a less than significant impact*.

- d) **Would the project 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?**

No Impact: The project site is not listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control. There would be *no impact*.

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

No Impact: The proposed project is located approximately 2.4 miles West of the nearest public airport (Hanford Municipal Airport) and is not located in an airport land use plan. Implementation of the proposed project would not result in a safety hazard for people residing or working in the project area. There is *no impact*.

- f) **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

No Impact: The City's design and environmental review procedures shall ensure compliance with emergency response and evacuation plans. In addition, the site plan will be reviewed by the Fire Department per standard City procedure to ensure consistency with emergency response and evacuation needs. Therefore, the proposed project would have *no impact* on emergency evacuation.

- g) **Would the project expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?**

No Impact: The land surrounding the project site is developed with urban uses and farmlands which are not considered to be wildlands. Additionally, the City of Hanford General Plan finds that fire hazards within the Planning Area, including the proposed project site, have low frequency, limited extent, limited magnitude, and low significance. The proposed project would not expose people or structures to significant risk of loss, injury or death involving wildland fires and there is *no impact*.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise sustainably degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones risk the release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater movement plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting**Surface Water**

Hanford is in the Tulare Lake Hydrologic Study Area (TLHSA). Most surface water in the TLHSA originates from the Sierra Nevada Mountain Range. There are no significant surface water features in Hanford outside of natural and manmade drainage ways and canals. The Kings River is about four miles North of Hanford. No surface water is used in Hanford's Water System.

Groundwater

Hanford is located in the Tulare Lake Hydrologic Region and is within the Tulare Lake Groundwater Subbasin which transmits, filters, and stores water from the main San Joaquin Valley Groundwater Basin. Groundwater is recharged by rain and snowfall in addition to percolation from storm water basins, local waterways, and agricultural irrigation. The City of Hanford also recharges the groundwater table through the disposal of treated disinfected wastewater from its wastewater treatment facility. Each day approximately 5 million gallons of water is processed through the facility

and discharged as irrigation water for specific types of agricultural crops on land owned outside the City. Quality of groundwater within Hanford is acceptable. The City of Hanford's water supply system is a groundwater system. The system consists of 14 groundwater wells, three storage reservoirs, distribution mains, and fire hydrants.

Stormwater Drainage

The existing drainage infrastructure within the City of Hanford's Stormwater Management Program include natural drainage channels, retention basins, natural vegetation, piping, and pump stations. There are some areas where storm drainage is controlled by drainage inlets and underground structures. The system consists of 30 pump stations, 57 miles of pipeline, and 568 acre-feet of drainage basins and drainage ditches. Additionally, the City is planning to add approximately 317 acre-feet of additionally drainage basins. The Project includes a 5.4-acre, on-site basin that can hold up to 51.23 acre-feet of stormwater. The stormwater will percolate and allow for groundwater recharge.

Regulatory Setting

Clean Water Act

The Clean Water Act (CWA) is enforced by the U.S. EPA and was developed in 1972 to regulate discharges of pollutants into the waters of the United States. The Act made it unlawful to discharge any pollutant from a point source into navigable waters unless a National Pollution Discharge Elimination System (NPDES) Permit is obtained.

National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is tasked with responding to, planning for, recovering from, and mitigating against disasters. The Federal Insurance and Mitigation Administration within FEMA is responsible for administering the National Flood Insurance Program (NFIP) and administering programs that aid with mitigating future damages from natural hazards.

California Water Quality Porter-Cologne Act

California's primary statute leading water quality and water pollution concerns with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the nine Regional Water Quality Boards (RWQCB) power to protect water quality and further develop the Clean Water Act within California. The applicable RWQCB for the proposed project is the Central Valley RWQCB.

Central Valley RWQCB

The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB requires a National Pollution Discharge Elimination System (NPDES) Permit and Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a NPDES Permit and SWPPP will be required.

City of Hanford General Plan

The 2035 General Plan includes the policies related to hydrology and water quality that correlate to the proposed project:

- *Policy O25. Recharge Basins:* Protect existing groundwater recharge basins and natural and manmade sloughs and seek the establishment of new basins within and around Hanford.
- *Policy O29. Water Conservation Measures for New Development:* Encourage new development projects to include water conservation measures, including use of graywater, reclaimed, or recycled water for landscaping, water-conserving plumbing fixtures and appliances, and water-efficient landscapes.
- *Policy O30. Storm Water Pollution Prevention:* Implement the NPDES Stormwater Permit and for those properties exempt from the Permit, require a storm water pollution prevention plan, including use of best management practices, to control erosion and sedimentation during construction.
- *Policy P3. Water Supply and Fire Flow Availability:* Condition approval of new development projects and water service extensions on the availability of adequate water supply and the ability to meet domestic and fire flow needs of the area.

Discussion

- a) **Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Less than Significant with Mitigation: The project will result in less than significant impacts to water quality due to potentially polluted runoff generated during construction activities. Construction may include excavation, grading, and other types of earthworks across most of the 1.8-acre project site. During storm events, exposed construction areas across the project site may cause runoff to carry pollutants, such as chemicals, oils, sediment, and debris. Because the Project site is greater than 1 acre in size, implementation of a Stormwater Pollution Prevention Plan (SWPPP) will be required for the project. A SWPPP identifies all potential sources of pollution that could affect stormwater discharges from the project site and identifies best management practices (BMPs) related to stormwater runoff. In addition, runoff resulting from the Project would be managed by the City in compliance with the Storm Drainage Master Plan in addition to approved grading and drainage plans. As such, implementation of Mitigation Measures HYD- 1 and HYD-2 will ensure impacts remain *less than significant with mitigation*.

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

Less than Significant Impact: Water services will be provided by the City of Hanford upon development. The City's Water System has a supply capacity of about 34.5 million gallons per day (mgd). The supply is from groundwater, pumped by 14 active wells and delivers it to customers

through more than 217 miles of pipeline. Construction of three additional wells is underway. To support the full buildout of General Plan, the City has a Capital Improvement Plan to improve 70 miles of pipeline and add 11 new wells, five new storage reservoirs, and three new booster stations. The District delivers water to residential, commercial, industrial, and governmental customers. Non-residential water uses account for 23 percent of total demand, while distribution system losses or unmetered uses account for 17 percent.

The project would result in nearly full development of the site, which would convert approximately 1.8 acres from pervious surfaces to impervious surfaces. However, this would not significantly interfere with groundwater recharge because all stormwaters would be collected and diverted to a new stormwater basin located on the West area of the project site for groundwater recharge. Because the addition of impervious surfaces would not interfere substantially with groundwater recharge and the project would not utilize groundwater resources beyond what has been previously analyzed in the City of Hanford General Plan or the Urban Water Management Plan, the impact would be *less than significant*.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river 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 with Mitigation: The proposed project would result in the addition of impervious surfaces and alter existing drainage patterns on the 1.8-acre project site which would have the potential to result in erosion or siltation on- or off-site. The disturbance of soils during construction could cause erosion, resulting in temporary construction impacts. However, this impact would be appropriately mitigated through implementation of a Stormwater Pollution Prevention Plan (SWPPP) which include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction (Mitigation Measure HYD-1). The Project proponent will also be required to prepare drainage plans (Mitigation Measure HYD-2) and a Development Maintenance Manual (Mitigation Measure HYD-3) to ensure that existing drainage patterns are maintained during project operations and that the project would not result in substantial erosion or siltation on- or off-site. The impact is *less than significant with implementation of these mitigation measures*.

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

Less than Significant with Mitigation: The proposed project would result in the addition of impervious surfaces on the 1.8-acre project site which would have the potential to increase surface runoff resulting in flooding on or off-site. This impact would be appropriately mitigated through implementation of Mitigation Measure HYD-2, which requires the project to submit drainage plans to

the City Engineer prior to the issuance of grading permits. The drainage plans will include BMPs to ensure runoff from the project will not result in flooding on- or off-site. Therefore, impacts are *less than significant with mitigation*.

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 with Mitigation: The proposed project would result in the addition of impervious surfaces and alter existing drainage patterns on the 1.8-acre project site which would have the potential to impact existing stormwater drainage systems or provide additional sources of polluted runoff. The proposed project would contain a storm drainage basin to collect all runoff from the site. The disturbance of soils during construction could cause erosion, resulting in temporary construction impacts. However, this impact would be appropriately mitigated through implementation of a Stormwater Pollution Prevention Plan (SWPPP) which include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction (Mitigation Measure HYD-1). During project operations, the proposed impervious surfaces, including roads, building pads, and parking areas, would collect automobile derived pollutants such as oils, greases, rubber, and heavy metals. This could contribute to point source and non-point source pollution if these pollutants were transported into waterways during storm events. The Project proponent will be required to prepare drainage plans (Mitigation Measure HYD-2) and a Development Maintenance Manual (Mitigation Measure HYD-3) to ensure that the project would not overwhelm the planned stormwater drainage basin or result in discharges of polluted runoff into local waterways. The impact is *less than significant with implementation of these mitigation measures*.

iv. Impede or redirect flood flows?

Less than Significant with Mitigation: The Project site is generally flat and no significant grading or leveling will be required. The proposed project site is not in proximity to a stream or river and will not alter the course of a stream or river. According to National Flood Hazard mapping by the Federal Emergency Management Agency, the proposed project is in the X flood zone, which has a 0.2 percent chance of flooding per year. The proposed project would result in the addition of impervious surfaces on the 1.8-acre project site which could affect drainage and flood patterns. This impact would be appropriately mitigated through implementation of Mitigation Measure HYD-2, which requires the project to submit drainage plans to the City Engineer prior to the issuance of grading permits. The drainage plans will include BMPs to ensure the project would not impede or redirect flood flows. Therefore, impacts are *less than significant with mitigation*.

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

No Impact: The proposed project is located inland and not near an ocean or large body of water, therefore, would not be affected by a tsunami. The proposed project is in a relatively flat area and

would not be impacted by inundation related to mudflow. Since the project is in an area that is not susceptible to inundation, the project would not risk release of pollutants due to project inundation. As such, there is *no impact*.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact: The project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The proposed project is consistent with the Central Valley RWQCB. The project will comply with all applicable rules and regulations regarding water quality and groundwater management and there is *no impact*.

Mitigation Measures for Hydrology and Water Quality

Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit.

- Prior to issuance of grading permits for Phase 1 the Applicant shall submit a copy of the NOI to the City.
- The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the site during construction for compliance.

Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to:

- Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust;
- A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures;
- Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used;
- Soil stockpiles and graded slopes will be covered after two weeks of inactivity and 24 hours prior to and during extreme weather conditions; and,
- BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc.

Mitigation Measure HYD-3: A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP devices be inspected, cleaned, and

maintained in accordance with the manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following:

- Runoff shall be directed away from trash and loading dock areas;
- Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes;
- Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and,
- Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system.

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The proposed project site is in the Southwest corner of the City of Hanford. The site is approximately 2 miles Southwest of the Hanford downtown. The site is zoned C-R by the City of Hanford and designated as Regional Commercial by the City of Hanford 2035 General Plan. The Project does not need any zoning changes or General Plan Amendments.

The site is currently vacant with no uses. The site is topographically flat and is bounded by agricultural uses to the North, commercial uses and a vacant lot to the South, commercial uses and single-family homes to the East, and a preschool and agricultural uses to the West.

Regulatory Setting

Hanford General Plan

The 2035 General Plan includes the policies related to land use that correlate to the proposed project:

- *Policy L49. Design of Regional Commercial Land Use Designation:* Require that new development projects and major site reconfigurations in the Regional Commercial land use designation lay out buildings and parking as a single, integrated shopping center with shared driveway access and parking, with walkways connecting buildings to each other and the street to promote pedestrian accessibility.
- *Policy L50. Location and Size of Regional Commercial Land Use Designation:* Locate Regional Commercial land use designations along arterial streets near access to Highways 198 or 43. Offices and high-density residential development are typically located adjacent to the Regional Commercial land use designation. Require new development projects to be a minimum 10 acres in size.

Discussion

a) Would the project physically divide an established community?

No Impact: The proposed project will not physically divide an established community. The proposed project site is designated for Regional Commercial by the Hanford General Plan and the project is

consistent with this land use designation. The project would continue to operate as the same designation following project implementation. There is *no impact*.

b) Would the project 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 project site is located on land designated for commercial use. The proposed project does not conflict with this land use, or any other policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There is *no impact*.

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 lands use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The California Geological Survey (CGS) classifies and designates areas within California that contain or potentially contain significant mineral resources. Lands are classified into Aggregate and Mineral Resource Zones (MRZs), which identify known or inferred significant mineral resources. According to the California Department of Conservation, CGS's Surface Mining and Reclamation Act (SMARA) Mineral Lands Classification (MLC) data portal, the city of Hanford is not within a mineral resource study area. In addition, according to the General Plan, the city of Hanford is not within a Division of Oil, Gas, and Geothermal Resources recognized oil field. Rather, the General Plan identifies sand and gravel for road and building construction as the only likely mineral resources in the area. Lastly, according to the Kings County General Plan, there are no oil fields or areas designated for mineral recovery in the city of Hanford.

Regulatory Setting

California State Surface Mining and Reclamation Act

The California State Surface Mining and Reclamation Act was adopted in 1975 to regulate surface mining to prevent adverse environmental impacts and to preserve the state's mineral resources. The Act is enforced by the California Department of Conservation's Division of Mine Reclamation.

Discussion

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

No Impact: The project site has no known mineral resources that would be of a value to the region and the residents of the state, therefore the proposed project would not result in the loss of impede the mining of regionally or locally important mineral resources. There is *no impact*.

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

No Impact: There are no known mineral resources of importance to the region and the project site is not designated under the City's or County's General Plan as an important mineral resource recovery site. For that reason, the proposed project would not result in the loss of availability of known regionally or locally important mineral resources. There is *no impact*.

XIII. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground-borne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Noise is often described as unwanted sound. Sound is the variation in air pressure that the human ear can detect. If the pressure variations occur at least 20 times per second, they can be detected by the human ear. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Ambient noise is the “background” noise of an environment. Ambient noise levels on the proposed project site are primarily due to agricultural activities and traffic. Construction activities usually result in an increase in sound above ambient noise levels.

Vibration is seismic waves that radiate along the surface of the earth and downward into the earth. Operation of heavy construction equipment, particularly pile driving and other impacts devices such as pavement breakers create this vibration.

Sensitive Receptors

Noise level allowances for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hotels/motels, hospitals, schools, and libraries are some of the most sensitive land uses to noise intrusion and therefore have more stringent noise level allowances than most commercial or agricultural uses that are not subject to impacts such as sleep disturbance. The nearest sensitive receptor is the Early Head Start Preschool that is to the Southwest of the site.

Regulatory Setting

County of Kings General Plan

The County of Kings General Plan Noise Element provides noise level criteria for land use compatibility for both transportation and non-transportation noise sources. The Noise Element of the 2035 Kings County General Plan contains the non-transportation noise standards for the unincorporated areas of the county in Table 3-13. The standards are shown in Leq and Lmax. Leq is continuous dB, and Lmax is maximum allowed dB. For commercial buildings, the exterior noise during the daytime is to be below 75 Lmax, and the indoor noise during the daytime is to be below 65 Lmax.

Table N-8 Non-Transportation Noise Standards Average (Leq) / Maximum (Lmax)¹				
Receiving Land Use	Outdoor Area ²		Interior ³	Notes
	Daytime	Nighttime	Day & Night	
All Residential	55 / 75	50 / 70	35 / 55	
Transient Lodging	55 / 75	---	35 / 55	4
Hospitals & Nursing Homes	55 / 75	---	35 / 55	5, 6
Theaters & Auditoriums	---	---	30 / 50	6
Churches, Meeting Halls, Schools, Libraries, etc.	55 / 75	---	35 / 60	6
Office Buildings	60 / 75	---	45 / 65	6
Commercial Buildings	55 / 75	---	45 / 65	6
Playgrounds, Parks, etc.	65 / 75	---	---	6
Industry	60 / 80	---	50 / 70	6
Notes: 1. The Table N-8 standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards of Table N-8, then the noise level standards shall be increased at 5 dB increments to encompass the ambient. 2. Sensitive areas are defined acoustic terminology section. 3. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions. 4. Outdoor activity areas of transient lodging facilities are not commonly used during nighttime hours. 5. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients. 6. The outdoor activity areas of these uses (if any), are not typically utilized during nighttime hours.				

Table 3-13: County of Kings Non-Transportation Noise Standards. Source: County of Kings 2035 General Plan

County of Kings General Plan: The County of Kings General Plan addresses noise and vibration within the Noise and Safety Element. The following noise related policies are applicable to the proposed project:

- N A1.1.1 Policy: Appropriate noise mitigation measures shall be included in a proposed project design when the proposed new use(s) will be affected by traffic or railroad noise sources and exceed the County's "Noise Standards for New Uses Affected by Transportation Noise Sources" (Table N-7). Mitigation measures shall reduce projected noise levels to a state of compliance with this standard.

- N B1.1.1 Policy: Appropriate noise mitigation measures shall be included in a proposed project design when the proposed new use(s) will be affected by or include non-transportation noise sources and exceed the County's "Non-Transportation Noise Standards" (Table N-8). Mitigation measures shall reduce projected noise levels to a state of compliance with this standard within sensitive areas. These standards are applied at the sensitive areas of the receiving use.
- N C1.1.2 Policy: Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, emphasis shall be placed on the use of setbacks and site design, prior to consideration of the use of noise barriers.
- N B1.1.3 Policy: Noise associated with construction activities shall be considered temporary but will still be required to adhere to applicable County Noise Element standards.

Discussion

- a) **Would the project result in 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?**

Less than Significant Impact: Implementation of the Project has the potential to result in short-term construction noise impacts to surrounding land uses due to construction activities. Construction noise represents a short-term impact on ambient noise levels. Although most of the types of exterior construction activities associated with the Project will not generate continually high noise levels, occasional single-event disturbances from grading and construction activities are possible. Table 3-14 depicts typical construction equipment noise. Construction equipment noise is controlled by the EPA's Noise Control Program pursuant to Part 204 of Title 40, Code of Federal Regulations Noise Emission Standards for Construction Equipment 36).

During the construction phase of the Project, noise from construction activities will add to the ambient noise environment in the immediate area. Activities involved in construction would generate maximum noise levels, as indicated in Table 3-14, ranging from 73 to 85 dB at a distance of 50-feet. Construction activity for the new medical building would commence in mid-2024. Construction is anticipated to be completed within six-months.

Construction activities are expected to occur during normal daytime working hours in compliance with the Kings County General Plan Noise Element. Based on information provided in Table 3-14 and the noise attenuation formula from the California Department of Transportation's (Caltrans) Technical Noise Supplement to the Traffic Noise Analysis Protocol. Considering the maximum sound level of 75 dBA Lmax from the Kings County Non-Transportation Noise Standard, construction of the Project is not anticipated to impact neighboring residential areas. Therefore, noise resulting from short-term, transient construction activity will not result in significant adverse impacts to the nearby sensitive preschool and residences. Construction activities associated with the Project will be subject to N Policy B1.1.3 of Kings County's General Plan Noise Element. Therefore, the impact is *less than significant*.

Type of Equipment	Exterior Lmax at 50 feet (dBA)	Calculated Lmax at 230 feet (dBA)	
		Exterior	Interior
Tractors	84	71	46
Loaders	80	67	42
Backhoes	80	67	42
Excavators	85	72	47
Generator Sets	82	69	44
Air Compressors	80	67	42
Rubber Tired Dozers	85	72	47
Forklifts	75	62	37
Welders	73	60	35
Graders	85	72	47
Scrapers	85	72	47
Cranes	85	72	47
Paving Equipment	85	72	47
Rollers	85	72	47

Table 3-14. Noise levels of noise-generating construction equipment at various distances. Source: Federal Highway Administration Construction Noise Handbook (dBA at 50 feet). Noise levels beyond 50 feet were estimated using the inverse square law based on given values for dBA at 50 feet.

b) Would the project result in generation of excessive ground-borne vibration or groundborne noise levels?

Less than Significant Impact: Although project operations would not include uses or activities that typically generate excessive groundborne vibration or groundborne noise levels, project construction could introduce temporary groundborne vibration to the project site and the surrounding area. Sources that may produce perceptible vibrations are provided in Table 3-15.

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level (LV) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill (slurry wall)	0.008 in soil	66
	0.017 in rock	75
Vibratory Roller	0.210	94

Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Table 3-15. Vibration Levels Generated by Construction Equipment. Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018.

The primary source of vibration during project construction would likely be from a bulldozer (tractor), which would generate 0.089 inch per second PPV at 25 feet with an approximate vibration level of 87 VdB. Vibration from the bulldozer would be intermittent and not a source of continual vibration. There are no adopted City standards or thresholds of significance for vibration. The evaluation of potential impacts related to construction vibration levels is based on the published data in the 2018 FTA Guidelines. At 25 feet, the buildings most susceptible to vibration could be impacted at .12 inch/second. Because vibrations generated by project construction would not exceed 0.12 inch/second, the impact is *less than significant*.

- 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 public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

No Impact: The proposed project is not located within an airport land use plan, within the vicinity of a private airstrip, or within two miles of a public airport. There is *no impact*.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The United States Census Bureau stated the population in the City of Hanford to be 57,990 as of April 2020. This is an increase from the 2010 census, which counted the population in the City of Hanford to be 53,967. This is an increase from the 2010 population of 4,023. Factors that influence population growth in Hanford include job availability, housing availability, and the capacity of proposed and existing infrastructure.

Regulatory Setting

The City of Hanford population size is controlled by the development code and Housing Element of the Kings County General Plan. These documents regulate the number of dwelling units per acre allowed on various land uses and establish minimum and maximum lot sizes, which has a direct impact on the City's population size.

Discussion

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

No Impact: The Project will not have a significant change in the surrounding area as it will develop a vacant property with a use that is generally compatible with the existing land uses within the area. While the Project would generate employment, it would not be at a level that could induce population growth. For these reasons, the Project would not contribute to unplanned population growth directly or indirectly and no impact would occur because of the Project. There is *no impact*.

- b) **Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No Impact: There project would not displace any existing housing as the site is vacant and undeveloped. There are no existing homes on the site. There is *No Impact*.

XV. PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable serve ratios, response times of other performance objectives for any of the public services:				
a. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting**Fire**

Hanford and project site is served by The Hanford Fire Department (HFD), which operates 3 fire stations within the City of Hanford. The HFD will continue to provide fire protection services to the proposed project site following project implementation. The nearest fire station to the site is approximately 900 ft to the Southwest.

Police

Law enforcement services are provided to the project site via The Hanford Police Department (HPD). The HPD will continue to provide police protection services to the proposed project site following project implementation. The HPD headquarters are located approximately 1.7 miles Northeast of the proposed project site.

Schools

The proposed project site is located near Roosevelt Elementary School District and Hanford Joint Union High School District (HJUHS). The HJUHS has three high schools, with the project site zoned for Sierra Pacific High School. Hanford also contains four private schools. The proposed project site is located across 12th Avenue, about 250 feet, from the nearest school (Early Head Start Preschool).

Regulatory Setting**California Fire Code**

The California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The provisions of the Fire Code apply to the construction, alteration,

movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

City of Hanford General Plan

The 2035 General Plan includes the policies related to public services that correlate to the proposed project:

- *Policy P37. Impact Fees for Police Facilities:* Require new development to provide funding to meet the cost of providing vehicles, equipment, and structures, to meet the needs of new population growth.
- *Policy P47. Lighting for Safety:* Facilitate public safety through the placement and design of outdoor lighting, while respecting the privacy of surrounding properties.
- *Policy P48. CPTED Principles for Safety:* Create building and neighborhood design standards that are consistent with Crime Prevention through Environmental Design (CPTED) principles.
- *Policy P52. Impact Fees for Fire Facilities:* Require developers to contribute impact fees to fund the cost of providing fire facilities needed to support new population growth and development.
- *Policy P59. Fire and Building Codes:* Continue to enforce the California Fire Code, California Building Code, and Hanford Municipal Code to mitigate threats to safety and property.
- *Policy P79. Impact Fees for General Government Facilities:* Require developers to contribute impact fees to fund the cost of providing expanded general government facilities needed to support new population growth and development.

Discussion

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

a. Fire protection?

Less than Significant Impact with Mitigation Incorporation: The HFD will provide fire protection services to the proposed development. The nearest fire station to the site is approximately 900 ft to the Southwest. The Project's proximity to existing stations would support adequate service ratios, response times, and other objectives for fire protection services. There would not be a need for additional facilities for the proposed project. HFD requires the installation of Knox Box, address numbers, fire extinguishers, and compliance with California Fire and Building Code requirements. However, to further reduce potential Project impacts, the Project shall be subject to Fire Protection Department Impact Fees pursuant to MM PUB-1. With mitigation incorporated,

the Project's impacts would be reduced to less than significant. Therefore, the impact is *less than significant with mitigation incorporation*.

MM PUB-1. The Developer shall pay the Fire Protection Department Impact Fees.

b. Police protection?

Less than Significant Impact with Mitigation Incorporation: The HPD will provide services to the proposed development. The HPD headquarters are located approximately 1.7 miles Northeast of the proposed project site. The addition of a commercial office in a designated, growing commercial area would not cause the Department to significantly expand its existing service area or construct any new facilities. However, to further reduce potential Project impacts, the Project shall be subject to Police Protection Development Impact Fees pursuant to MM PUB-2. With mitigation incorporated, the Project's impacts would be reduced to less than significant. Therefore, the impact is *less than significant with mitigation incorporation*.

MM PUB-2. The Developer shall pay the Police Protection Development Impact Fees

c. Schools?

Less than Significant Impact: The proposed project is within the Roosevelt Elementary School District and Hanford Joint Union High School District (HJUHSD). The project proposes a commercial use and would not result in an increase of the population in the area. The proposed project would not impact the schools in the area. Therefore, the impact is *less than significant*.

d. Parks?

Less than Significant Impact: The project is proposing a commercial use which would not result in a net increase of the area population. Since there would be no increase in population, there would be no increased demand for parks in the area. The project would not result in any physical impacts and therefore, there is *no impact*.

e. Other public facilities?

Less than Significant Impact: As discussed previously, the proposed project would not result in an increase in the residential population of the area and would not require other public facilities such as libraries or post offices. The project would not result in the need of new services or facilities, there would be *no impact*.

XVI. PARKS AND RECREATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

There are 26 park facilities totaling 299.70 acres within the City of Hanford. The City of Hanford provides different types of parks and open space facilities, or park types, to meet park and open space recreation needs of the community. Park types include:

- **Mini-Park or Pocket Parks:** A Mini-Park is typically under two acres in size and intended to serve the needs of a specific neighborhood within a quarter-mile radius. The recommended size is 0.25 acres per 1,000 population. Pocket parks are usually fully landscaped with trees and turf. More urban-style parks include hardscape. Besides residential neighborhoods, they can also be found in downtown areas to serve the needs of shoppers or employees as places to rest or eat. There are currently 9 mini-parks in Hanford.
- **Neighborhood Parks:** This type of park is primarily for children and families. The Neighborhood Park is usually 5 to 7.5 acres in size. A neighborhood park serves a half-mile radius, and the recommended size is 1.00 acre per 1,000 population. There are currently 3 neighborhood parks in Hanford.
- **Community Parks:** A Community Park is intended to serve the needs of the entire city especially those living within about a 2-mile radius of the park. Being larger in size, it provides outdoor and indoor facilities that accommodate a much wider range of recreational interests than a Neighborhood Park. Facilities usually include fields and courts for various adult sports. A community park's recommended size is 5.0 acres per 1,000 population. There are currently 5 community parks in Hanford.
- **Regional Parks:** A regional park is a large open space facility designed for active and passive uses. It can be a large natural open space area, or an improved area with fields and courts that usually include lighting. A regional park serves the entire community and often draw people from outside the community, especially for special events.
- **Special Use Parks:** Special use parks provide a specific type of recreational activity and are meant to serve the entire community. The BMX Track, Harris Street Ball Park and The Plunge/Skate Park

site are examples that provide special programmed park spaces. There are currently 5 special use parks in Hanford.

- **Dual-Purpose Storm Basin Parks:** Some neighborhood, community, and regional parks, include storm water detention basins to use the land more efficiently. This allows the site to be used to control urban flooding, recharge groundwater systems, and provide recreational use. Careful design can allow the storm basin to be used for recreation when not filled with water.
- **Indoor Recreation Facilities:** Indoor recreation facilities allow for public gathering places for a variety of social and recreational activities. Larger facilities serve the entire community while smaller facilities may serve a large neighborhood or a certain portion of the community. The Civic Center Auditorium, Coe Hall, Longfield Center, St. Brigid's Teen Center, and the Veterans-Senior Center, are examples of indoor recreational facilities. There are currently 5 indoor recreation facilities in Hanford.
- **School Parks:** All school sites have limited public access since their primary purpose is to support the educational mission of the school districts that control their use. There are 16 school sites within the Hanford. These facilities are sometimes accessible to the public during school hours in some cases.

The Hanford General Plan states a goal of 3.5 acres of city parkland per 1,000 residents. According to the 2020 Parks and Recreation Master Plan, the City currently offers 299.70 acres of park land which equates to a total Level of Service (LOS) of 5.06 acres of park land per 1,000 residents based on the City's 2018 population. The Project may also be subject to requirements of the Quimby Act, including park land dedication and/or payment of fees in-lieu thereof (or a combination of both).

Regulatory Setting

Quimby Act

The 1975 Quimby Act (California Government Code section 66477) authorized cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. The Act states that the dedication requirement of parkland can be a minimum of three acres per thousand residents or more and up to five acres per thousand residents if the existing ratio is greater than the minimum standard. Revenues generated through in-lieu fees collected and the Quimby Act cannot be used for the operation and maintenance of park facilities. In 1982, the Act was substantially amended. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be closely tied (nexus) to a project's impacts as identified through studies required by the California Environmental Quality Act (CEQA).

Discussion

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

No Impact: The proposed project proposes a commercial use and would not result in an increase of the Hanford population. There would be no increased demand for regional or neighborhood parks or other recreational facilities. There is *no impact*.

- 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?**

No Impact: The proposed project will not require the construction or expansion of any recreational facilities that would have an adverse physical effect on the environment. There is *no impact*.

XVII. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with the CEQA guidelines Section 15064.3, Subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting**Vehicular Access**

Site access will be via one right-in/right-out driveway on 12th Avenue and one driveway connecting to Hayden Drive. There will be a relocated street light on 12th avenue to allow access into the driveway.

Parking

The project site will contain 69 parking spaces, including 65 standard spaces and four ADA spaces. During construction, workers will utilize temporary construction staging areas for parking of vehicles and equipment.

Regulatory Setting**CEQA Guidelines Section 15064.3, Subdivision (b): Criteria for Analyzing Transportation Impacts**

- (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.
- (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.
- (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the

availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

- (4) **Methodology.** 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 vehicle miles traveled and any revisions 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.

City of Hanford Standard Specifications

The City of Hanford Standard Plans are developed and enforced by the City of Hanford Public Works Department to guide the development and maintenance of streets within the City. The cross-section drawings contained in the City's Standard Plans dictate the development of roads within the City.

City of Hanford General Plan:

The 2035 General Plan includes the policies related to transportation that correlate to the proposed project:

- *T-P-5:* Take advantage of opportunities to consolidate driveways, access points, and curb cuts along existing arterials when a change in development or a change in intensity occurs or when traffic operation or safety warrants.
- *T-P-23:* Require that all new developments provide right-of-way, which may be dedicated or purchased, and improvements (including necessary grading, installation of curbs, gutters, sidewalks, parkway/landscape strips, bike and parking lanes) other city street design standards. Design standards will be updated following General Plan adoption
- *T-P-24:* Require that proposed developments make necessary off-site improvements if the location and traffic generation of a proposed development will result in congestion on major streets or failure to meet LOS D during peak periods or if it creates safety hazards.
- *T-P-26:* Require that future commercial developments or modifications to existing developments be designed with limited points of automobile ingress and egress, including shared access, onto major streets.

Discussion

- a) **Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?**

Less than Significant Impact: The project consists of a 1.8-acre project and would include on-site circulation-related infrastructure improvements, including interior sidewalks. All improvements, including those related to transit, roadway, bicycle, and pedestrian facilities are subject to City review and approval to ensure compliance with all plans, ordinances, and policies related to circulation.

A Traffic Study was completed by Peters Engineering on December 16, 2022 to determine the impact of the proposed project on traffic in the surrounding area (Appendix F). The study locations were determined in consultation with City of Hanford staff. The study included analysis of the intersections of 12th Avenue and Hayden Drive during weekday a.m. and p.m. peak hours between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m. The traffic analyses for the near-term and long-term conditions consider the effects of traffic expected to be generated by pending and approved projects in the study area. The City of Hanford provided that a proposed Hampton Inn (102 rooms) at the northeast of the intersection of 12th Avenue and Hayden Drive be considered in the analysis. Additionally, the connection of Hayden Drive to Bengston Drive was considered.

The results of the intersection operational analyses indicate that the intersection of 12th Avenue and Hayden Drive is currently operating at acceptable levels of service. With development of the Project alone the intersection would continue to operate at an acceptable Level of Service (LOS) similar to the existing conditions. In the near-term condition considering development of a hotel on the north side of Hayden Drive, the LOS for the left-turn from the westbound approach would drop to E during the a.m. peak hour. With LOS A representing the best operating conditions from the traveler's perspective and LOS F representing the worst. This LOS is expected to be experienced by very few vehicles and peak-hour traffic signal warrants are not expected to be satisfied.

In the year 2043 condition, the LOS for the left-turn from the westbound approach would drop to F during the a.m. peak hour, and the LOS on the eastbound approach will also be F. When required, the center median on 12th Avenue shall be connected thru the intersection with Hayden and a raised center median with a SB left turn worm would be constructed.

Standard traffic engineering principles and methods were employed to establish the existing conditions, to estimate the number of trips expected to be generated by the Project, and to analyze the traffic conditions that may occur in the future. The conclusion of the traffic study states that the Project alone will not cause traffic issues requiring improvements. Traffic signals are not expected to be warranted in the near-term condition. The project will not install a traffic signal due to proximity to SH ramps. When LOS requires, a raised center median with a SB left turn from 12th onto Hayden will be constructed. Based on these conclusions, the proposed project will not conflict with the City's circulation plan and standards. The impact would be *less than significant*.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?

Less than Significant Impact: The State of California Governor's Office of Planning and Research document entitled Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018 (OPR Guidelines) provides guidance for determining a project's transportation impacts based on vehicle miles traveled (VMT). Based on the Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (TGM), the Project is considered Land Use 630(clinic) and will produce an average daily rate of 37.60 for trip generation. Additionally, the KCAG mapping tool reflects a VMT per employee of 9.31 for the TAZ in which the Project will be located, which is more than fifteen percent (15%) below the County VMT per employee average of 17.7. It can be concluded that, based upon KCAG's VMT mapping tool, the Project's VMT impact will be less than significant because VMT associated with the Project will be below the fifteen percent-below-existing-development threshold. It can also be

concluded that, based upon the Project trip generation estimates, the Project's VMT impact will be less than significant because the Project will generate an average of fewer than 110 trips per day. Therefore, the impact is *less than significant*.

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

Less Than Significant Impact: The project does not propose any incompatible uses or include any design features that could increase traffic hazards. The project does include one new vehicle access point on 12th Avenue. According to the traffic study completed by Peters Engineering on December 16, 2022, the proposed project alone will not cause any traffic issues with the addition of a new access point. Any improvements will be subject to review by the City's engineer to ensure the new access point does not pose any safety risks due to project design. The proposed project would not substantially increase hazards in or around the project area, there is a *less than significant impact*.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact This project would not result in inadequate emergency access. Emergency access to the site would be via 12th Avenue and W. Hayden Drive. Both entrances will provide full access to the proposed medical building. At time of build out when LOS reaches LOS E, the center median in 12th Avenue will be constructed to block left turns off of Hayden. There will be a worm constructed in the median in 12th Avenue that will allow SB left turn movements onto Hayden. The Project would have a *less than significant impact* on emergency access.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Project area is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley. The Yokuts are a sub-group of the Penutian language that covers much of coastal and central California and Oregon. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts. The Project area is likely within the Telamni and Wukchamni Yokuts territory. Primary Yokuts villages were typically located along lakeshores and major stream courses, with scattered secondary or temporary camps and settlements located near gathering areas in the foothills. Prior to Euro-American contact, the Yokuts were one of the densest populations of Native Americans in western North America due to the substantial natural resources surrounding Tulare Lake. According to the Native American Heritage Commission, six Native American tribal groups are currently associated with the Project area, including the Tubatulabals of Kern Valley, Wukasache Indian Tribe/Eshom Valley Band, the Kern Valley Indian Community, the Santa Rosa Rancheria Tachi Yokut Tribe, and the Tule River Indian Tribe.

Cultural Resources Record Search

A records search was conducted on behalf of the Applicant from the SSJVIC of the CHRIS at California State University in Bakersfield, California, to determine if historical or archaeological sites had previously been recorded within the study area, if the project area had been systematically surveyed

by archaeologists prior to the initial study, and/or whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. According to the SSJVIC records search, there has been two previous cultural resource investigations within the Project area. There has been seven cultural resource studies conducted withing a 0.5-mile radius of the project. There have been no cultural resources were previously recorded within the Project area and two recorded resources within the 0.5-mile radius. Additionally, no recorded cultural resources are recorded within the Project area or 0.5-mile radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

Native American Consultation

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)).

Additional 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.

The site is currently vacant. If any artifacts are inadvertently discovered during ground-disturbing activities, existing federal, State, and local laws, and regulations as well as the mitigation measures will require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified cultural resource professional.

Regulatory Setting

Historical Resources

Historical resources are defined by CEQA as resources that are listed in or eligible for the California Register of Historical Resources, resources that are listed in a local historical resource register, or resources that are otherwise determined to be historical under California Public Resources Code Section 21084.1 or California Code of Regulations Section 15064.5. Under these definitions Historical Resources can include archaeological resources, Tribal cultural resources, and Paleontological Resources.

Archaeological Resources

As stated above, archaeological resources may be considered historical resources. If they do not meet the qualifications under the California Public Resources Code 21084.1 or California Code of Regulations Section 15064.5, they are instead determined to be "unique" as defined by the CEQA Statute Section 21083.2. A unique archaeological resource is an artifact, object, or site that: (1)

contains information (for which there is a demonstrable public interest) needed to answer important scientific research questions; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

Tribal Cultural Resource (TCR)

Tribal Cultural Resources can include site features, places, cultural landscapes, sacred places, or objects, which are of cultural value to a Tribe. It is either listed on or eligible for the CA Historic Register or a local historic register or determined by the lead agency to be treated as TCR.

Paleontological Resources

For the purposes of this section, “paleontological resources” refers to the fossilized plant and animal remains of prehistoric species. Paleontological Resources are a limited scientific and educational resource and are valued for the information they yield about the history of the earth and its ecology. Fossilized remains, such as bones, teeth, shells, and leaves, are found in geologic deposits (i.e., rock formations). Paleontological resources generally include the geologic formations and localities in which the fossils are collected.

Native American Reserve (NAR)

This designation recognizes tribal trust and reservation lands managed by a Native American Tribe under the United States Department of the Interior’s Bureau of Indian Affairs over which the County has no land use jurisdiction. The County encourages adoption of tribal management plans for these areas that consider compatibility and impacts upon adjacent area facilities and plans.

National Historic Preservation Act

The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register

The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, experimental, or other value. For a resource to be designated as a historical landmark, it must meet the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- Is associated with the lives of persons important in our past.
- 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.
- Has yielded, or may be likely to yield, information important in prehistory or history.

City of Hanford General Plan

The 2035 General Plan includes the policies related to tribal resources that correlate to the proposed project:

OSC-P-42: Establish requirements to avoid potential impacts to sites suspected of being archeologically, paleontologically, or historically significant or of concern, by:

- Requiring a records review for development proposed in areas that are considered archaeologically or paleontologically sensitive;
- Determining the potential effects of development and construction on archaeological or paleontological resources (as required by CEQA);
- Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historical and archaeological sensitivity (defined as areas identified according to the National Historic Preservation Act as part of the Section 106 process); and
- Implementing appropriate measures to avoid the identified impacts, as conditions of project approval.

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: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. Based on the results of the records search, no previously recorded tribal cultural resources are located within the project site. Although no cultural resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures TCR-1 and TCR-2 will ensure that impacts to this checklist item will be *less than significant with mitigation* incorporation.

- 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 with Mitigation: The lead agency has not determined there to be any known tribal cultural resources located within the project area. Additionally, there are not believed to be any paleontological resources or human remains buried within the project area's vicinity. However, if resources were found to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American Tribe. Implementation of Mitigation Measures TCR-1 and TCR-2 will ensure that any impacts resulting from project implementation remain *less than significant with mitigation* incorporation.

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure TCR-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 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.

Mitigation Measure TCR-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting**Wastewater**

The City of Hanford wastewater system provides for treatment, disposal, and reuse of effluent, which meets all of the state's discharge requirements for the city. The wastewater system consists of a treatment plant and 21 sanitary sewer lift stations located throughout the city. The treatment facility has a capacity of 8 million gallons per day and is located south of Houston Avenue and East of 11th Avenue. The City's wastewater system also pursues water conservation strategies to ensure long-term reuse of treated disinfected wastewater to reduce the need for groundwater.

Solid Waste

Solid waste in the city is collected by a private contractor, Kings Waste Recycling Authority (KWRA). Refuse is sorted at the KWRA facility to recover recyclable materials before being hauled to the landfills in Kettleman Hills. For single-family residential customers, the City has instituted a green waste collection mixed recycle collection program.

Water

The City of Hanford's water supply system is a groundwater system. The city is located within the Tulare Lake Hydrologic Region and is within the Tulare Lake Groundwater Subbasin which transmits, filters, and stores water from the main San Joaquin Valley Groundwater Basin. The system consists of 14 groundwater wells, three storage reservoirs, distribution mains, and fire hydrants. The system does not use surface water. Groundwater is recharged by rain and snowfall in addition to percolation from storm water basins, local waterways, and agricultural irrigation.

Regulatory Setting

CalRecycle

California Code of Regulations, Title 14, Natural Resources – Division 7 contains all current CalRecycle regulations regarding nonhazardous waste management in the state. These regulations include standards for the handling of solid waste, standards for the handling of compostable materials, design standards for disposal facilities, and disposal standards for specific types of waste.

Central Valley RWQCB

The Central Valley RWQCB requires a Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a SWPPP to manage stormwater generated during project construction will be required.

The Central Valley RWQCB regulates Wastewater Discharges to Land by establishing thresholds for discharged pollutants and implementing monitoring programs to evaluate program compliance. This program regulates approximately 1500 dischargers in the region.

The Central Valley RWQCB is also responsible for implementing the federal program, the National Pollutant Discharge Elimination System (NPDES). The NPDES Program is the federal permitting program that regulates discharges of pollutants to surface waters of the U.S. Under this program, a NPDES permit is required to discharge pollutants into Waters of the U.S. There are 350 permitted facilities within the Central Valley Region.

Cal Water Urban Water Management Plan (UWMP) – Hanford District

The UWMP describes the Hanford District service area, system demand and usage, available water resources, reliability of the water supply, and contingency planning for water shortage. It also contains a conservation section in compliance with SB X7-7 describing water usage reduction targets and implementation measures. The UWMP identifies five core programs for water conservation in the District that involve promotion of high-efficiency fixtures in residential settings, promotion of high-efficiency irrigation systems, and public information and education.

City of Hanford General Plan

The 2035 General Plan includes the objectives and policies related to utilities and service systems that correlate to the proposed project:

- *Policy P3. Water Supply and Fire Flow Availability:* Condition approval of new development projects and water service extensions on the availability of adequate water supply and the ability to meet domestic and fire flow needs of the area.

- *Policy P7. New Water Infrastructure:* Require developers to fund and install new water distribution facilities to service their new developments.
- *Policy P11. Adequate Sanitary Sewer Improvements Availability:* Condition approval of development projects on the provision of adequate sanitary sewer improvements.
- *Policy P13. New Wastewater Infrastructure:* Require developers to fund and install new wastewater collection facilities to service their new developments.
- *Policy P17. Adequate Storm Water Drainage Improvements:* Availability Condition approval of development projects on the provision of adequate storm water drainage improvements.
- *Policy P21. New Storm Water Drainage Infrastructure:* Require developers to fund and install new storm water drainage facilities to service their new developments.
- *Policy P24. New Development Run-Off Volumes:* Require new development to discharge storm water runoff at volumes no greater than the capacity of any portion of the existing downstream system by utilizing detention or retention or other approved methods unless the project is providing drainage infrastructure in accordance with an adopted drainage plan.
- *Policy P25. Reduction in Storm Water Runoff:* Adopt development standards to reduce peak-hour storm water flow and increase groundwater recharge.

Discussion

- a) **Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relation of which could cause significant environmental effects?**

Less than Significant Impact: The proposed project is within city limits and will be required to connect to water, stormwater, solid waste, and wastewater services. The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation which could cause significant environmental effects. Therefore, there is *a less than significant impact*.

- b) **Would the project 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: Water services will be provided by Cal Water. The City's water supply source is comprised of 14 operational groundwater wells. The current system has a capacity to pump 39,093 acre-feet per year (AFY), all from groundwater. To meet future demands of a full buildout, the City plans to add 11 new wells to add an additional 26,659 AFY, totaling 65,752 AFY by 2050. This will be able to supply a growing population, as projected demand in Hanford is expected to 14,561 AF in 2025, 16,354 AF in 2030, 18,034 AF in 2035, 20,051 AF in 2040, and 24,643 AF in 2050.

Potable water demands for the Project were estimated using land-use-based unit water demand factors last updated for the City in 2018. The Project site has an existing General Plan land use designation of Regional Commercial. According to the land-use based unit water demand factors for the City of Hanford, the Regional Commercial land use has an average daily demand of 1,070 gallons

per day (gpd) per net acre. Since the proposed project is consistent with the future land use designation, there will be sufficient water supply available. Therefore, the impact is *less than significant*.

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

Less than Significant Impact: The project does not propose any new or expanded uses and is therefore not anticipated to result in increased demand for wastewater treatment services beyond existing conditions in the Hanford General Plan. The Project has adequate capacity based on the estimated sewage collection and treatment demand.

Because the City's sewer system has the capacity to meet the project site's expected demand for wastewater treatment, and it is not anticipated that the project will increase the site's demand for wastewater treatment, it can be inferred that the existing wastewater treatment system has adequate capacity to serve the proposed project. There is a *less than significant impact*.

- d) **Would the project 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: KWRA provides solid waste services to the proposed project site. The project does not propose any new or expanded uses and is therefore not anticipated to result in increased generation of solid waste beyond existing conditions. Because the City's existing infrastructure has the capacity to accommodate the solid waste currently planned in the General Plan for expanded population, it can be inferred that the existing solid waste infrastructure has adequate capacity to serve the proposed project. Although, the project would be subject to refuse impact fees. The project would not generate solid waste in excess of State or Local Standards and the impact is *less than significant*.

- e) **Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Less Than Significant Impact: This proposed project conforms to all applicable statutes and regulations related to solid waste disposal. The proposed project will comply with the adopted policies related to solid waste, and will comply with all applicable federal, state, and local statutes and regulations pertaining to disposal of solid waste, including recycling. Therefore, the proposed project would have a *less than significant impact* on solid waste regulations.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

There are no State Responsibility Areas (SRAs) within the vicinity of the project site, and the project site is not categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire. This CEQA topic only applies to areas within an SRA or a Very High FHSZ.

Regulatory Setting

Fire Hazard Severity Zones: geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189.

Discussion**a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

No Impact: The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. The project will be reviewed by the City of Hanford Fire Chief to ensure the project does not impair emergency response or emergency evacuation. Additionally, the proposed project site is not located within an SRA or a Very High FHSZ. There is *no impact*.

- b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

No Impact: The project is located on a flat area of agricultural and urban land which is considered to be at little risk of fire. Additionally, the proposed project site is not located within an SRA or a Very High FHSZ. There is *no impact*.

- c) Would the project 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?**

Less than Significant Impact: The construction of the project involves adding new local residential streets, and new and relocated utilities. Utilities such as emergency water sources and power lines would be included as part of the proposed development, however all improvements would be subject to City standards and Fire Chief approval. The proposed project would not exacerbate fire risk and the impact would be *less than significant*

- d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes?**

No Impact: The project site is not located in an area designated as a Fire Hazard Severity Zone and lands associated with the Project site are relatively flat. Therefore, the project would not be susceptible to downslope or downstream flooding or landslides as a result of post-fire instability or drainage changes. There is *no impact*.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Does the project have the potential substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- 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?

Less than Significant Impact with Mitigation: This initial study/mitigated negative declaration found the project could have significant impacts on biological resources, cultural resources, geology and soils, hydrology and water quality, and Tribal cultural resources. However, implementation of the identified mitigation measures for each respective section would ensure that impacts are *less than significant with mitigation incorporation*.

- 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. 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). Impacts would be *less than significant*.

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

Less Than Significant Impact: 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. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to less than significant, which results in a *less than significant* impact to this checklist item.

3.6 MITIGATION MONITORING AND REPORTING PROGRAM

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the project in order to monitor the implementation of the mitigation measures that have been adopted for the project. This Mitigation Monitoring and Reporting Program (MMRP) has been created based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Family Healthcare Network Clinic Project in the City of Hanford.

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

Plan checking and verification of mitigation compliance shall be the responsibility of the City of Hanford.

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
<p>Mitigation Measure TCR-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.</p> <p>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 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.</p>	City of Hanford	Ongoing during construction	City of Hanford	
Mitigation Measure TCR-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to	City of Hanford	Ongoing during construction	City of Hanford	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.				
<p>Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit.</p> <ul style="list-style-type: none"> • Prior to issuance of grading permits for Phase 1 the Applicant shall submit a copy of the NOI to the City. • The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the site during construction for compliance. 	City of Hanford	Prior to the Start of Construction	City of Hanford	
Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the	City of Hanford	45 Days Prior to the Start of Construction	City of Hanford	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
<p>Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to:</p> <ul style="list-style-type: none"> • Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust; • A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures; • Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used; • Soil stockpiles and graded slopes will be covered after two weeks of inactivity and 24 hours prior to and during extreme weather conditions; and, • BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc. 				
<p>Mitigation Measure HYD-3: A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP devices be inspected, cleaned, and maintained in accordance with the manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following:</p> <ul style="list-style-type: none"> • Runoff shall be directed away from trash and loading dock areas; • Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes; • Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and, • Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system. 	City of Hanford	Prior to the Start of Construction	City of Hanford	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
<p>Mitigation Measure 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.</p> <p>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 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.</p>	City of Hanford	Ongoing during construction	City of Hanford	
<p>Mitigation Measure CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if</p>	City of Hanford	Ongoing during construction	City of Hanford	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment				
Mitigation Measure BIO-1a: Construction Timing. If feasible, project construction will occur entirely outside the Swainson's hawk nesting season, typically defined as March 1- September 15.	City of Hanford	Prior to the Start of Construction	City of Hanford	
Mitigation Measure BIO-1b: Preconstruction Surveys. If construction activities must occur between March 1 and September 15, then within 10 days prior to the start of work, a qualified biologist will conduct preconstruction surveys from publicly accessible roads for Swainson's hawk nests within ½ mile of the work area(s) in question.	City of Hanford	Prior to the Start of Construction	City of Hanford	
Mitigation Measure BIO-1c: Avoidance. Should any active nests be identified, the biologist will establish a suitable disturbance-free buffer around the nest, to be maintained until the biologist has determined that the young have fledged.	City of Hanford	Ongoing during construction	City of Hanford	

3.7 Supporting Information and Sources

1. AB 3098 List
2. EMFAC2014
3. Kings County General Plan
4. City of Hanford General Plan
5. City of Hanford General Plan MEIR
6. City of Hanford Greenhouse Gas Reduction Plan
7. City of Hanford Zoning Ordinance
8. Engineering Standards, City of Hanford
9. SJVAPCD Regulations and Guidelines
10. FEMA Flood Maps
11. California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
12. 2019 California Environmental Quality Act CEQA Guidelines
13. California Building Code
14. California Stormwater Pollution Prevention Program (SWPPP)
15. "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
16. Government Code Section 65962.5
17. California Environmental Protection Agency (CEPA) San Joaquin Valley Air Pollution Control District Mitigation Measures (<http://www.valleyair.org/transportation/Mitigation-Measures.pdf>)
18. Southern California Edison 2019 Power Content Label
19. Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018.
20. 2020 U.S. Census
21. California Department of Transportation Scenic Roadways
22. EPA, Intergovernmental Panel on Climate Change
23. 2020 Cal Water Urban Water Management Plan (UWMP) – Hanford District
24. State of California Governor's Office of Planning and Research

Section 4

List of Preparers

City of Hanford
317 North Douty Street
Hanford, CA, 93230

SECTION 4

List of Preparers

Project Title: Family Healthcare Network Clinic

List of Preparers

4-Creeks Inc.

- David Duda, AICP, GISP
- Molly Baumeister, Associate Planner
- Ellie Krantz, Assistant Planner

Persons and Agencies Consulted

The following individuals and agencies contributed to this Initial Study/Mitigated Negative Declaration:

City of Hanford

- Gabrielle de Silva Myers, Senior Planner
- Lisa Dock, City Engineer

Southern San Joaquin Valley Information Center

- Jeremy E. David, Assistant Coordinator

Peters Engineering Group

- John Rowland, Project Engineer

Live Oak Associates, Inc.

- Austin Pearson, Vice President
- Colleen Del Vecchio, Project Manager/Staff Ecologist and Arborist

Appendix A

CalEEMod Report

Part 1

Projected Emissions from CalEEMod

Family Healthcare Network Clinic - Kings County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Family Healthcare Network Clinic
Kings County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	15.00	1000sqft	0.34	15,000.00	0
Parking Lot	69.00	Space	0.62	27,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2024

Utility Company Pacific Gas and Electric Company

CO2 Intensity (lb/MWahr)	203.98	CH4 Intensity (lb/MWahr)	0.033	N2O Intensity (lb/MWahr)	0.004
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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Demolition -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	250.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2216	0.3977	0.4492	8.2000e-004	0.0152	0.0189	0.0342	5.2200e-003	0.0175	0.0227	0.0000	72.6730	72.6730	0.0186	1.1700e-003	73.4878
Maximum	0.2216	0.3977	0.4492	8.2000e-004	0.0152	0.0189	0.0342	5.2200e-003	0.0175	0.0227	0.0000	72.6730	72.6730	0.0186	1.1700e-003	73.4878

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2023	8-31-2023	0.2449	0.2449
2	9-1-2023	9-30-2023	0.0798	0.0798
		Highest	0.2449	0.2449

2.2 Overall Operational**Unmitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	0.0714	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003
Energy	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	23.5043	23.5043	2.3300e-003	4.5000e-004	23.6960
Mobile	0.1673	0.2867	1.3769	3.1100e-003	0.2908	2.9500e-003	0.2938	0.0777	2.7800e-003	0.0805	0.0000	288.3106	288.3106	0.0169	0.0184	294.2027
Waste						0.0000	0.0000		0.0000	0.0000	32.8845	0.0000	32.8845	1.9434	0.0000	81.4701
Water						0.0000	0.0000		0.0000	0.0000	0.5971	1.0584	1.6556	0.0615	1.4700e-003	3.6309
Total	0.2398	0.2963	1.3857	3.1700e-003	0.2908	3.6700e-003	0.2945	0.0777	3.5000e-003	0.0812	33.4817	312.8749	346.3566	2.0241	0.0203	403.0012

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0714	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003
Energy	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	23.5043	23.5043	2.3300e-003	4.5000e-004	23.6960
Mobile	0.1459	0.2139	1.0285	2.0400e-003	0.1852	1.9800e-003	0.1872	0.0495	1.8600e-003	0.0514	0.0000	188.9085	188.9085	0.0137	0.0134	193.2372
Waste						0.0000	0.0000		0.0000	0.0000	32.8845	0.0000	32.8845	1.9434	0.0000	81.4701
Water						0.0000	0.0000		0.0000	0.0000	0.5971	1.0584	1.6556	0.0615	1.4700e-003	3.6309
Total	0.2184	0.2234	1.0373	2.1000e-003	0.1852	2.7000e-003	0.1879	0.0495	2.5800e-003	0.0521	33.4817	213.4728	246.9545	2.0210	0.0153	302.0357

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	8.92	24.58	25.14	33.75	36.32	26.43	36.20	36.33	26.29	35.88	0.00	31.77	28.70	0.16	24.56	25.05

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2023	6/14/2023	5	10	
2	Site Preparation	Site Preparation	6/15/2023	6/15/2023	5	1	
3	Grading	Grading	6/16/2023	6/19/2023	5	2	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	6/20/2023	11/6/2023	5	100	
5	Paving	Paving	11/7/2023	11/13/2023	5	5	
6	Architectural Coating	Architectural Coating	11/14/2023	11/20/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.62

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500; Striped Parking Area: 1,656
(Architectural Coating – sqft)

OffRoad Equipment

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003	1.3500e-003	1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	3.2300e-003	0.0289	0.0370	6.0000e-005	0.0000	1.4100e-003	1.4100e-003	0.0000	1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.0000e-004	1.2400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3160	0.3160	1.0000e-005	1.0000e-005	0.3190
Total	1.5000e-004	1.0000e-004	1.2400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3160	0.3160	1.0000e-005	1.0000e-005	0.3190

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003	1.3500e-003	1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	3.2300e-003	0.0289	0.0370	6.0000e-005	0.0000	1.4100e-003	1.4100e-003	1.3500e-003	1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.0000e-004	1.2400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3160	0.3160	1.0000e-005	1.0000e-005	0.3190
Total	1.5000e-004	1.0000e-004	1.2400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3160	0.3160	1.0000e-005	1.0000e-005	0.3190

3.3 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	1.1000e-004	1.1000e-004	1.1000e-004	1.0000e-004	1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	1.1000e-004	3.8000e-004	3.0000e-005	1.0000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0158	0.0158	0.0000	0.0000	0.0160
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0158	0.0158	0.0000	0.0000	0.0160

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	1.1000e-004	1.1000e-004	1.1000e-004	1.0000e-004	1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	1.1000e-004	3.8000e-004	3.0000e-005	1.0000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0158	0.0158	0.0000	0.0000	0.0160
Total	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0158	0.0158	0.0000	0.0000	0.0160

3.4 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004	3.9000e-004	0.0000	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	5.3100e-003	4.2000e-004	5.7300e-003	2.5700e-003	3.9000e-004	2.9600e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0506	0.0506	0.0000	0.0000	0.0510
Total	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0506	0.0506	0.0000	0.0000	0.0510

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004	3.9000e-004	0.0000	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	5.3100e-003	4.2000e-004	5.7300e-003	3.9000e-004	3.9000e-004	2.9600e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0506	0.0506	0.0000	0.0000	0.0510
Total	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0506	0.0506	0.0000	0.0000	0.0510

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3000e-004	0.0157	5.1700e-003	7.0000e-005	2.3300e-003	1.0000e-004	2.4300e-003	6.7000e-004	1.0000e-004	7.7000e-004	0.0000	6.9358	6.9358	3.0000e-005	1.0000e-003	7.2354
Worker	2.4200e-003	1.6600e-003	0.0198	6.0000e-005	6.4300e-003	3.0000e-005	6.4600e-003	1.7100e-003	3.0000e-005	1.7400e-003	0.0000	5.0561	5.0561	1.6000e-004	1.5000e-004	5.1041
Total	2.8500e-003	0.0174	0.0250	1.3000e-004	8.7600e-003	1.3000e-004	8.8900e-003	2.3800e-003	1.3000e-004	2.5100e-003	0.0000	11.9919	11.9919	1.9000e-004	1.1500e-003	12.3395

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3000e-004	0.0157	5.1700e-003	7.0000e-005	2.3300e-003	1.0000e-004	2.4300e-003	6.7000e-004	1.0000e-004	7.7000e-004	0.0000	6.9358	6.9358	3.0000e-005	1.0000e-003	7.2354
Worker	2.4200e-003	1.6600e-003	0.0198	6.0000e-005	6.4300e-003	3.0000e-005	6.4600e-003	1.7100e-003	3.0000e-005	1.7400e-003	0.0000	5.0561	5.0561	1.6000e-004	1.5000e-004	5.1041
Total	2.8500e-003	0.0174	0.0250	1.3000e-004	8.7600e-003	1.3000e-004	8.8900e-003	2.3800e-003	1.3000e-004	2.5100e-003	0.0000	11.9919	11.9919	1.9000e-004	1.1500e-003	12.3395

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3400e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	9.0000e-005	1.1100e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2844	0.2844	1.0000e-005	1.0000e-005	0.2871
Total	1.4000e-004	9.0000e-005	1.1100e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2844	0.2844	1.0000e-005	1.0000e-005	0.2871

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004	6.2000e-004	6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	8.1000e-004					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3400e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004	6.2000e-004	6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	9.0000e-005	1.1100e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2844	0.2844	1.0000e-005	1.0000e-005	0.2871
Total	1.4000e-004	9.0000e-005	1.1100e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2844	0.2844	1.0000e-005	1.0000e-005	0.2871

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	0.1801	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0474	0.0474	0.0000	0.0000	0.0479
Total	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0474	0.0474	0.0000	0.0000	0.0479

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	0.1801	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0474	0.0474	0.0000	0.0000	0.0479
Total	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0474	0.0474	0.0000	0.0000	0.0479

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1459	0.2139	1.0285	2.0400e-003	0.1852	1.9800e-003	0.1872	0.0495	1.8600e-003	0.0514	0.0000	188.9085	188.9085	0.0137	0.0134	193.2372
Unmitigated	0.1673	0.2867	1.3769	3.1100e-003	0.2908	2.9500e-003	0.2938	0.0777	2.7800e-003	0.0805	0.0000	288.3106	288.3106	0.0169	0.0184	294.2027

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Medical Office Building	522.00	128.55	21.30	771,674	491,388
Parking Lot	0.00	0.00	0.00		
Total	522.00	128.55	21.30	771,674	491,388

4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %			
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by	Primary	Diverted	Pass-by
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10			
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0			

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.504365	0.051424	0.168544	0.163993	0.029850	0.006745	0.008269	0.036653	0.000620	0.000189	0.024675	0.001152	0.0003520
Parking Lot	0.504365	0.051424	0.168544	0.163993	0.029850	0.006745	0.008269	0.036653	0.000620	0.000189	0.024675	0.001152	0.0003520

5.0 Energy Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated	1.0500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	13.1624	13.1624	2.1300e-003	2.6000e-004	13.2926
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	13.1624	13.1624	2.1300e-003	2.6000e-004	13.2926
NaturalGas Mitigated	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034
NaturalGas Unmitigated	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	193800	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	193800	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Medical Office Building	132600	12.2687	1.9800e-003	2.4000e-004	12.3900
Parking Lot	9660	0.8938	1.4000e-004	2.0000e-005	0.9026
Total		13.1624	2.1200e-003	2.6000e-004	13.2926

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Medical Office Building	132600	12.2687	1.9800e-003	2.4000e-004	12.3900
Parking Lot	9660	0.8938	1.4000e-004	2.0000e-005	0.9026
Total		13.1624	2.1200e-003	2.6000e-004	13.2926

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0714	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003
Unmitigated	0.0714	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003
Total	0.0714	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003
Total	0.0714	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	0.0000	0.0000	1.6000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.6556	0.0615	1.4700e-003	3.6309
Unmitigated	1.6556	0.0615	1.4700e-003	3.6309

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Medical Office Building	1.88221 / 0.358516	1.6556	0.0615	1.4700e-003	3.6309
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.6556	0.0615	1.4700e-003	3.6309

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Medical Office Building	1.88221 / 0.358516	1.6556	0.0615	1.4700e-003	3.6309
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.6556	0.0615	1.4700e-003	3.6309

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	32.8845	1.9434	0.0000	81.4701
Unmitigated	32.8845	1.9434	0.0000	81.4701

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	162	32.8845	1.9434	0.0000	81.4701
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		32.8845	1.9434	0.0000	81.4701

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	162	32.8845	1.9434	0.0000	81.4701
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		32.8845	1.9434	0.0000	81.4701

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
----------------	--------

11.0 Vegetation

Part 2

2005 BAU from CalEEMod

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	15.00	1000sqft	0.34	15,000.00	0
Parking Lot	69.00	Space	0.62	27,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2005

Utility Company Pacific Gas and Electric Company

CO2 Intensity (lb/MW/hr)	489	CH4 Intensity (lb/MW/hr)	0.033	N2O Intensity (lb/MW/hr)	0.011
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1.3 User Entered Comments & Non-Default Data

Project Characteristics - Updated PGE intensity factors 2005

Land Use -

Demolition -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CO2IntensityFactor	203.98	489
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.011

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction

Mitigated Construction

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2004	8-31-2004	0.9517	0.9517
2	9-1-2004	9-30-2004	0.3159	0.3159
		Highest	0.9517	0.9517

2.2 Overall Operational**Unmitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	0.0785	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003
Energy	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	41.8961	41.8961	2.3300e-003	9.0000e-004	42.2223
Mobile	0.6192	1.5137	5.9724	9.9500e-003	0.2915	0.0319	0.3235	0.0781	0.0304	0.1084	0.0000	398.6345	398.6345	0.0621	0.0472	414.2659
Waste						0.0000	0.0000		0.0000	0.0000	32.8845	0.0000	32.8845	1.9434	0.0000	81.4701
Water						0.0000	0.0000		0.0000	0.0000	0.5971	2.5373	3.1345	0.0615	1.5100e-003	5.1206
Total	0.6987	1.5232	5.9814	0.0100	0.2915	0.0327	0.3242	0.0781	0.0311	0.1092	33.4817	443.0695	476.5511	2.0694	0.0497	543.0806

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0785	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003
Energy	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005	7.2000e-004	7.2000e-004	7.2000e-004	7.2000e-004	7.2000e-004	7.2000e-004	0.0000	41.8961	41.8961	2.3300e-003	9.0000e-004	42.2223
Mobile	0.6192	1.5137	5.9724	9.9600e-003	0.2915	0.0319	0.3235	0.0781	0.0304	0.1084	0.0000	398.6345	398.6345	0.0621	0.0472	414.2659
Waste						0.0000	0.0000		0.0000	0.0000	32.8845	0.0000	32.8845	1.9434	0.0000	81.4701
Water						0.0000	0.0000		0.0000	0.0000	0.5971	2.5373	3.1345	0.0615	1.5100e-003	5.1206
Total	0.6987	1.5232	5.9814	0.0100	0.2915	0.0327	0.3242	0.0781	0.0311	0.1092	33.4817	443.0695	476.5511	2.0694	0.0497	543.0806

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2004	6/14/2004	5	10	
2	Site Preparation	Site Preparation	6/15/2004	6/15/2004	5	1	
3	Grading	Grading	6/16/2004	6/17/2004	5	2	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	6/18/2004	11/4/2004	5	100	
5	Paving	Paving	11/5/2004	11/11/2004	5	5	
6	Architectural Coating	Architectural Coating	11/12/2004	11/18/2004	5	5	

Acres of Grading (Site Preparation Phase): 0.5**Acres of Grading (Grading Phase): 1.5****Acres of Paving: 0.62**

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500; Striped Parking Area: 1,656
(Architectural Coating – sqft)

OffRoad Equipment

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 2004****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.1097	0.0479	6.6000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346
Total	0.0183	0.1097	0.0479	6.6000e-004	0.0000	8.7000e-003	8.7000e-003	0.0000	8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2004****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	1.5600e-003	0.0110	1.0000e-005	4.0000e-004	2.0000e-005	4.2000e-004	1.1000e-004	2.0000e-005	1.2000e-004	0.0000	0.4660	0.4660	9.0000e-005	7.0000e-005	0.4903
Total	1.1400e-003	1.5600e-003	0.0110	1.0000e-005	4.0000e-004	2.0000e-005	4.2000e-004	1.1000e-004	2.0000e-005	1.2000e-004	0.0000	0.4660	0.4660	9.0000e-005	7.0000e-005	0.4903

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.1097	0.0479	6.6000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346
Total	0.0183	0.1097	0.0479	6.6000e-004	0.0000	8.7000e-003	8.7000e-003	0.0000	8.7000e-003	8.7000e-003	0.0000	5.6973	5.6973	1.4900e-003	0.0000	5.7346

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2004****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	1.5600e-003	0.0110	1.0000e-005	4.0000e-004	2.0000e-005	4.2000e-004	1.1000e-004	2.0000e-005	1.2000e-004	0.0000	0.4660	0.4660	9.0000e-005	7.0000e-005	0.4903
Total	1.1400e-003	1.5600e-003	0.0110	1.0000e-005	4.0000e-004	2.0000e-005	4.2000e-004	1.1000e-004	2.0000e-005	1.2000e-004	0.0000	0.4660	0.4660	9.0000e-005	7.0000e-005	0.4903

3.3 Site Preparation - 2004**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143
Total	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005	2.7000e-004	5.7000e-004	8.4000e-004	3.0000e-005	5.7000e-004	6.0000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2004****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	8.0000e-005	5.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0233	0.0233	0.0000	0.0000	0.0245
Total	6.0000e-005	8.0000e-005	5.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0233	0.0233	0.0000	0.0000	0.0245

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005		5.7000e-004	5.7000e-004	5.7000e-004	5.7000e-004	5.7000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143
Total	1.2700e-003	9.3600e-003	3.4600e-003	6.0000e-005	2.7000e-004	5.7000e-004	8.4000e-004	3.0000e-005	5.7000e-004	6.0000e-004	0.0000	0.5117	0.5117	1.0000e-004	0.0000	0.5143

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2004****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	8.0000e-005	5.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0233	0.0233	0.0000	0.0000	0.0245
Total	6.0000e-005	8.0000e-005	5.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0233	0.0233	0.0000	0.0000	0.0245

3.4 Grading - 2004**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7400e-003	0.0287	0.0104	1.7000e-004		1.6400e-003	1.6400e-003	1.6400e-003	1.6400e-003	1.6400e-003	0.0000	1.4822	1.4822	3.0000e-004	0.0000	1.4898
Total	3.7400e-003	0.0287	0.0104	1.7000e-004	5.3100e-003	1.6400e-003	6.9500e-003	2.5700e-003	1.6400e-003	4.2100e-003	0.0000	1.4822	1.4822	3.0000e-004	0.0000	1.4898

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	2.5000e-004	1.7600e-003	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0746	0.0746	1.0000e-005	1.0000e-005	0.0785
Total	1.8000e-004	2.5000e-004	1.7600e-003	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0746	0.0746	1.0000e-005	1.0000e-005	0.0785

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7400e-003	0.0287	0.0104	1.7000e-004		1.6400e-003	1.6400e-003	1.6400e-003	1.6400e-003	1.6400e-003	0.0000	1.4822	1.4822	3.0000e-004	0.0000	1.4898
Total	3.7400e-003	0.0287	0.0104	1.7000e-004	5.3100e-003	1.6400e-003	6.9500e-003	2.5700e-003	1.6400e-003	4.2100e-003	0.0000	1.4822	1.4822	3.0000e-004	0.0000	1.4898

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2004****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	2.5000e-004	1.7600e-003	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0746	0.0746	1.0000e-005	1.0000e-005	0.0785
Total	1.8000e-004	2.5000e-004	1.7600e-003	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0746	0.0746	1.0000e-005	1.0000e-005	0.0785

3.5 Building Construction - 2004**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0010	60.0010	0.0150	0.0000	60.3765
Total	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0010	60.0010	0.0150	0.0000	60.3765

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2004****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.1053	0.0640	7.4000e-004	2.3300e-003	4.2800e-003	6.6100e-003	6.7000e-004	4.1000e-003	4.7700e-003	0.0000	8.8133	8.8133	6.1000e-004	1.2800e-003	9.2109
Worker	0.0183	0.0250	0.1764	1.2000e-004	6.4300e-003	2.7000e-004	6.6900e-003	1.7100e-003	2.5000e-004	1.9600e-003	0.0000	7.4564	7.4564	1.4500e-003	1.1800e-003	7.8446
Total	0.0305	0.1303	0.2403	8.6000e-004	8.7600e-003	4.5500e-003	0.0133	2.3800e-003	4.3500e-003	6.7300e-003	0.0000	16.2697	16.2697	2.0600e-003	2.4600e-003	17.0556

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0009	60.0009	0.0150	0.0000	60.3764
Total	0.1846	1.1335	0.4836	6.8700e-003		0.0892	0.0892		0.0892	0.0892	0.0000	60.0009	60.0009	0.0150	0.0000	60.3764

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2004****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.1053	0.0640	7.4000e-004	2.3300e-003	4.2800e-003	6.6100e-003	6.7000e-004	4.1000e-003	4.7700e-003	0.0000	8.8133	8.8133	6.1000e-004	1.2800e-003	9.2109
Worker	0.0183	0.0250	0.1764	1.2000e-004	6.4300e-003	2.7000e-004	6.6900e-003	1.7100e-003	2.5000e-004	1.9600e-003	0.0000	7.4564	7.4564	1.4500e-003	1.1800e-003	7.8446
Total	0.0305	0.1303	0.2403	8.6000e-004	8.7600e-003	4.5500e-003	0.0133	2.3800e-003	4.3500e-003	6.7300e-003	0.0000	16.2697	16.2697	2.0600e-003	2.4600e-003	17.0556

3.6 Paving - 2004**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4100e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.2200e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2004****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	1.4000e-003	9.9200e-003	1.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4194	0.4194	8.0000e-005	7.0000e-005	0.4413
Total	1.0300e-003	1.4000e-003	9.9200e-003	1.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4194	0.4194	8.0000e-005	7.0000e-005	0.4413

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4100e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.2200e-003	0.0531	0.0232	3.3000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	2.7483	2.7483	6.9000e-004	0.0000	2.7654

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2004****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	1.4000e-003	9.9200e-003	1.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4194	0.4194	8.0000e-005	7.0000e-005	0.4413
Total	1.0300e-003	1.4000e-003	9.9200e-003	1.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	0.4194	0.4194	8.0000e-005	7.0000e-005	0.4413

3.7 Architectural Coating - 2004**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003	1.0300e-003	1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428
Total	0.1818	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428

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3.7 Architectural Coating - 2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.3000e-004	1.6500e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0699	0.0699	1.0000e-005	1.0000e-005	0.0735
Total	1.7000e-004	2.3000e-004	1.6500e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0699	0.0699	1.0000e-005	1.0000e-005	0.0735

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003	1.0300e-003	1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428
Total	0.1818	0.0127	5.6300e-003	7.0000e-005		1.0300e-003	1.0300e-003	1.0300e-003	1.0300e-003	1.0300e-003	0.0000	0.6383	0.6383	1.8000e-004	0.0000	0.6428

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.3000e-004	1.6500e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0699	0.0699	1.0000e-005	1.0000e-005	0.0735
Total	1.7000e-004	2.3000e-004	1.6500e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0699	0.0699	1.0000e-005	1.0000e-005	0.0735

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6192	1.5137	5.9724	9.9600e-003	0.2915	0.0319	0.3235	0.0781	0.0304	0.1084	0.0000	398.6345	398.6345	0.0621	0.0472	414.2659
Unmitigated	0.6192	1.5137	5.9724	9.9600e-003	0.2915	0.0319	0.3235	0.0781	0.0304	0.1084	0.0000	398.6345	398.6345	0.0621	0.0472	414.2659

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated		
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT		
Medical Office Building	522.00	128.55	21.30	771,674		771,674		
Parking Lot	0.00	0.00	0.00					
Total	522.00	128.55	21.30	771,674		771,674		

4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %			
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by			
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10			
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0			

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.469644	0.076968	0.160836	0.173619	0.042235	0.005594	0.011165	0.028022	0.000693	0.000053	0.021206	0.001062	0.008904
Parking Lot	0.469644	0.076968	0.160836	0.173619	0.042235	0.005594	0.011165	0.028022	0.000693	0.000053	0.021206	0.001062	0.008904

5.0 Energy Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated	1.0500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	31.5542	31.5542	2.1300e-003	7.1000e-004	31.8190
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	31.5542	31.5542	2.1300e-003	7.1000e-004	31.8190
NaturalGas Mitigated	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034
NaturalGas Unmitigated	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	193800	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Medical Office Building	193800	1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.0500e-003	9.5000e-003	7.9800e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3419	10.3419	2.0000e-004	1.9000e-004	10.4034

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Medical Office Building	132600	29.4116	1.9800e-003	6.6000e-004	29.6583
Parking Lot	9660	2.1427	1.4000e-004	5.0000e-005	2.1606
Total		31.5542	2.1200e-003	7.1000e-004	31.8190

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Medical Office Building	132600	29.4116	1.9800e-003	6.6000e-004	29.6583
Parking Lot	9660	2.1427	1.4000e-004	5.0000e-005	2.1606
Total		31.5542	2.1200e-003	7.1000e-004	31.8190

6.0 Area Detail

Family Healthcare Network Clinic - Kings County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0785	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003
Unmitigated	0.0785	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003
Total	0.0785	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003
Total	0.0785	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-003	1.5000e-003	1.0000e-005	0.0000	1.6800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.1345	0.0615	1.5100e-003	5.1206
Unmitigated	3.1345	0.0615	1.5100e-003	5.1206

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Medical Office Building	1.88221 / 0.358516	3.1345	0.0615	1.5100e-003	5.1206
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		3.1345	0.0615	1.5100e-003	5.1206

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Medical Office Building	1.88221 / 0.358516	3.1345	0.0615	1.5100e-003	5.1206
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		3.1345	0.0615	1.5100e-003	5.1206

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	32.8845	1.9434	0.0000	81.4701
Unmitigated	32.8845	1.9434	0.0000	81.4701

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	162	32.8845	1.9434	0.0000	81.4701
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		32.8845	1.9434	0.0000	81.4701

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Medical Office Building	162	32.8845	1.9434	0.0000	81.4701
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		32.8845	1.9434	0.0000	81.4701

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B

Biological Evaluation



LIVE OAK
— ASSOCIATES, INC. —

**BIOLOGICAL EVALUATION
FAMILY HEALTH CARE NETWORK PROJECT
HANFORD, KINGS COUNTY, CA**

By:

LIVE OAK ASSOCIATES, INC.

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October 10, 2022

Project No. 2741-01

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EXECUTIVE SUMMARY

Family Health Care Network proposes to construct a new medical clinic on an undeveloped parcel in Hanford, California. The project site is approximately 1.8 acres in size and is located in the southwest corner of the City of Hanford in Kings County.

Live Oak Associates, Inc. conducted an investigation of the biotic resources of the project site and prepared a technical report in support of the California Environmental Quality Act.

The project site is located in the San Joaquin Valley, in a landscape dominated by agricultural and urban uses. At the time of the field survey, the site consisted of an undeveloped lot that could best be characterized as a ruderal grassland habitat. The site has the potential to be used for foraging by the Swainson's hawk, a California threatened species, and the loggerhead shrike, a California Species of Special Concern.

The proposed site development will result in impact to some biotic resources of the site. One potential impact, construction-related disturbance of active raptor and other migratory bird nests, would be considered significant as defined by CEQA. The project can avoid this impact by: (1) timing the project to avoid the general avian nesting season; (2) conducting surveys for active raptor and migratory bird nests in advance of any construction that must take place during the nesting season; and (3) avoiding such nests during the nesting season with appropriate buffers for each species, as determined by a qualified biologist.

Less than significant impacts are anticipated for special status wildlife that may occur on site as occasional foragers, special status plant species, and special status species determined to be unlikely to occur on site. No impacts are anticipated to sensitive natural communities or designated critical habitat, wildlife movement corridors, jurisdictional water features, or local policies.



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1.0 INTRODUCTION

The following technical report, prepared by Live Oak Associates, Inc. (LOA) in support of California Environmental Quality Act (CEQA) review, describes the biotic resources of an approximately 1.8-acre parcel (“project site” or “site”) that may be impacted by proposed development of a medical clinic (“project”), and evaluates potential impacts to those resources that could result from the project.

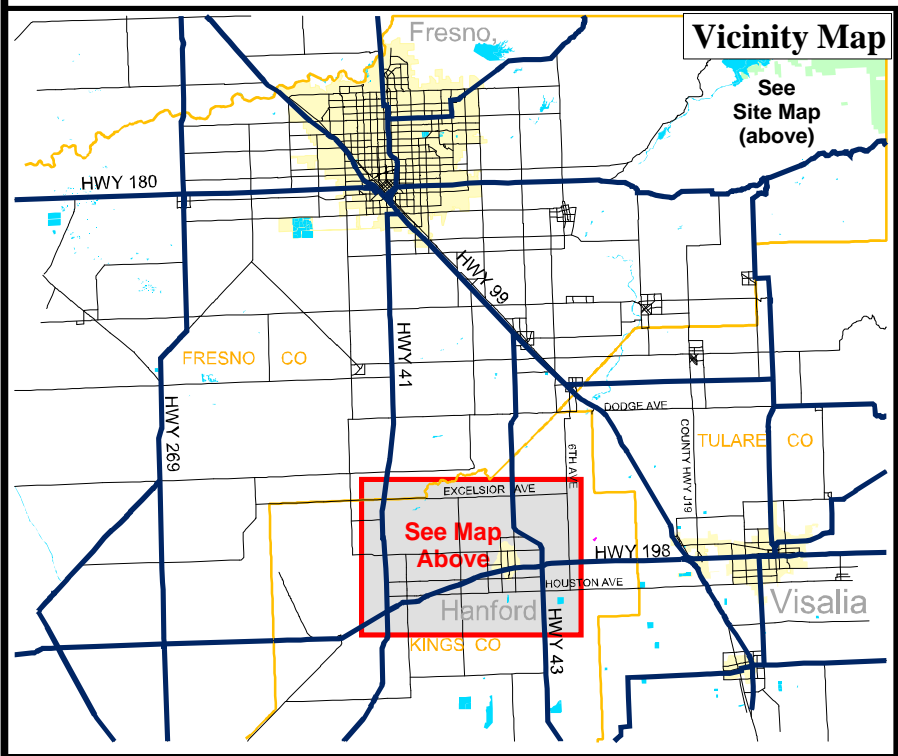
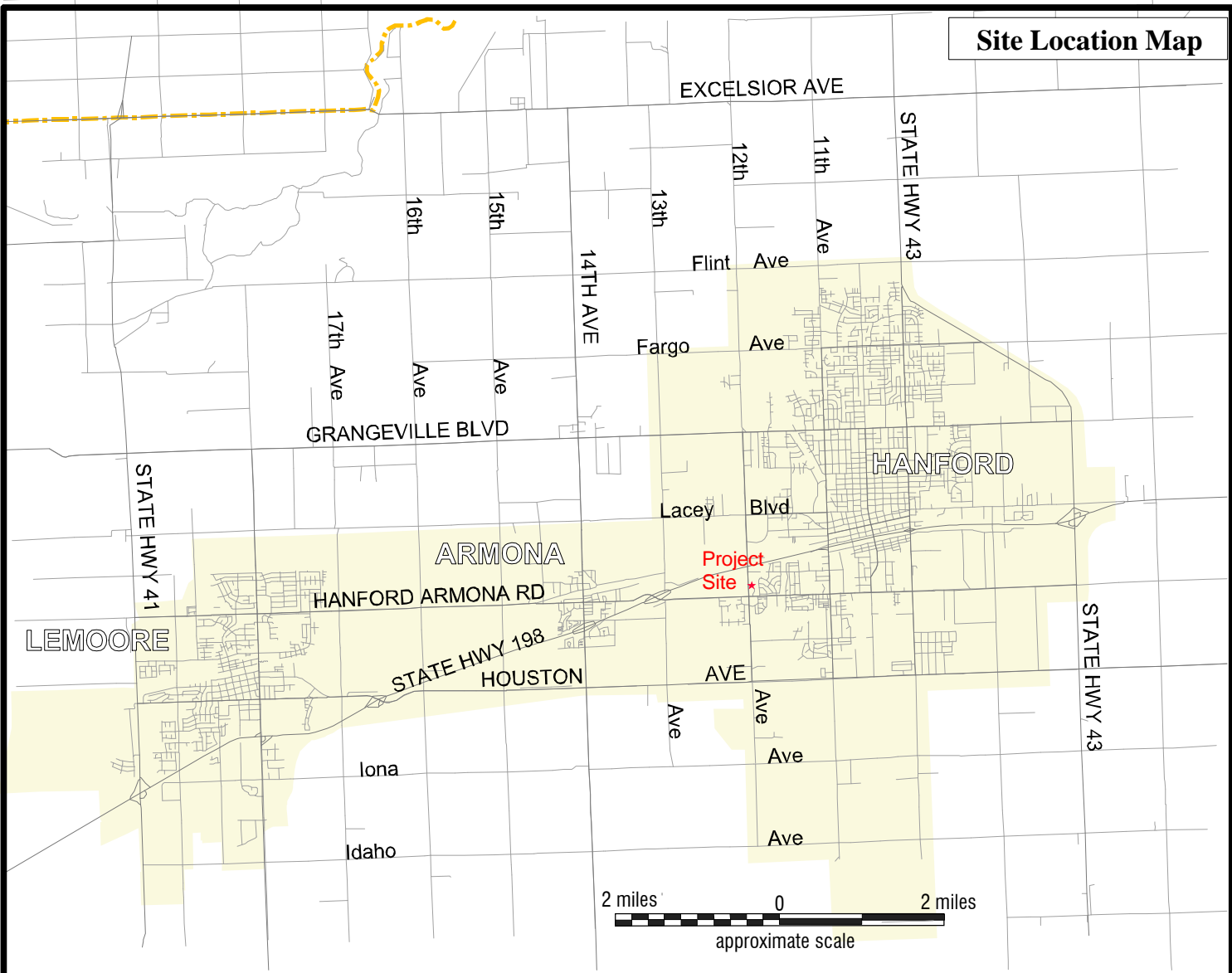
The Assessor Parcel Number for the project site is 011-060-057. The site is located at the intersection of West Hayden Avenue and 12th Avenue, in the southwest corner of the City of Hanford, in Kings County, California (Figure 1). The site may be found entirely on the *Hanford* U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 35, Township 18 South, Range 21 East (Figure 2).

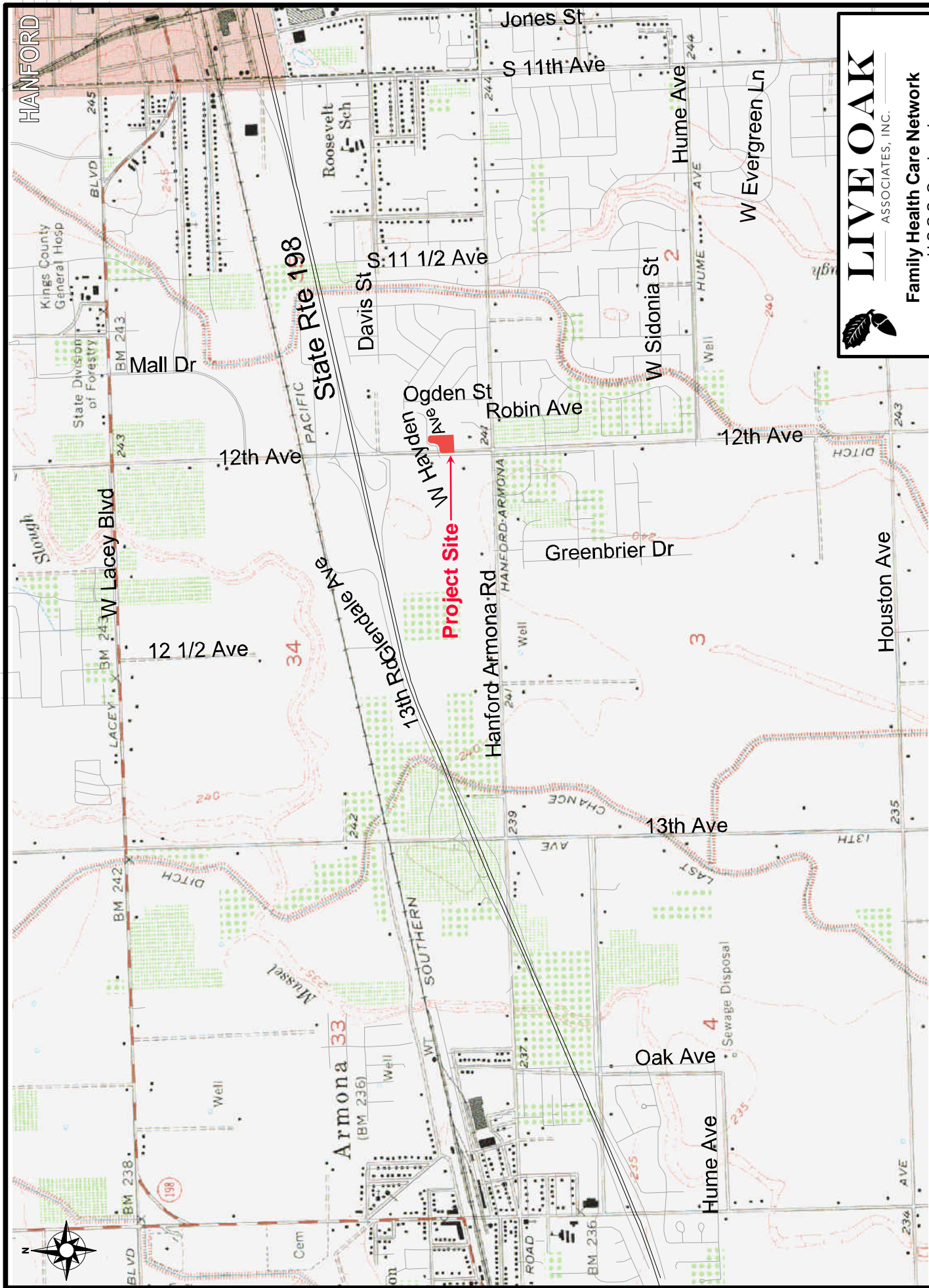
1.1 PROJECT DESCRIPTION

Family Health Care Network proposes to construct a new medical clinic on a vacant parcel in Hanford. This medical clinic will consist of a 15,000 square foot building with 69 parking stalls. The project will also include connection of utilities to the building (i.e. water and electricity), a monument sign, enclosed trash receptacle, block walls, sidewalks, landscaping, and a community garden. A site plan is included as Appendix A.

1.2 REPORT OBJECTIVES

Building projects such as that proposed by the project partners may damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to review under CEQA and/or subject to local policies and ordinances. This report addresses issues related to: 1) sensitive biotic resources occurring within the project site; 2) the federal, state, and local laws regulating such resources; and 3) mitigation measures that may be required to reduce the magnitude of anticipated impacts and/or comply with permit requirements of state and federal resource agencies. As such, the objectives of this report are to:







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Family Health Care Network
U.S.G.S. Quadrangle

Date
9/29/2022

Project #
2741-01

Figure #
2

From USGS
Hanford 7.5' Quadrangle 1954



- Summarize all site-specific information related to existing biological resources.
- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range.
- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development.
- Identify and discuss project impacts to biological resources that may occur within the project site within the context of CEQA guidelines and relevant state and federal laws.
- Identify avoidance and mitigation measures that would reduce the magnitude of project impacts in a manner consistent with the requirements of CEQA and that are generally consistent with recommendations of the resource agencies regulating affected biological resources.

1.3 STUDY METHODOLOGY

Prior to any field investigations, a background review of the project site and region was conducted. Sources of information used included: (1) the *California Natural Diversity Database* (CDFW 2022), (2) the *Online Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2022), and (3) manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

A reconnaissance-level field survey of the project site was conducted on September 19, 2022 by LOA ecologist Colleen Del Vecchio. The survey consisted of walking the project site while identifying its principal land uses and the constituent plants and animals of each land use. The field survey conducted for this study was sufficient to assess the significance of possible biological impacts associated with the development plans for the project site.

LOA's field investigation did not include an aquatic resources delineation or focused surveys for special status species. The field survey was sufficient to generally describe those features of the project site that could be subject to the jurisdiction of the U.S. Army Corps of Engineers



(USACE), California Department of Fish and Wildlife (CDFW), and/or the Regional Water Quality Control Board (RWQCB), and to assess the significance of possible biological impacts associated with development of the project site.

Following the field survey, LOA conducted an analysis of potential project impacts based on the known and potential biotic resources of the project site discussed in Section 2.0.



2.0 EXISTING CONDITIONS

2.1 REGIONAL SETTING

The project site is located in the San Joaquin Valley which has, for decades, experienced intensive agricultural disturbances and more recently intensive urban development. The project site is situated in Kings County within the City of Hanford. Land use surrounding the project site is best described as vacant land to the north, commercial/residential to the east and south, and agriculture/residential to the west. Current agricultural endeavors in the region include row crops, pasture, and dairies. The project site is near the southwest city limits and beyond this the land use is dominated by agriculture.

Like most of California, the San Joaquin Valley has a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures commonly exceed 100 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely rise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the project site is about 11 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain. Stormwater readily infiltrates the soils of and surrounding the project site.

Native plant and animal species once abundant in the region have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

2.2 PHYSICAL CONDITIONS OF PROJECT SITE

The overall topography of the project site is flat with an approximate elevation of 242 feet National Geodetic Vertical Datum (NGVD). One soil-mapping unit was identified within the site: Nord complex, 0 to 2 percent slope (NRCS 2021). This soil type is classified as well drained with a low runoff class, and no hydric soil rating, meaning that they do not have the propensity to pond water in depressions and form vernal pools.



2.3 BIOTIC HABITAT

One biotic habitat was identified on the project site during the site visit: ruderal grassland (Figure 3). A comprehensive list of the vascular plants observed on the project site is provided in Appendix B. A list of the terrestrial vertebrates observed and those that likely use habitats on and adjacent to the project site is provided in Appendix C. Photos taken during the site visit are presented in Appendix D.

2.3.1 Ruderal Grassland

The project site is best described a ruderal grassland. Historic aerial imagery dating to 1947 shows this parcel was likely never used for agriculture. In 2015, aerial imagery shows the entire parcel was graded and had numerous storage containers staged. Since that time, no grading appears to have taken place, only regular mowing. This site has historically experience heavy use and disturbance. The site has electrical poles and sidewalks along 12th Avenue and West Hayden Road.

At the time of the survey, approximately 95% of the plants in the grassland were senescent and the majority of the grassland was mowed. The dominant grass species was non-native seaside barley (*Hordeum marinum*), and the dominant herb was native fiddleneck (*Amsinckia* sp.). Other plant species observed included alkali heliotrope (*Heliotropium curassavicum* var. *oculatum*) and London rocket (*Sisymbrium irio*). The border of the grassland was unmowed at the time of the field survey, and supported Russian thistle (*Salsola australis*), Canada horseweed (*Erigeron canadensis*), short-podded mustard (*Hirschfeldia incana*), puncture vine (*Tribulus terrestris*), and alkali mallow (*Malvella leprosa*) were observed in this border.

No amphibian use is expected in this habitat due to the lack of breeding habitat in the vicinity of the site, as well as the generally anthropogenic nature of the surrounding landscape. Reptile species common to grasslands of the San Joaquin Valley are likely to occur in the site's grassland



LEGEND



Approximate Project Boundary



Ruderal Grassland

Aerial Photograph courtesy of Google Earth 2/2021

200' 0 100' 200 feet
approximate scale

W. Hayden Ave

12th Avenue

Robin Ct

Hanford Armona Road

Google Earth



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Family Health Care Network

Habitats / Land Cover

Date
9/29/2022

Project #
2741-01

Figure #
3



habitat. Lizard species may include San Joaquin fence lizards (*Sceloporus occidentalis biseriatus*), western side-blotched lizards (*Uta stansburiana elegans*), and California whiptail (*Aspidoscelis tigris munda*). Snake species may include California kingsnake (*Lampropeltis californiae*), Pacific gophersnake (*Pituophis catenifer catenifer*), and northern Pacific rattlesnake (*Crotalus oreganus oreganus*). None of these species were observed here, but would be reasonably attracted to this habitat based on the prey species observed during the field survey.

The grassland provides habitat for many avian species. Eurasian collared doves (*Streptopelia decaocto*), house sparrow (*Passer domesticus*), rock pigeon (*Columba livia*), and common raven (*Corvus corax*) were observed foraging, soaring, or perching in the project site. Other species that may be reasonably expected to utilize the site include California horned lark (*Eremophila alpestris actia*), white-crowned sparrow (*Zonotrichia leucophrys*), and Brewer's blackbird (*Euphagus cyanocephalus*). Birds of prey anticipated to hunt in the grassland include American kestrels (*Falco sparverius*), red-tailed hawks (*Buteo jamaicensis*), and Swainson's hawks (*Buteo swainsoni*). A red-tailed hawk was observed foraging in the field just north of the project site on the opposite side of West Hayden Road at the time of LOA's survey. Great horned owls (*Bubo virginianus*) and barn owls (*Tyto alba*) also have a potential to forage in the grassland.

Several mammal species are expected to occur in this grassland habitat. Those species observed or positively identified by their sign (i.e. burrows, scats, and tracks) included the California ground squirrel (*Otospermophilus beecheyi*) and coyote (*Canis latrans*). Other small mammal burrows were observed and are likely associated with the common Heermann's kangaroo rat (*Dipodomys heermanni*), Botta's pocket gopher (*Thomomys bottae*), and/or a mouse species. These granivorous and herbivorous small mammal species may provide foraging opportunities for predators such as the introduced red fox (*Vulpes vulpes*), domestic or feral cats/dogs, and raccoon (*Procyon lotor*).

2.4 SPECIAL-STATUS PLANTS AND ANIMALS

Many species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as



the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.0, state and federal laws have provided CDFW and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as “threatened” or “endangered” under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as “species of special concern” by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists (i.e., California Rare Plant Ranks, or CRPR) of native plants considered rare, threatened, or endangered (CNPS 2022). Collectively, these plants and animals are referred to as “special status species.”

Special status plants and wildlife of the project vicinity and their potential for occurrence on the project site, have been identified in Table 1. The list of species for Table 1 was obtained using the *California Natural Diversity Database* (CDFW 2022) and entailed a records search for the nine 7.5-minute quadrangles containing and surrounding the project site (*Lemoore, Hanford, Laton, Riverdale, Stratford, Guernsey, Burris Park, Remnoy, and Waukena*). Other sources of information for this table included *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2022), iNaturalist (iNaturalist 2022), eBird (eBird 2022), and California Herps (Nafis 2022). Note that only federally and state listed plants listed as 1A, 1B, 2A, 2B, or 3 with threat ranks 0.1, 0.2, and 0.3 by the California Rare Plant Ranking (CRPR) are included in this table. Other special status plants with a CRPR 4 may be considered for CEQA evaluation if they meet the criteria for rare or locally significant, addressed in the *2022 CEQA Statute & Guidelines* Section 15380 and Section 15125(c) (AEP 2022). The locations of documented special status species occurrences in the project vicinity are depicted on Figure 4.



TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

PLANTS

Special Status Plant Species (CDFW 2022 and CNPS 2022)

Species	Status	Habitat	Occurrence in the Project Site*
Earlimart orache (<i>Atriplex cordulata</i> var. <i>erecticaulis</i>)	CRPR 1B.2	Occurs in valley and foothill grasslands at elevations between 130 and 330 feet. Blooms August-September.	Absent. Suitable habitat is absent due to the high amount of historic ground disturbance at the project site.
Brittlescale (<i>Atriplex depressa</i>)	CRPR 1B.2	Occurs in chenopod scrub, valley and foothill grassland, and wetland habitats at elevations below 1,050 feet. Blooms April- October.	Absent. Suitable habitat is absent due to the high amount of historic ground disturbance at the project site.
Lesser saltscale (<i>Atriplex minuscule</i>)	CRPR 1B.1	Occurs in cismontane woodland and valley and foothill grasslands of the Central Valley; alkaline/sandy soils at elevations between 50 and 660 feet. Blooms May- October.	Absent. Suitable habitat is absent due to the high amount of historic ground disturbance at the project site.
Subtle orache (<i>Atriplex subtilis</i>)	CRPR 1B.2	Occurs in valley and foothill grasslands of the Central Valley at elevations between 130 and 330 feet. Blooms August-October.	Absent. Suitable habitat is absent due to the high amount of historic ground disturbance at the project site.
Recurved larkspur (<i>Delphinium recurvatum</i>)	CRPR 1B.2	Occurs in cismontane woodland and valley and foothill grasslands with alkaline soils at elevations below 2,500 feet. Blooms March-June.	Absent. Suitable habitat is absent due to the high amount of historic ground disturbance at the project site.
Alkali-sink goldfields (<i>Lasthenia chrysantha</i>)	CRPR 1B.1	Occurs in vernal pools or wet saline flats of valley grassland, alkali sink, or wetland-riparian habitats at elevations below 330 feet. Blooms February- April.	Absent. Suitable habitat is absent since the site is lacking vernal pools or water features that would support this species.
Panoche peppergrass (<i>Lepidium jaredii</i> ssp. <i>album</i>)	CRPR 1B.2	Occurs in valley and foothill grasslands. In white or grey clay lenses and gypsum-rich soils on steep slopes with incidental in alluvial fans and washes at elevations between 210 and 3,300 feet. Blooms February- June.	Absent. Suitable habitat is absent due to the high amount of historic ground disturbance at the project site.
Mud nama (<i>Nama stenocarpa</i>)	CRPR 2B.2	Found in marshes and swamps on lake shores, riverbanks, or intermittently wet areas at elevations between 50 and 2,675 feet. Blooms March- October.	Absent. Suitable habitat is absent since the site is lacking water features that would support this species.
California alkali-grass (<i>Puccinellia simplex</i>)	CRPR 1B.2	Occurs in saline flats and mineral springs in the Central Valley, San Francisco Bay area, and western Mojave Desert at elevations less than 2,955 feet. Blooms March-May.	Absent. Suitable habitat is absent since the site is lacking water features that would support this species.
Sanford's arrowhead (<i>Sagittaria sanfordii</i>)	CRPR 1B.2	Occurs in freshwater emergent marsh habitat in drainage ditches and canals of California's central valley at elevations less than 1,985 feet. Blooms May- October.	Absent. Suitable habitat is absent since the site is lacking water features that would support this species.



TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS

Special Status Animal Species (CDFW 2022)

Species	Status	Habitat	Occurrence in the Project Site*
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Occurs in vernal pools, clear to tea-colored water in grass or mud-bottomed swales, and basalt depression pools.	Absent. Suitable habitat is absent since the project site does not contain any vernal pools or seasonal water features that would support this species.
Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	FE	Primarily found in vernal pools but may use other seasonal wetlands in mesic valley and foothill grasslands.	Absent. Suitable habitat is absent since the project site does not contain any vernal pools or seasonal water features that would support this species.
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	FT	Lives in mature blue elderberry shrubs (<i>Sambucus mexicana</i>) of California's Central Valley and Sierra Foothills. Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Absent. The USFWS has determined that the range of the valley elderberry longhorn beetle does not include Kings County (USFWS 2014). Moreover, the project site does not contain any elderberry shrubs to support this species.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, CT	Found primarily in annual grasslands; requires vernal pools or other seasonal ponds for breeding and rodent burrows for aestivation. Although most California tiger salamanders aestivate within 0.4 mile of their breeding pond, outliers may aestivate up to 1.3 miles away (Orloff 2011).	Absent. Potential breeding habitat for this species is absent from the site and surrounding lands, and the site is situated in an urban-influenced landscape within which this species would not have been able to persist.
Western spadefoot (<i>Spea hammondi</i>)	CSC	Ranges throughout the Central Valley and adjacent foothills. Occurs primarily in grassland situations. Reproduction occurs in shallow, temporary ponds.	Absent. Potential breeding habitat for this species is absent from the site and surrounding lands, and the site is situated in an urban-influenced landscape within which this species would not have been able to persist.
California glossy snake (<i>Arizona elegans occidentalis</i>)	CSC	A generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils. It is patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Absent. The high amount of disturbance in the ruderal grassland and the surrounding land uses makes this project site unsuitable for this species. The nearest observations of this species are the Fresno area (Nafis 2022, iNaturalist 2022, CNDDDB 2022).
Western pond turtle (<i>Emys marmorata</i>)	CSC	Associated with permanent bodies of water. Requires partially submerged rocks or logs for basking sites. Eggs are deposited in a variety of soil types near water's edge. Seasonal hibernation/estivation includes use of upland habitat from water sources including ground squirrel burrows and loose substrate for burying themselves.	Absent. Suitable habitat is absent since the project site and surrounding lands lack bodies of water that would support this species.



TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (cont'd)

Species	Status	Habitat	Occurrence in the Project Site*
Blunt-nosed leopard lizard (<i>Gambelia sila</i>)	FE, CE, CFP	A resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	Absent. While the site is within the historic range of this species, suitable habitat is absent due to the high amount of historic ground disturbance at the project site. Moreover, the site is situated in an urban-influenced landscape within which this species would not have been able to persist.
Tricolored blackbird (<i>Agelaius tricolor</i>)	CT	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in many open habitats.	Absent. Suitable breeding habitat is absent from the project site. No tricolored blackbird observations are within the vicinity of the City of Hanford (eBird 2022).
Burrowing owl (<i>Athene cunicularia</i>)	CSC	Frequents open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon burrowing mammals, most notably the California ground squirrel, for nest burrows.	Unlikely. Ground squirrel burrow complexes are present in the grassland at the project site. However, due to the site's high levels of human disturbance and urban setting, it is unlikely a burrowing owl would use the project site except perhaps as a transient. There are no documented burrowing owl observations within the City of Hanford (CNDDB 2022, eBird 2022, iNaturalist 2022), and the nearest CNDDB occurrence of this species is over 10 miles to the northeast.
Swainson's hawk (<i>Buteo swainsoni</i>)	CT	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	Likely. Suitable foraging habitat is present at the project site; however breeding habitat is absent at the site and in the near vicinity. This species is regularly documented foraging in and around Hanford (eBird 2022). Nesting occurrences are documented on the east side of the City of Hanford (CNDDB 2022).
Western snowy plover (<i>Charadrius nivosus nivosus</i>)	FT, CSC	Found in sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting. Known to nest in the southern San Joaquin Valley as well as coastal areas.	Absent. Suitable breeding and foraging habitat are absent from the project site.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. Can often be found in cropland.	Possible. This species may occasionally forage on the site, but breeding habitat is absent.
Yellow-headed blackbird (<i>Xanthocephalus xanthocephalus</i>)	CSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant; nesting timed with maximum emergence of aquatic insects. Outside of the breeding season, forages for grain and seeds	Absent. Suitable breeding and foraging habitat are absent from the project site. This species is typically found foraging in agricultural areas with seeds. No yellow-headed blackbird observations are within the vicinity of the City of Hanford (eBird 2022).



TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

		in agricultural fields and plowed, barren, or fallow fields.	
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ANIMALS (cont'd)

Species	Status	Habitat	Occurrence in the Project Site*
Tipton kangaroo rat (<i>Dipodomys nitratooides nitratooides</i>)	FE, CE	Found in saltbrush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. Needs soft friable soils which escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.	Absent. Recent Tipton kangaroo rat studies have not detected this species north of the Tule River (USFWS 2020). Moreover, due to the site's historic ground disturbance and urban setting, this species has no appreciable potential to occur on site.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, CT	Found in desert alkali scrub and annual grasslands; may forage in adjacent agricultural habitats. Use underground dens for thermoregulation, cover, and reproduction. Dens are either self-dug or modified rodent burrows.	Unlikely. Due to the site's high levels of anthropogenic disturbance and urban setting, it is highly unlikely to be used by the San Joaquin kit fox. There are three kit fox records within the City of Hanford; the most recent of these is from 2006, suggesting that this species is, at most, an occasional transient in this area (CNDDB 2022).

OCCURRENCE TERMINOLOGY

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
		CFP	California Fully Protected
		CSC	California Species of Special Concern
CRPR	California Rare Plant Rank		
1B	Plants Rare, Threatened, or Endangered in California and elsewhere	0.1	Seriously Threatened in California
2B	Plants Rare, Threatened, or Endangered in California, but more common elsewhere	0.2	Moderately Threatened in California

2.5 ENDANGERED, THREATENED, OR SPECIAL STATUS ANIMAL SPECIES MERITING FURTHER DISCUSSION

2.5.1 Expanded Discussion of Swainson's Hawk

Ecology of the Species. Swainson's hawks (*Buteo swainsoni*; California Threatened) are large, broad-winged hawks. As typical with most birds of prey, they are usually monogamous and will aggressively defend their breeding ground year after year. They are breeding season migrants to



most of California, with some small non-migratory populations in the California Delta region (Bechard et al. 2020). In central California they typically arrive at their nesting sites in March, initiating their pair formation and bonding. Nest building typically begins within 7-15 days of arriving to their breeding ground and lasts about 1 week. Nest sites are selected by the male and can favor agricultural areas in central California. Swainson's hawks typically nest in a single tree, bush, grove, or row of trees at any height along a riparian corridor, isolated oak woodland, lone trees, roadside trees, or farmyard trees (Bechard et al. 2020). Eggs are typically laid in April or May, and the young hatch in May or June. Juveniles associate with their parents for 30 days on average during the post-fledgling period, remaining in the parent's territory and being largely dependent on them for food (Bechard et al. 2020). By the end of October, adults and juveniles have separated and most birds have left for wintering grounds in South America. Some hawks will stay in California into November.

Swainson's hawks forage in large, open fields with abundant prey, including grasslands or lightly grazed pastures, irrigated alfalfa fields, and row, grain and hay crop fields, particularly before and after harvest when prey is both numerous and conspicuous (Bechard et al. 2020). In the Central Valley, California voles (*Microtus californicus*) account for about 45% of non-insect prey taken by the Swainson's hawk, followed by ground birds (32%) and pocket gophers, deer mice, and other small mammals (20%) (Estep 1989). Insects comprise a large proportion of individual prey items, but a negligible proportion of total prey biomass. The designation of the Swainson's hawk as Threatened under the California Endangered Species Act is based on population decline due in part to loss of nesting and foraging habitat to urban development, pesticides, shooting, and disturbance of nest sites (CDFG 1994).

Potential to Occur Onsite. Swainson's hawks are known to forage in the project vicinity. This species is sighted fairly regularly at the Hanford wastewater treatment plant, approximately 1.5 miles southeast of the project site (eBird 2022). Other sightings are within the City at Hidden Valley Park approximately 2.5 miles north of the project area, and along Highway 198 approximately 3.5 miles west of the site (eBird 2022). The nearest CNDDDB nesting record is approximately 4.2 miles east of the project site within an agricultural area near the intersection of Highway 198 and Highway 43 (Occurrence No. 2517).



Given the number of sightings in the vicinity, it is likely that individuals opportunistically forage on the project site from time to time; however, there are no trees in the near vicinity that are suitable for this species to nest in. At the time of the field survey, there was a larger undeveloped parcel to the north with suitable foraging habitat and to the west some scattered row crop agriculture with residential housing nearby that may also be suitable seasonally for foraging.

2.5.2 Expanded Discussion of San Joaquin Kit Fox

Ecology of the species. By the time the San Joaquin kit fox (*Vulpes macrotis mutica*; SJKF) was listed as federally endangered in 1967 and California threatened in 1971, it had been extirpated from much of its historic range. The smallest North American member of the dog family (Canidae), the kit fox historically occupied the dry plains of the San Joaquin Valley, from San Joaquin County to southern Kern County (Grinnell et al. 1937). Local surveys, research projects, and incidental sightings indicate that kit fox currently occupy available habitat on the Central Valley floor and in the surrounding foothills. Core SJKF populations are located in the natural lands of western Kern County, the Carrizo Plain Natural Area in San Luis Obispo County, and the Ciervo-Panoche Natural Area in western Fresno and eastern San Benito Counties (USFWS 1998).

The SJKF prefers habitats of open or low vegetation with loose soils. In the southern and central portion of the Central Valley, kit fox is found in valley sink scrub, valley saltbrush scrub, upper Sonoran subshrub scrub, and annual grassland (USFWS 1998). Kit fox may also be found in grazed grasslands, urban settings, and in areas adjacent to tilled or fallow fields (USFWS 1998). They require underground dens to raise pups, regulate body temperature, and avoid predators and other adverse environmental conditions (Golightly and Ohmart 1984). In the central portion of their range, they usually occupy burrows excavated by small mammals such as California ground squirrels. The SJKF is primarily carnivorous, feeding on black-tailed hares, desert cottontails, rodents, insects, reptiles, and some birds.

Potential to occur onsite. The project area consists of a ruderal grassland with Russian thistle and other taller vegetation along the perimeter. Based on aerial imagery, the site gets regularly mowed and maintained. It is also adjacent to two commercial lots that are actively used as



storefronts. It is possible the SJKF could find suitable prey items in the grassland and thus may be seen on site as a transient; however, the grassland would not be suitable for kit fox denning due to intensive maintenance activities and lack of cover.

There are three CNDDDB occurrences within 3 miles of the project site (Figure 4). All of these records are over 15 years old and indicates this species no longer as common in the region. The urban expansion in this area within the last 15 years has drastically changed the landscape and resulted in a loss of suitable habitat for this species. As discussed, the project is surrounded by expanding urban development, commercial activities, agriculture, and vacant land. Based on the site's urban setting and disturbed nature, SJKF are highly unlikely to den on site, but may occasionally pass through or forage on site.

2.6 JURISDICTIONAL WATERS

Jurisdictional waters are those rivers, creeks, drainages, lakes, ponds, reservoirs, and wetlands that are subject to the authority of the USACE, CDFW, and/or the RWQCB. In general, the USACE regulates navigable waters, tributaries to navigable waters, and wetlands adjacent to these waters, where wetlands are defined by the presence of hydric soils, hydrophytic vegetation, and wetland hydrology. The CDFW asserts jurisdiction over waters in California that have a defined bed and bank, and the RWQCB has jurisdiction over California surface water and groundwater. The regulation of jurisdictional waters is discussed in more detail in Section 3.10.

The project site does not contain jurisdictional waters or any other type of aquatic resource.

2.7 DESIGNATED CRITICAL HABITAT

USFWS often designates areas of “critical habitat” when it lists species as threatened or endangered. Critical habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

Designated critical habitat is absent from the project site and surrounding lands (USFWS 2022).



2.8 SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are those that are of limited distribution, distinguished by significant biological diversity, home to special status species, etc. CDFW is responsible for the classification and mapping of all natural communities in California. Natural communities are assigned state and global ranks according to their degree of imperilment. Any natural community with a state rank of 3 (S3) or lower (on a 1 to 5 scale) is considered sensitive. Natural communities with ranks of S1-S3 are considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents. Examples of sensitive natural communities in the vicinity of the project area include Northern Basalt Flow Vernal Pool and various types of Central Valley Drainage Streams (Sawyer, Keeler-Wolf and Evens 2009).

The project site supports no sensitive natural communities.

2.9 WILDLIFE MOVEMENT CORRIDORS

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

The project site contains no regular or predictable wildlife movement corridors.



3.0 RELEVANT GOALS, POLICIES, AND LAWS

3.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

In California, any project carried out or approved by a public agency that will result in a direct or reasonably foreseeable indirect physical change in the environment must comply with CEQA. The purpose of CEQA is to ensure that a project's potential impacts on the environment are evaluated, and methods for avoiding or reducing these impacts are considered before the project is allowed to move forward. A secondary aim of CEQA is to provide justification to the public for the approval of any projects involving significant impacts on the environment.

According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest.” Although the lead agency may set its own CEQA significance thresholds, project impacts to biological resources are generally considered to be significant if they would meet any of the following criteria established in Appendix G of the CEQA Guidelines:

- 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 CDFW or USFWS.
- 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 CDFW or USFWS.
- 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.
- 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 site.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.



Furthermore, CEQA Guidelines Section 15065(a) requires the lead agency to make “mandatory findings of significance” if there is substantial evidence that a project may:

- 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, or substantially reduce the number or restrict the range of an endangered, rare or threatened species.
- Achieve short-term environmental goals to the detriment of long-term environmental goals.
- Produce environmental effects that are individually limited but cumulatively considerable, meaning that the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects.

3.2 GENERAL PLAN POLICIES OF THE CITY OF HANFORD

In compliance with CEQA, the lead agency must consider project conformance with applicable goals and policies of the City of Hanford General Plan. The City of Hanford General Plan includes goals and policies are “general in nature, but also comprehensive, and are intended to guide Hanford for the next 20 years.” Resource elements addressed by this plan include: (1) rare, threatened, or endangered species; (2) wetland and riparian habitats; (3) oak trees; and (4) general preservation of natural resources. The City of Hanford General Plan policies related to natural resources can be found in Appendix E.

3.3 HABITAT CONSERVATION PLANS AND NATURAL COMMUNITY CONSERVATION PLANS

Section 10 of the federal Endangered Species Act establishes a process by which non-federal projects can obtain authorization to incidentally take listed species, provided take is minimized and thoroughly mitigated. A Habitat Conservation Plan (HCP) developed by the project applicant in collaboration with the USFWS and/or National Marine Fisheries Service (NMFS) ensures that such minimization and mitigation will occur and is a prerequisite to the issuance of a federal incidental take permit. Similarly, a Natural Community Conservation Plan (NCCP) developed by the project applicant in collaboration with CDFW, provides for the conservation of biodiversity within a project area, and permits limited incidental take of state-listed species.



3.4 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of “critical habitat” when it lists species as threatened or endangered. Critical habitat is defined by section 3(5)(A) of the federal Endangered Species Act as “(i) The specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.” The Act goes on to define “conservation” as “the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which listing under the Act is no longer necessary.”

The designation of a specific area as critical habitat does not directly affect its ownership. Federal actions that result in destruction or adverse modification of critical habitat are, however, prohibited in the absence of prior consultation with the USFWS according to provisions of the act. Furthermore, recent appellate court cases require that federal actions affecting critical habitat promote the recovery of the listed species protected by the critical habitat designation.

The USFWS designates critical habitat for a species by identifying general areas likely to contain the species’ “primary constituent elements,” or physical or biological features of the landscape that the species needs to survive and reproduce. Although a unit of critical habitat for a particular species may be quite large, only those lands within the unit that contain the species’ primary constituent elements are actually considered critical habitat by the USFWS.

3.5 THREATENED AND ENDANGERED SPECIES

In California, imperiled plants and animals may be afforded special legal protections under the California Endangered Species Act (CESA) and/or Federal Endangered Species Act (FESA). Species may be listed as “threatened” or “endangered” under one or both Acts, and/or as “rare” under CESA. Under both Acts, “endangered” means a species is in danger of extinction throughout all or a significant portion of its range, and “threatened” means a species is likely to



become endangered within the foreseeable future. Under CESA, “rare” means a species may become endangered if their present environment worsens. Both Acts prohibit “take” of listed species, defined under CESA as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 86), and more broadly defined under FESA to include “harm” (16 USC, Section 1532(19), 50 CFR, Section 17.3).

When state and federally listed species have the potential to be impacted by a project, the USFWS and CDFW must be included in the CEQA process. These agencies review the environmental document to determine the adequacy of its treatment of endangered species issues and to make project-specific recommendations for the protection of listed species. Projects that may result in the “take” of listed species must generally enter into consultation with the USFWS and/or CDFW pursuant to FESA and CESA, respectively. In some cases, incidental take authorization(s) from these agencies may be required before the project can be implemented.

3.6 CALIFORNIA FULLY PROTECTED SPECIES

The classification of certain animal species as “fully protected” was the State of California’s initial effort in the 1960s, prior to the passage of the California Endangered Species Act, to identify and provide additional protection to those species that were rare or faced possible extinction. Following CESA enactment in 1970, many fully protected species were also listed as California threatened or endangered. The list of fully protected species are identified, and their protections stipulated, in California Fish and Game Code Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and fish (5515). Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except in conjunction with necessary scientific research and protection of livestock.

3.7 MIGRATORY BIRDS

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States,



even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Native birds are also protected under California state law. The California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities. Moreover, the California Migratory Bird Protection Act, enacted in September 2019, clarifies native bird protection, and increases protections where California law previously deferred to federal law.

3.8 BIRDS OF PREY

Birds of prey are protected in California under provisions of the Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

Additionally, the Bald and Golden Eagle Protection Act (16 U.S.C., sec. 668-668c) prohibits anyone from taking (pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb) bald or golden eagles, including their parts, nests, or eggs, unless authorized under a federal permit. In addition to immediate acts of take, the act prohibits any disturbance that directly affects an eagle or an active eagle nest as well as any disturbance caused by humans around a previously used nest site during a time when eagles are not present such that it agitates or bothers an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

3.9 NESTING BIRDS

In California, protection is afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that it is “unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant



thereto.” Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of “take” by the CDFW.

3.10 WETLANDS AND OTHER JURISDICTIONAL WATERS

Section 404 of the federal Clean Water Act (CWA) regulates the discharge of dredged or fill material into “navigable waters” (33 U.S.C. §1344), defined in the CWA as “the waters of the United States, including the territorial seas” (33 U.S.C. §1362(7)). The CWA does not supply a definition for waters of the U.S., and that has been the subject of considerable debate since the CWA’s passage in 1972. A variety of regulatory definitions have been promulgated by the two federal agencies responsible for implementing the CWA, the Environmental Protection Agency (EPA) and USACE. These definitions have been interpreted, and in some cases, invalidated, by federal courts.

Most recently, waters of the U.S. were defined by the Navigable Waters Protection Rule (NWPR). The new rule was published in the Federal Register on April 21, 2020 and took effect on June 22, 2020. However, on August 30, 2021, in the case of Pascua Yaqui Tribe v. U.S. Environmental Protection Agency, the U.S. District Court for the District of Arizona vacated and remanded the NWPR. In light of this order, the EPA and USACE have halted implementation of the NWPR and, until further notice, are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime.

The interpretation of waters of the U.S. prior to 2015 generally included:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- All interstate waters including interstate wetlands.
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or



natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce.

- All impoundments of waters otherwise defined as waters of the United States under the definition.
- Tributaries of waters identified in the bulleted items above.

As determined by the United States Supreme Court in its 2001 Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC) decision, channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. Similarly, in its 2006 consolidated Carabell/Rapanos decision, the U.S. Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered a jurisdictional water.

All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to the permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards.

Under the Porter-Cologne Water Quality Control Act of 1969, the State Water Resources Control Board has regulatory authority to protect the water quality of all surface water and groundwater in the State of California (“waters of the State”). Nine RWQCBs oversee water quality at the local and regional level. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the State through the issuance of various permits and orders. Discharges into waters of the State that are also waters of the U.S. require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 Clean Water Act permit. Discharges into all waters of the State, even those that are not also waters of the U.S., require Waste Discharge Requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal



National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one or more acres of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a water of the U.S. may require a NPDES permit.

CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of debris require a Notification of Lake or Streambed Alteration. If CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the lake or drainage in question.



4.0 IMPACTS AND MITIGATIONS

The following discussions assume all 1.8 acres of the project site will be developed into a health care facility. Potential project impacts to biological resources and recommended mitigation measures are discussed below.

4.1 POTENTIALLY SIGNIFICANT PROJECT IMPACTS/MITIGATION

4.1.1 Disturbance to Active Raptor and Other Migratory Bird Nests from Construction Activities During Project Implementation

Potential Impacts. The project site has the potential to be used for nesting by a variety of native avian species protected by the Migratory Bird Treaty Act and related state laws. Birds can nest in the taller grasses and herbs, Russian thistle, burrows, on the ground, or within the existing electrical infrastructure. Raptors and other migratory birds could nest on power poles within and adjacent to the site, as well as trees in the vicinity of the site. If project construction takes place during the nesting season (generally February 1- August 31), birds nesting on the site could be injured or killed by construction activities or disturbed such that they would abandon their nests. Significant construction-related disturbance is also a possibility for birds nesting adjacent to the project site. Project-related injury, mortality, or disturbance of nesting birds that results in nest abandonment are potentially significant adverse environmental effects of the project.

Mitigation. To avoid and minimize the potential for construction-related mortality/disturbance of nesting raptors and migratory birds, the following measures will be implemented:

Measure 4.1.1a (Construction Timing). If feasible, the project will be implemented outside of the avian nesting season, typically defined as February 1 to August 31.

Measure 4.1.1b (Pre-construction Surveys). If construction is to occur between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for active bird nests within 10 days prior to the start of construction. The survey area will encompass the site and accessible surrounding lands within 250 feet for nesting migratory birds and 500 feet for raptors (i.e., birds of prey).



Measure 4.1.1c (Avoidance of Active Nests). Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing and will be maintained until the biologist has determined that the young have fledged and are capable of foraging independently.

Implementation of the above measures will reduce potential effects of future project development on nesting raptors and migratory birds to a less than significant level under CEQA and will ensure compliance with state and federal laws protecting nesting birds.

4.2 LESS THAN SIGNIFICANT PROJECT IMPACTS

4.2.1 Special Status Animal Species that May Occur on the Project Site as Occasional or Regular Foragers but Breed Elsewhere

Potential Impacts. Two special status animals, the loggerhead shrike (*Lanius ludovicianus*) and Swainson's hawk, have the potential to forage on the site from time to time as transients but do not have suitable breeding habitat on site (see Table 1). Potential foraging habitat on the project site is not uniquely important for these species, and similar or higher quality foraging habitat is relatively abundant in the region. The loggerhead shrike or Swainson's hawk would not be vulnerable to construction related mortality, as they would simply move away from any construction activity on site. Even if one or more individuals were to occur on the site during construction, their high level of mobility would allow them to easily evade any construction activity. For these reasons, project impacts to the special status species that may occur on the site as occasional or regular foragers are considered less than significant under CEQA.

Mitigation. Mitigation is not warranted.

4.2.2 Project Impacts to Special Status Plant Species

Potential Impacts. Ten special status plant species, vascular and bryophyte, are known to occur in the region (see Table 1). These species include Earlimart orache (*Atriplex cordulata* var. *erecticaulis*), brittlescale (*Atriplex depressa*), lesser saltscale (*Atriplex minuscula*), subtle orache



(*Atriplex subtilis*), recurved larkspur (*Delphinium recurvatum*), alkali-sink goldfields (*Lasthenia chrysantha*), Panoche peppergrass (*Lepidium jaredii* ssp. *album*), mud nama (*Nama stenocarpa*), California alkali-grass (*Puccinellia simplex*), and Sanford's arrowhead (*Sagittaria sanfordii*). The project site consists of a ruderal grassland with a high level of historic and current human disturbance and would not support any of these special status plants. The proposed project is not expected to affect these species or their habitats, and impacts would be less than significant under CEQA.

Mitigation. Mitigation measures are not warranted.

4.2.3 Project Impacts to Special Status Animal Species Absent from or Unlikely to Occur on Site

Potential Impacts. Of the 16 special status animal species known from the regional vicinity, 14 are considered absent or unlikely to occur on the project site due to the absence of suitable habitat, the site's urban setting, and/or the site being situated outside of the species' distribution. These species include the vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), California tiger salamander (*Ambystoma californiense*), western spadefoot (*Spea hammondi*), California glossy snake (*Arizona elegans occidentalis*), western pond turtle (*Emys marmorata*), blunt-nosed leopard lizard (*Gambelia sila*), burrowing owl (*Athene cunicularia*), tricolored blackbird (*Agelaius tricolor*), western snowy plover (*Charadrius nivosus nivosus*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), Tipton kangaroo rat (*Dipodomys nitratoideus nitratoideus*) (see Table 1), and San Joaquin kit fox.

Since there is little to no likelihood that these species occur on site, they have no appreciable potential to be affected through construction-related injury or mortality or loss of habitat. Project impacts to these species are considered less than significant.

Mitigation. Mitigation measures are not warranted.



4.2.4 Project Impact to Sensitive Natural Communities and Designated Critical Habitat

No Impacts. Designated critical habitat and sensitive natural communities are absent from the project site.

Project development is expected to have no impact on sensitive natural communities or designated critical habitat.

Mitigation. No mitigation is warranted.

4.2.5 Project Impact to Wildlife Movement Corridors

No Impacts. As discussed, this project site is surrounded by expanding urban development, vacant land to the north, commercial/residential to the east and south, and agriculture/residential to the west at the western edge of the City of Hanford. There are no physical features (riparian corridors, valleys, etc.) at the project site or vicinity that would support regular or predicted wildlife movement. Therefore, the project will result in a less than significant effect on wildlife movement corridors.

Mitigation. No mitigation is warranted.

4.2.6 Project Impacts to Jurisdictional Waters

No Impacts. Wetlands and jurisdictional waters are absent from the project site.

Mitigation. No mitigation is warranted.

4.2.7 Local Policies or Habitat Conservation Plans

No Impacts. Proposed project design is consistent with the goals and policies of the City of Hanford General Plan.

Mitigation. No mitigation is required.



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APPENDIX A: SITE PLAN

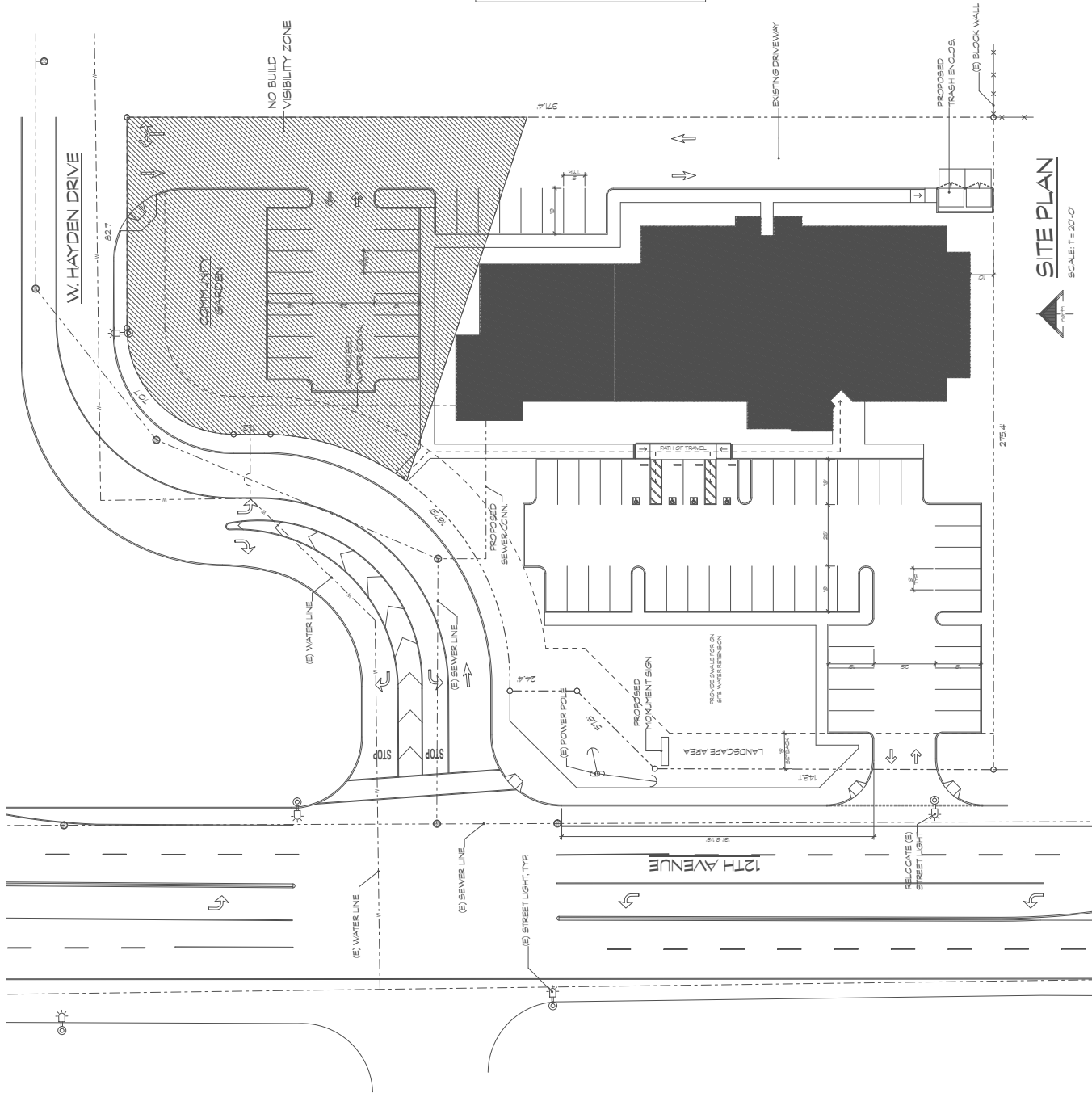
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A NEW CLINIC FOR
FAMILY HEALTH CARE NETWORK
HANFORD, CA

HANFORD, CA

DATE: 7-21-2022	
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PROJECT INFORMATION

ADDRESS	BLDG OF CHURCH (N. HUTTON DR.)
CITY	CHICAGO-027
PROPERTY TYPE	CHURCH
BLDG AREA	1,000 S.F.
REQUIRED PARKING SPACES	5,000 S.F. / 200 + 40 SPACES
PROPOSED PARKING SPACES	65
SPACED S.F.	3
TOTAL PROVIDED	68
BLDG DIMENSIONS	20' X 100'
W/TH	20'
DEPTH	100'
COMMENTS	VARIES W/ 22'
W/TH	10'
DEPTH	10'
PRE-RECTION	10' DEPTH 9' DEPTH 9' DEPTH
REQUIRED TO BE HANDLED ON SITE	SPINWHEEL BUILDING
STREET DAMAGE	



APPENDIX B: VASCULAR PLANTS OF THE PROJECT SITE



VASCULAR PLANTS OF THE PROJECT SITE

The plant species listed below were observed on the project site during a survey conducted by Live Oak Associates, Inc. on September 19, 2022. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland
+/- - Higher/lower end of category
NR - No review
NA - No agreement
NI - No investigation

ASTERACEAE – Daisy Family

<i>Erigeron canadensis</i>	Canada horseweed	FACU
<i>Sonchus asper</i>	Prickly sow thistle	FAC

BORAGINACEAE – Borage Family

<i>Amsinckia</i> sp.	Fiddleneck	
<i>Helianthus annuus</i>	Hairy leaved sunflower	FACU

BRASSICACEAE – Mustard Family

<i>Hirschfeldia incana</i>	Shortpod mustard	UPL
<i>Sisymbrium irio</i>	London rocket	UPL

CHENOPODIACEAE – Goosefoot Family

<i>Salsola australis</i>	Russian thistle	UPL
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GERANIACEAE – Geranium Family

<i>Erodium cicutarium</i>	Red stemmed filaree	UPL
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HELIOTROPIACEAE – Heliotrope Family

<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	Alkali heliotrope	FACU
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MALVACEAE – Mallow Family

<i>Malva parviflora</i>	Cheeseweed	UPL
<i>Malvella leprosa</i>	Alkali mallow	FACU

POACEAE – Grass Family

<i>Avena fatua</i>	Wild oat	UPL
<i>Bromus diandrus</i>	Ripgut brome	UPL
<i>Hordeum marinum</i>	Seaside barley	FAC

POLYGONACEAE – Buckwheat Family

<i>Rumex crispus</i>	Curly dock	FAC
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ZYGOPHYLLACEAE – Caltrop Family

<i>Tribulus terrestris</i>	Puncture vine	UPL
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APPENDIX C: TERRESTRIAL VERTEBRATES OF THE PROJECT SITE



TERRESTRIAL VERTEBRATES OF THE PROJECT SITE

The species listed below are those that may reasonably be expected to use the habitats of the project site routinely or from time to time. The list was not intended to include birds that are vagrants or occasional transients. Terrestrial vertebrate species observed in or adjacent to the project site during the September 19, 2022 survey has been noted with an asterisk.

CLASS: REPTILIA

ORDER: SQUAMATA (Lizards and Snakes)

SUBORDER: SAURIA (Lizards)

FAMILY: PHRYNOSOMATIDAE (Spiny, Side-blotched, Horned, and relatives)

San Joaquin Fence Lizard (*Sceloporus occidentalis biseriatus*)

Western Side-blotched Lizard (*Uta stansburiana elegans*)

FAMILY: TELLIDAE (Whiptails and Racerunners)

California Whiptail (*Aspidoscelis tigris munda*)

SUBORDER: SERPENTES (Snakes)

FAMILY: COLUBRIDAE (Colubrids)

San Joaquin Coachwhip (*Coluber flagellum ruddocki*)

California Kingsnake (*Lampropeltis californiae*)

Pacific Gopher Snake (*Pituophis catenifer catenifer*)

Valley Gartersnake (*Thamnophis sirtalis fitchi*)

FAMILY: VIPERIDAE

Northern Pacific Rattlesnake (*Crotalus oreganus oreganus*)

CLASS: AVES

ORDER: APODIFORMES (Swifts and Hummingbirds)

FAMILY: TROCHILIDAE (Hummingbirds)

Anna's Hummingbird (*Calypte anna*)

Rufous Hummingbird (*Selasphorus rufus*)

Allen's Hummingbird (*Selasphorus sasin*)

ORDER: CHARADRIIFORMES (Shorebirds and Allies)

FAMILY: CHARADRIIDAE (Plovers and relatives)

Killdeer (*Charadrius vociferus*)

ORDER: COLUMBIFORMES (Pigeons and Doves)

FAMILY: COLUMBIDAE (Pigeons and Doves)

*Rock Pigeon (*Columba livia*)

*Eurasian Collared-dove (*Streptopelia decaocto*)

Mourning Dove (*Zenaida macroura*)

ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)

FAMILY: CATHARTIDAE (American Vultures)

Turkey Vulture (*Cathartes aura*)

FAMILY: ACCIPITRIDAE (Hawks, Eagles, and Kites)



*Red-tailed Hawk (*Buteo jamaicensis*)

Swainson's Hawk (*Buteo swainsonii*)

FAMILY: FALCONIDAE (Caracaras and Falcons)

Merlin (*Falco columbarius*)

American Kestrel (*Falco sparverius*)

ORDER: PICIFORMES (Woodpeckers and Relatives)

FAMILY: PICIDAE (Woodpeckers and Wrynecks)

Acorn Woodpecker (*Melanerpes formicivorus*)

ORDER: STRIGIFORMES (Owls)

FAMILY: TYTONIDAE (Barn Owls)

Barn Owl (*Tyto alba*)

FAMILY: STRIGIDAE (Typical Owls)

Great Horned Owl (*Bubo virginianus*)

ORDER: PASSERIFORMES (Perching Birds)

FAMILY: ALAUDIDAE

California Horned Lark (*Eremophila alpestris actia*)

FAMILY: CORVIDAE (Jays, Magpies, and Crows)

American Crow (*Corvus brachyrhynchos*)

*Common Raven (*Corvus corax*)

FAMILY: FRINGILLIDAE (Finches)

House Finch (*Carpodacus mexicanus*)

Lesser Goldfinch (*Carduelis psaltria*)

American Goldfinch (*Spinus tristis*)

FAMILY: ICTERIDAE (Blackbirds, Orioles and Allies)

Brewer's Blackbird (*Euphagus cyanocephalus*)

Brown-headed Cowbird (*Molothrus ater*)

FAMILY: MIMIDAE (Mockingbirds and Thrashers)

Northern Mockingbird (*Mimus polyglottos*)

FAMILY: PASSERELLIDAE (New World Sparrows)

Lincoln's Sparrow (*Melospiza lincolnii*)

Dark-eyed Junco (*Junco hyemalis*)

*House Sparrow (*Passer domesticus*)

Savannah Sparrow (*Passerculus sandwichensis*)

White-crowned Sparrow (*Zonotrichia leucophrys*)

FAMILY: STURNIDAE (Starlings)

European Starling (*Sturnus vulgaris*)

FAMILY: TYRANNIDAE (Tyrant Flycatchers)

Say's Phoebe (*Sayornis saya*)

Western Kingbird (*Tyrannus verticalis*)

CLASS: MAMMALIA

ORDER: CARNIVORA (Carnivores)

FAMILY: CANIDAE (Foxes, Wolves, and Relatives)

*Coyote (*Canis latrans*)



Domestic/Feral Dog (*Canis lupus*)

Red Fox (*Vulpes vulpes*)

FAMILY: PROCYONIDAE (Raccoons and Relatives)

Raccoon (*Procyon lotor*)

FAMILY: MUSTELIDAE (Weasels, Badgers, and Relatives)

Striped Skunk (*Mephitis mephitis*)

FAMILY: FELIDAE (Cats)

Domestic/Feral Cat (*Felis catus*)

ORDER: CHIROPTERA (Bats)

FAMILY: MOLOSSIDAE (Free-tailed Bat)

Brazilian Free-tailed Bat (*Tadarida brasiliensis*)

FAMILY: VESPERTILIONIDAE (Vespertilionid Bats)

Big Brown Bat (*Eptesicus fuscus*)

Yuma Myotis (*Myotis yumanensis*)

Long-eared Myotis (*Myotis evotis*)

Fringed Myotis (*Myotis thysanodes*)

Long-legged Myotis (*Myotis volans*)

California Myotis (*Myotis californicus*)

Small-footed Myotis (*Myotis leibii*)

Western Pipistrelle (*Pipistrellus hesperus*)

ORDER: INSECTIVORA (Shrews and Moles)

FAMILY: SORCIDAE (Shrews)

Ornate shrew (*Sorex ornatus*)

FAMILY: TALPIDAE (Moles)

Broad-footed Mole (*Scapanus latimanus*)

ORDER: MARSUPIALIA (Opossums, Kangaroos, and Relatives)

FAMILY: DIDELPHIDAE (Opossums)

Virginia Opossum (*Didelphis virginiana*)

ORDER: RODENTIA (Squirrels, Rats, Mice, and Relatives)

FAMILY: CRICETIDAE (Deer Mice, Voles, and Relatives)

California Vole (*Microtus californicus*)

Deer Mouse (*Peromyscus maniculatus*)

Western Harvest Mouse (*Reithrodontomys megalotis*)

FAMILY: GEOMYIDAE (Pocket Gophers)

Botta's Pocket Gopher (*Thomomys bottae*)

FAMILY: HETERONIDAE (Kangaroo Rats and Pocket Mice)

Heermann's Kangaroo Rat (*Dipodomys heermanni*)

FAMILY: MURIDAE (Old World Rats and Mice)

Norway Rat (*Rattus norvegicus*)

House Mouse (*Mus musculus*)

FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)

*California Ground Squirrel (*Spermophilus beecheyi*)



APPENDIX D: SELECTED PHOTOGRAPHS OF THE PROJECT SITE



Photo 1. Overview of ruderal grassland and entire project site. Photo taken from southwest corner facing northeast.



Photo 2. Close-up of active California ground squirrel burrow complex in grassland.



Photo 3. Overview of east side of ruderal grassland adjacent to commercial building (Tractor Supply).



Photo 4. Overview of project site from West Hayden Ave. facing south.

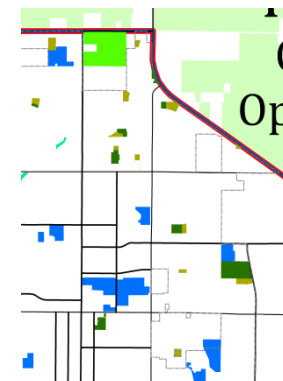
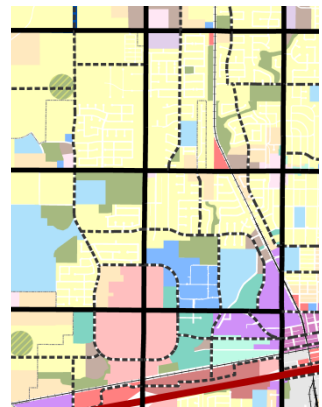
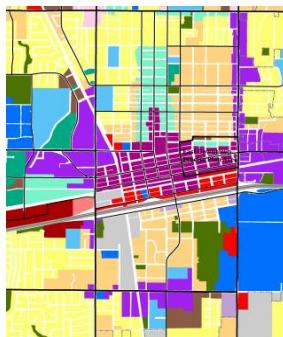


APPENDIX E: CITY OF HANFORD, KINGS COUNTY, PLAN POLICIES

2035 General Plan

Policy Document

City of Hanford



POLICY DOCUMENT

CITY OF HANFORD
2035 GENERAL PLAN UPDATE

Prepared for:



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Adopted April 24, 2017

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CHAPTER 1

INTRODUCTION

1.1 Purpose of the General Plan

A general plan is the foundation for establishing a local community’s purposes regarding land use, major transportation routes, and general location and size of future community facilities. It expresses the community’s development goals and embodies public policy relative to the distribution of future land uses. All other city policies must be consistent with the general plan. A city’s general plan has often been referred to as a city’s constitution for its growth and development.

Every city and county in California is required to prepare and maintain a general plan. A general plan states a desired vision for the community’s future. It contains policies that guide the way land is developed and used. State law requires that each city adopt a general plan “for the physical development of a city and any land outside its boundaries which bears relation to its planning.”

Hanford’s General Plan is long-range in scope, planning out to the year 2035. Its goals and policies are general in nature, but also comprehensive, and are intended to guide Hanford for the next 20 years. Since actions by the City of Hanford must be consistent with the General Plan, regular on-going use of the Plan is essential. The General Plan can be amended by the City Council up to four times per year, but best practices suggest that amendments should occur infrequently.

1.2 Organization of the General Plan

1.2.1 General Plan Volumes

The Hanford General Plan is comprised of a number of volumes that together make up the General Plan. The **General Plan Background Report** summarizes information on the issues addressed in the General Plan, focusing on existing conditions and trends as they existed in the year 2013 when the General Plan Update process began.

The **General Plan Policy Document** includes goals, policies, maps, and tables that describe how Hanford plans to grow and develop during the Planning period, which is 2015 to 2035. This document contains all the required elements of the General Plan, with the exception of Housing and Air Quality.

A document containing Hanford's **Housing Element** was prepared and adopted separately from the rest of the General Plan due to its State mandated deadlines for adoption. Hanford has historically joined Kings County, Corcoran, Lemoore, and Avenal in preparing a combined Housing Element. A combined Housing Element document was adopted for the years 2009 to 2014. An updated Housing Element was adopted in 2016 for the time period between January 2016 and January 2024.

A document containing Hanford's **Air Quality Element** was prepared and adopted in 2010. No updates to this document were necessary when the rest of the General Plan was updated in 2017.

1.2.2 Required General Plan Elements

There are seven State-mandated elements in a general plan. They are land use, circulation, housing, open space, conservation, noise, and safety. Cities within the San Joaquin Valley are also required to have an air quality element. Hanford's General Plan also contains an economic development element and a public facilities and services element. All elements of the General Plan have equal weight and status. One element is not superior to any other. The goals and policies within each element are consistent with each other and with the goals and policies in the other elements of the General Plan.

The general plan's maps, diagrams, and development policies form the basis for the zoning ordinance, subdivision ordinance, design guidelines, and the capital improvement program – tools which implement the general plan. Under California law, no specific plan, zoning, subdivision map, or public works project may be approved unless the City finds that it is consistent with the adopted general plan.

The **land use element** designates the type, intensity, and general distribution of uses of the land for housing, business, industry, open space, education, public buildings and grounds, waste disposal facilities, and other categories of public and private uses. The land use element is found mostly in Chapter 3 of both the Background Report and the Policy Document.

The **circulation element** is correlated with the land use element and identifies the general location and extent of existing and proposed major thoroughfares, transportation routes, and terminals for all modes of transportation. The circulation element is found mostly in Chapter 4 of both the Background Report and the Policy Document.

The **housing element** is a comprehensive assessment of current and projected housing needs for all segments of the community and all economic groups. In addition, it embodies policies for providing adequate housing and includes action programs for that purpose. By statute, the housing element must be updated and certified on a schedule set by the State Housing and Community Development Department. The housing element is prepared as a separate document in conjunction with the County of Kings, and the cities of Lemoore, Corcoran, and Avenal.

The **conservation element** addresses the conservation, development, and use of natural resources, including water and soils. The conservation element is found mostly in Chapter 5 of both the Background Report and the Policy Document. This chapter also contains goals and policies for parks and recreation.

The **open space element** describes measures for preserving open-space for natural resources, the managed production of resources, outdoor recreation, and agricultural land. The open space element is also found mostly in Chapter 5 of both the Background Report and the Policy Document.

The **noise element** identifies and appraises noise problems within the community and forms the basis for land use distribution. The noise element is found mostly in Chapter 7 of both the Background Report and the Policy Document.

The **safety element** establishes policies and programs to protect the community from risks associated with seismic, geologic, flood, extreme heat, and fire hazards. The safety element is found mostly in Chapter 7 of both the Background Report and the Policy Document.

The **economic development element** identifies trends in the local economy and sets general direction for improving the community’s economic sustainability and prosperity. The economic development element is found mostly in Chapter 2 of both the Background Report and the Policy Document.

The **public facilities and services element** identifies publicly owned facilities and service infrastructure. It sets policies to facilitate continued service to the community as it grows and develops. It sets a general direction for citywide school site planning, law enforcement and fire protection services, sewer and water infrastructure, and other local public facilities and buildings. The public facilities element is found mostly in Chapter 6 of both the Background Report and the Policy Document.

1.2.3 Relationship of General Plan to Other City Policies, Plans, and Ordinances

The General Plan is the overarching document for all of the City’s policies, plans, and ordinances. A number of the policies in the General Plan require the City of Hanford to prepare and maintain other more detailed plans, such as a sewer master plan or a zoning ordinance. The General Plan sets a general policy direction while the more detailed plans and ordinances serve to implement the goals and policies of the General Plan. They cannot be inconsistent with the General Plan. For example, the location of zoning designations in the Zoning Ordinance must be consistent with the land use designations in the General Plan. Similarly the locations planned for new sewer lines in the sewer master plan must be consistent with the areas planned in the General Plan for new growth, and the City’s capital improvements plan cannot budget money to build a major thoroughfare that is not shown in the General Plan.

1.2.4 Organization of Policy Document

The City’s General Plan is intended to be used by all members of the Hanford community, including residents, businesses, land developers, City staff, Planning Commissioners, and Councilmembers. The General Plan is composed of both text, maps, and tables. The text includes statements of goals and policies, some of which determine how the maps are to be drawn. The maps define the goals and policies in pictorial form. The General Plan is intended to present a clear and concise statement of the City’s goals and policies regarding the physical growth and development of Hanford. Some of the goals and policies have been carried over from the previous General Plan. For this General Plan, goals and policies are defined as follows:

- A **goal** is a description of the general desired result that the City of Hanford seeks to achieve through the implementation of its General Plan.
- A **policy** is a specific statement that regulates activities of the City, guides decision making, and directs on-going efforts toward the achievement of the goals. The policies set out the general standards that will be used by the City of Hanford in their review of land development projects and in their own City actions related to the physical development of Hanford.

In the Policy Document, goals are grouped under a topic heading and then numbered consecutively in each chapter with the first letter of the chapter's title preceding the number. For example, the first two goals of the Economic Development chapter (Chapter 2) are written as:

Economic Development and Employment Goals

Goal E1: A diverse and robust local economy capable of providing employment for all residents desiring to work in the city.

Goal E2: A diversity of commercial and industrial enterprises which provide goods, services, and employment opportunities consistent with Hanford's small-town, agricultural image.

Policies are also numbered consecutively with the first letter of the chapter's title preceding the number. Each policy has a topic heading. For example, the first two policies of the Land Use chapter (Chapter 3) are written as:

Policy L1 Planned Area Boundary

Designate a Planned Area Boundary to serve as the limits of the area to be planned for urban development.

Policy L2 2035 Growth Boundary

Designate a 2035 Growth Boundary to serve as the limits of the area to be developed with urban uses during the 2015 to 2035 planning period. Locate the 2035 Growth Boundary along major roadways and other natural or manmade physical features that can serve as a physical boundary between urban and agricultural uses.

1.3 Public Participation and General Plan Adoption Process

1.3.1 Public Participation Process

At the beginning of the General Plan Update process, a Public Participation Plan was prepared to guide the process of collaborating with the general public on the contents of the General Plan. A key component was the creation of a Citizen's Advisory Committee (CAC) by the City Council. The CAC was composed of approximately 20 individuals who either lived or owned property in Hanford. The City Council

appointed individuals to the CAC based upon their past civic participation and/or their particular knowledge or expertise in a certain aspect of Hanford. During the process of updating the General Plan, the CAC met at the Hanford City Hall roughly once every other month (sometimes more) for scheduled meetings between November 2013 and September 2015. These meetings were open to the public and were conducted under the rules of the Brown Act, with agendas and minutes prepared and distributed for each meeting. The CAC played a key role in the preparation of both the Background Report and the Policy Document of the General Plan. Their input guided both City planning staff and the City’s planning consultant in developing the goals and policies that are included in the General Plan.

Besides the opportunities provided for the public to comment at the CAC meetings, Planning Commission meetings, and City Council meetings, the City staff and the City’s planning consultant met with groups and individuals to receive additional input on the contents of the General Plan. Some of these group meetings included Hanford Chamber of Commerce events and a public outreach booth at the Hanford Thursday Night Marketplace in September 2014.

1.3.2 Adoption Process

Adoption of the General Plan is considered a quasi-legislative act of the City Council. In considering this General Plan, the City’s Planning Commission and City Council reviewed the document and its accompanying Environmental Impact Report (EIR). The Planning Commission reviewed the EIR and draft General Plan at a public hearing on March 14, 2017, and recommended that it be adopted. The draft General Plan was then reviewed by the City Council at a public hearing on April 18 and April 24, 2017. The City Council certified the EIR and subsequently voted to adopt the General Plan on April 24, 2017. The public was given opportunity to speak and comment on the draft General Plan at both the Planning Commission hearing on March 14th and the City Council hearing on April 18th.

1.3.3 General Plan Amendment Procedures

It is recognized that there will be instances where the General Plan may need to be amended. State law allows general plans to be amended up to four times per year, although best practices encourage that amendments be infrequent. Amendments must be adopted in accordance with State law, and cannot be inconsistent with other portions of the General Plan. Every proposal to amend the General Plan must be reviewed at a public hearing by the Planning Commission, who will make a recommendation regarding the proposed amendment. The City Council must then review the proposed amendment, along with the Planning Commission’s recommendation, at a public hearing and either approve or deny the proposed amendment.

Proposed amendments to the locations of land use designations on the Hanford General Plan Map may be directly initiated by the property owner(s) within the area of the proposed amendment, consistent with procedures established by the Community Development Director. All other amendments must be initiated by a vote of the City Council after being requested either by City staff or any individual making a formal request consistent with procedures established by the Community Development Director. Initiation of an amendment by the City Council has the effect of directing City staff to evaluate the proposed amendment,

prepare necessary environmental reviews, and bring a recommendation to the Planning Commission and City Council. Initiation by itself is not intended to indicate support for the proposed amendment. The City Council has the option to not initiate proposed amendments that are brought before them.

1.4 Hanford’s Overarching Principles

Hanford is a unique community that has become what it is today through the innumerable decisions made over many years by the individuals, groups, and businesses that have chosen to make Hanford their home, and who have chosen to invest their time, money, and efforts in its success. Over time, sometimes by purpose, and sometimes without specific intention, a number of shared overarching principles have emerged that are generally accepted by the majority of the Hanford community. Many of these principles were discussed at meetings held during the preparation of this General Plan. Many others can be seen in the City of Hanford’s description of itself and its purpose on the City of Hanford official website.

These principles have served as a guide in formulating the goals and policies of the General Plan. The principles are listed in a matrix in Table 1-1. The table illustrates how each principle is related to the elements in the General Plan. The red X’s in the matrix identify principles that are especially important to the development of that element. The principles related to each element will be stated again at the introduction of each chapter in the Policy Document.

Table 1-1 Hanford's Overarching Principles	<i>Economic Development</i>	<i>Land Use</i>	<i>Circulation</i>	<i>Open Space, Cons. & Rec.</i>	<i>Public Facilities & Services</i>	<i>Health & Safety</i>	<i>Housing</i>	<i>Air Quality</i>
A prosperous community	X	X	X	X	X	X	X	X
Opportunities for housing and jobs that benefit the existing and future community	X	X					X	X
Enhancement of small town charm	X	X		X			X	
Facilitation of a successful business environment	X	X						
Downtown area as the physical, cultural, civic, and commercial center of Hanford	X	X	X		X		X	X
Hanford as the regional commercial, service, and government center of Kings County	X	X	X					
Diversification of Industry	X	X						
Enhancement of quality of life	X	X	X	X	X	X	X	X
Orderly growth and development, concentrically located around the historic center of the City	X	X	X		X		X	X
Responsible management of land resources		X		X		X	X	
Coordinated land use and circulation systems		X	X					
Respect for private property rights	X	X	X	X		X		
Enhancement of the historic center of the City	X	X	X	X	X	X	X	X
Preservation of farmland resources	X	X		X		X	X	
A well-designed, physically integrated, livable community	X	X	X	X	X	X	X	X
Safe, reliable, efficient movement of people and goods	X		X			X		
Less reliance on private motorized transportation		X	X			X		X
Safe and secure recreational facilities				X		X		
Superior, innovative recreational opportunities				X		X		
Collaborative local government relationship with citizens	X	X		X	X			
Protection and preservation of natural, cultural, and historic resources		X		X		X		X
Respectful provision of government services					X			
Efficient provision of utility services					X			
Clean, useable city facilities					X			
Safety, peace of mind, and high quality of life	X	X				X		
Protection from conditions that would pose a threat to life, environment, and property						X		
Safe, swift, and efficient response to emergencies			X			X		
Healthy and active citizens		X		X		X		

5.4.2 Water Pollution Prevention

Hanford’s storm drain system prevents flooding by channeling rainwater runoff into collection basins interspersed throughout the City. Oil, pesticides, and other residues in runoff can contaminate stormwater. Wastes that people pour directly into the drains or creeks are other sources of stormwater pollution.

Policy 030 Storm Water Pollution Prevention

Implement the NPDES Stormwater Permit and for those properties exempt from the Permit, require a storm water pollution prevention plan, including use of best management practices, to control erosion and sedimentation during construction.

5.5 Biological Resources

Although not common, it is possible that the Planning Area could be inhabited by rare, threatened, or endangered species. There are also resources as such as wetlands and oak trees that could be disturbed by new development activity that results from city growth. Such disturbance would also have the potential to adversely affect species that inhabit these types of areas, including various amphibians, mammals, song birds, and raptors. Endangered or threatened species potentially within the Planning Area include the hoary bat, Swainson’s hawk, Western pond turtle, and San Joaquin Kit fox.

Biological Resources Goal

Goal 04: Protection of natural habitat and other biological resources.

5.5.1 Natural Habitat

Naturally occurring vegetation has recreational, educational, and aesthetic values to the entire community. Hanford is substantially surrounded by improved farmland and very little of the original habitat remains undisturbed around the City. As the City grows, the need for preservation of the valuable diversity of species becomes increasingly important.

Policy 031 Provision of Open Space Areas

Preserve and enhance natural open space areas.

Policy 032 Wetland and Riparian Corridors

Where appropriate and feasible, establish permanent mechanisms to protect wetlands and riparian corridors.

Policy 033 Vernal Pools

Identify and protect vernal pools that may be located in the Planning Area.

Policy 034 Recreation and Sensitive Habitat

Avoid the potential negative impacts of increased human activity on sensitive habitat areas when establishing new recreational facilities or programs.

Policy 035 Impacts from Development

Ensure that potential impacts to biological resources and sensitive habitat are carefully evaluated when considering development projects.

Policy 036 Nonnative Invasive Species

Manage or eliminate nonnative invasive species from City-owned property and open space.

Policy 037 Mature Trees

Promote the preservation of existing mature trees and encourage the planting of appropriate shade trees in new developments.

Policy 038 Native Tree Species and Drought Tolerant Vegetation

Encourage the planting of native tree species and drought-tolerant vegetation.

5.5.2 Wildlife and Sensitive Species

Naturally occurring wildlife have recreational, educational, and aesthetic values to the entire community. Hanford is substantially surrounded by improved farmland and very little of the original habitat remains undisturbed around the City. As the City grows, the need for preservation of the valuable diversity of species becomes increasingly important.

Policy 039 Endangered Wildlife and Habitat

Establish programs in connection with environmental review processes to protect endangered wildlife and their habitats.

Policy 040 Sensitive Wildlife

Work with state, federal, and local agencies on the preservation of sensitive wildlife species in the City.

5.6 Historical and Cultural Resources

Historic preservation greatly enhances a community's overall sense of place and quality of life. Not only does it help residents and visitors appreciate local history, but it also helps to revitalize and stabilize downtowns, business districts, and neighborhoods. Historic preservation efforts can also produce local jobs, promote heritage tourism, and increase local property values.

GLOSSARY

Acres, Gross	The entire acreage of a site, calculated to the centerline of proposed bounding streets and to the edge of the right-of-way of existing or dedicated streets.
Acres, Net	The portion of a site that can actually be built upon. Public or private road rights of way, and public open space are not included in the net acreage of a site.
Area of Interest.	A geographic area within the Hanford sphere of influence that is integral to Hanford's future city planning even though no specific land uses are designated.
Bikeway	A term that encompasses bicycle paths (Class 1), bicycle lanes (Class 2), and bicycle routes (Class 3.)
Brownfield	An area with abandoned, idle, or under-used industrial and commercial facilities where expansion, redevelopment, or reuse is complicated by real or perceived environmental contamination.
Capital Improvements Program (CIP)	A program administered by the City of Hanford that schedules permanent improvements, usually for a minimum of five years into the future, to fit the projected fiscal capability of the local jurisdiction.
City Limits	The defined boundary or border of a city.
Complete Street	A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists - appropriate to the function and context of the facility.
Concentric Growth	Orderly growth outward from the center of the downtown core that maintains the downtown at the physical center of the city.
Conservation	The management of natural resources to prevent waste, destruction, or degradation.
CPTED	Crime Prevention Through Environmental Design - a multi-disciplinary approach to deterring criminal behavior through the physical design of the built environment. CPTED strategies rely on the ability to influence offender decisions that precede criminal acts.

Developed Land	“Developed land” is land that is occupied by a permanent structure, or as in the case of a park, is developed for its intended use.
Endangered Species	A species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes.
Environmental Justice	The fair treatment and meaningful participation of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of new development, public facilities, and/or infrastructure.
General Plan	A document with a comprehensive declaration of purposes, policies and programs for the development of the city and including, where applicable, diagrams, maps and text setting forth objectives, principles, standards, and other features, and which have been adopted by the city council.
Goal	A general, overall, and ultimate purpose, aim, or end toward which the City will direct effort.
Holding Capacity	The holding capacity is the number of dwelling units that a given area can accommodate based on its acreage and the development density permitted.
Infill	Any parcel or group of parcels that is vacant or underdeveloped and surrounded by development on 75% of its perimeter. Infill sites may include previously developed sites that may/will be redeveloped.
Level of Service	Level of Service (LOS) is a letter grade given to an intersection or road segment that indicates the quality of traffic service in terms of speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
Planning Area	The area of land directly addressed by the general plan.
Policy	A specific statement of guiding action or actions that implies clear commitment. A general direction that a governmental agency sets to follow, in order to meet its stated goals.
Principle	An assumption, fundamental rule, or doctrine that is generally accepted by the majority of the community.
Sphere of Influence	The probable ultimate physical boundaries and service area of the City, as determined by the Local Agency Formation Commission (LAFCO) of the county.
Traffic Calming	The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alters driver behavior, and improves conditions for non-motorized street users.”
Underutilized Land	“Underutilized Land” is land with a structure or structures that occupy only a small portion of the land and are being used significantly below its potential use.

Undeveloped Land	“Undeveloped Land” is land that is mostly vacant of structures and is currently unused for any purpose or is being used for agricultural or natural open space use.
Walkability	A measure of how attractive an area is to pedestrians; it takes into account the presence or absence and quality of sidewalks, traffic and road conditions, land use patterns, and perceived safety.

Appendix C

Cultural Records Search Results



To: Molly Baumeister
4Creeks, Inc.
324 S. Santa Fe Ste A
Visalia, CA 93292

Record Search 22-375

Date: October 10, 2022

Re: Family Health Care Network (22437)

County: Kings

Map(s): Hanford 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP 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.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there have been two previous cultural resource studies conducted within the project area: KI-00042, 00192. There have been seven cultural resource studies conducted within the the one-half mile radius: KI-00028, 00109, 00110, 00111, 00203, 00310, & 00320. It should be noted that the cultural resources studies conducted within the project area are greater than five years in age, with the most current report being greater than 15 years in age. These reports should be considered out of date for current studies.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area, and it is unknown if any exist there. There are two recorded resources in the one-half mile radius: P-16-000122, 000246. These resources consist of a railroad, and historic ditch.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project involves the construction of a 15,000 sq. ft. medical clinic, 69 parking spaces, internal drive aisles, a bioswale for stormwater retention, new and relocated utilities, and infrastructure improvements along the frontage of 12th Avenue and Hayden Drive. Further, we understand there are no existing structures, and the project area is vacant. Due to changes in field methods and technology, the Information Center routinely recommends a new study when the previous one was conducted more than five years ago. Therefore, we recommend a qualified, professional archaeologist conduct a field survey prior to ground disturbance activities to determine if cultural resources are present. If any cultural resources are unearthed during any ground disturbance activities, all work must halt in the area of the find and a qualified, professional consultant should be called out to assess the findings and make the appropriate mitigation recommendations. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:



Jeremy E David, Assistant Coordinator

Date: October 10, 2022

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Appendix D

Energy Calculations

Construction Equipment Energy Use

Phase Name	Off Road Equipment Type	Off Road Equipment Unit Amount ¹	Usage Hours Per Day ¹	Horse Power (lbs/sec) ¹	Load Factor ¹	Total Operational Hours	BSFC ²	Fuel Used (gallons) ³	MBTU ⁴
Architectural Coating	Air Compressors	1	6.00	78	0.48	30	0.408	64.46	8.96032
Paving	Cement and Mortar Mixers	4	6.00	9	0.56	120	0.408	34.71	4.824788
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73	80	0.408	271.49	37.73673
Building Construction	Cranes	1	4.00	231	0.29	400	0.367	1383.34	192.2836
Building Construction	Forklifts	2	6.00	89	0.20	1200	0.408	1225.89	170.3993
Grading	Graders	1	6.00	187	0.41	12	0.367	47.50	6.602054
Site Preparation	Graders	1	8.00	187	0.41	8	0.367	31.66	4.401369
Paving	Pavers	1	7.00	130	0.42	35	0.367	98.65	13.71302
Paving	Rollers	1	7.00	80	0.38	35	0.408	61.07	8.488053
Demolition	Rubber Tired Dozers	1	1.00	247	0.40	10	0.367	51.01	7.089723
Grading	Rubber Tired Dozers	1	6.00	247	0.40	12	0.367	61.21	8.507668
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37	1600	0.408	3295.68	458.0996
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37	120	0.408	247.18	34.35747
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37	14	0.408	28.84	4.008371
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37	35	0.408	72.09	10.02093
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37	8	0.408	16.48	2.290498
Total								6991.25	971.78

Construction Phases

PhaseNumber	Phase Name	Phase Type	Phase Start Date	Phase End Date	Num Days Week	Total Number of Days
1	Demolition	Demolition	6/1/2023	6/14/2023	5	10
2	Site Preparation	Site Preparation	6/15/2023	6/15/2023	5	1
3	Grading	Grading	6/16/2023	6/19/2023	5	2
4	Building Construction	Building Construction	6/20/2023	11/6/2023	5	100
5	Paving	Paving	11/7/2023	11/13/2023	5	5
6	Architectural Coating	Architectural Coating	11/14/2023	11/20/2023	5	5

Notes

1. CalEEMod Default Values Used
2. BSFC - Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367
3. Fuel Used = Load Factor x Horsepower x Total Operational Hours x BSFC / Unit Conversion
4. MBTU calculated for comparison purposes. Assumed 1 gallon of diesel = 0.139 MBTU

Mobile Energy Use (Construction)

Worker Trips

	Daily Worker Trips ¹	Worker Trip Length ¹	VMT/Day	MPG Factor (EMFAC2017)	Gallons of Gas/Day	# of Days	Total Gallons of Gas	MBTU
Demolition	10	10.8	108	29.23	3.7	10	36.9	4.289333
Site Preparation	5	10.8	54	29.23	1.8	1	1.8	0.214467
Grading	8	10.8	86.4	29.23	3.0	2	5.9	0.686293
Building Construction	16	10.8	172.8	29.23	5.9	100	591.2	68.62933
Paving	18	10.8	194.4	29.23	6.7	5	33.3	3.8604
Architectural Coating	3	10.8	32.4	29.23	1.1	5	5.5	0.6434
Total	N/A	N/A	N/A	N/A	N/A	123	674.7	78.32322

Vendor Trips

	Daily Vendor Trips	Vendor Trip Length	VMT/Day	MPG Factor	Gallons of Diesel/Day	# of Days	Total Gallons of Diesel	MBTU
Building Construction	7	7.3	51.1	8.43	6.1	100	606.168446	84.25741

Hauling Trips

	Daily Hauling Trips	Hauling Trip Length	VMT/Day	MPG Factor	Gallons of Gas/Day	# of Days	Total Gallons of Diesel	MBTU
Demolition	0	20	0	8.43	0.0	10	0	0

Fleet Characteristics

	Vehicle Class	Fleet Mix	2024 MPG Factor (EMFAC2017)	Average MPG Factor
Assumed Vehicle Fleet for Workers	LDA	33%	33.24	29.23
	LDT1	33%	28.07	
	LDT2	33%	26.38	
Assumed Vehicle Fleet for Vendor Trips	MHD	50%	9.74	8.43
	HHD	50%	7.12	

Notes

1. CalEEMod Default values used
2. MBTU calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.11609 MBTU

Mobile Energy Use (Operations)

Total Annual VMT from Project (CalEEMod)	491,388
--	---------

Fleet Mix & Fuel Calculations

Vehicle Class	Proportion of Fleet Mix ¹	Annual VMT by Vehicle Class	Proportion of vehicle class using gas or diesel (EMFAC2021) ²		Annual VMT by Vehicle Class and Fuel Type		Fuel Efficiency (MPG) by Vehicle Class and Fuel Type (EMFAC2021)		Annual Fuel Use from Project (gallons)		MBTU/Year ³
			Gas	Diesel	Gas	Diesel	Gas	Diesel	Gas	Diesel	
LDA	50.44%	247838.9	100%	0%	247384.41	454.50	28.92	42.70	8553.0	10.6	994.4
LDT1	5.14%	25269.1	100%	0%	25259.79	9.34	23.79	24.66	1062.0	0.4	123.3
LDT2	16.85%	82820.5	100%	0%	82553.29	267.21	23.27	32.65	3548.3	8.2	413.1
MDV	16.40%	80584.2	98%	2%	79309.43	1274.76	18.87	23.72	4203.5	53.7	495.5
LHD1	2.99%	14667.9	50%	50%	7318.98	7348.95	9.67	15.77	756.6	466.0	152.6
LHD2	0.67%	3314.4	27%	73%	897.19	2417.22	8.58	13.15	104.5	183.9	37.7
MHD	0.83%	4063.3	18%	82%	725.35	3337.94	4.80	8.78	151.1	380.1	70.4
HHH	3.67%	18010.8	0%	100%	3.96	18006.89	3.37	6.22	1.2	2896.5	402.8
OBUS	0.06%	304.7	63%	37%	192.97	111.69	4.79	6.96	40.3	16.1	6.9
UBUS	0.02%	92.9	64%	36%	59.87	33.01	8.41	12.12	7.1	2.7	1.2
MCY	2.47%	12125.0	100%	0%	12125.00	0.00	40.47	NA	299.6	0.0	34.8
SBUS	0.12%	566.1	38%	62%	214.89	351.19	9.83	8.13	21.9	43.2	8.5
MH	0.35%	1729.7	65%	35%	1129.59	600.10	4.41	9.39	255.9	63.9	38.6
Total	100.00%	491387.5			457174.72	34212.79	14.55		19005	4125	2779.7

Fleet Characteristics

21.2

Source: EMFAC 2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: Tulare County
Calendar Year: 2028
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

GASOLINE

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT (Annual)	Trips (Annual)	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
Kings County	2025	HHDT	Aggregated	Aggregated	GAS	2	164	36	0.0486	49	3.37
Kings County	2025	LDA	Aggregated	Aggregated	GAS	62800	2580000	292000	89.2	89200	28.92
Kings County	2025	LDT1	Aggregated	Aggregated	GAS	5590	186000	24100	7.82	7820	23.79
Kings County	2025	LDT2	Aggregated	Aggregated	GAS	29000	1140000	135000	49	49000	23.27
Kings County	2025	LHDT1	Aggregated	Aggregated	GAS	2670	97700	39800	10.1	10100	9.67
Kings County	2025	LHDT2	Aggregated	Aggregated	GAS	336	12100	5010	1.41	1410	8.58
Kings County	2025	MCY	Aggregated	Aggregated	GAS	3370	19100	6750	0.472	472	40.47
Kings County	2025	MDV	Aggregated	Aggregated	GAS	27500	983000	125000	52.1	52100	18.87
Kings County	2025	MH	Aggregated	Aggregated	GAS	356	3200	36	0.725	725	4.41
Kings County	2025	MHDT	Aggregated	Aggregated	GAS	176	10800	3520	2.25	2250	4.80
Kings County	2025	OBUS	Aggregated	Aggregated	GAS	73	3870	1460	0.808	808	4.79
Kings County	2025	SBUS	Aggregated	Aggregated	GAS	28	1750	110	0.178	178	9.83
Kings County	2025	UBUS	Aggregated	Aggregated	GAS	12	497	47	0.0591	59	8.41

DIESEL

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption (1000 gal/year)	Annual Fuel Consumption (gallons)	MPG
Kings County	2025	HHDT	Aggregated	Aggregated	DSL	4890	746000	88700	120	120000	6.22
Kings County	2025	LDA	Aggregated	Aggregated	DSL	159	4740	658	0.111	111	42.70
Kings County	2025	LDT1	Aggregated	Aggregated	DSL	4	69	12	0.00279	3	24.66
Kings County	2025	LDT2	Aggregated	Aggregated	DSL	88	3690	422	0.113	113	32.65
Kings County	2025	LHDT1	Aggregated	Aggregated	DSL	2760	98100	34700	6.22	6220	15.77
Kings County	2025	LHDT2	Aggregated	Aggregated	DSL	871	32600	11000	2.48	2480	13.15
Kings County	2025	MDV	Aggregated	Aggregated	DSL	424	15800	1950	0.666	666	23.72
Kings County	2025	MH	Aggregated	Aggregated	DSL	196	1700	20	0.181	181	9.39
Kings County	2025	MHDT	Aggregated	Aggregated	DSL	1060	49700	12400	5.66	5660	8.78
Kings County	2025	OBUS	Aggregated	Aggregated	DSL	32	2240	390	0.322	322	6.96
Kings County	2025	SBUS	Aggregated	Aggregated	DSL	135	2860	1950	0.352	352	8.13
Kings County	2025	UBUS	Aggregated	Aggregated	DSL	3	274	14	0.0226	23	12.12

Notes

1. Fleet Mix Provided by CalEEMod

2. Proportion of diesel vs. gasoline vehicles calculated based on total annual VMT for each vehicle class

3. MBTU Calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.116090 MBTU and 1 gallon of diesel = 0.139 MBTU

Summary of Energy Use (Operation)

Mobile Fuel Use	Gal/Year		MMBTU
	Gasoline	19005	22860
	Diesel	4125	567
Electricity Use	kWh/Year		MMBTU
	142260		485
Natural Gas Use	kBTU/Year		MMBTU
	193800		194
Total Operational Energy Use			MMBTU
			24106

Appendix E

VMT Analysis Results



PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Mr. David Duda
4Creeks
324 South Santa Fe Street, Suite A
Visalia, California 93292

October 3, 2022

Subject: Vehicle Miles Traveled Screening
Proposed Medical Clinic
Southeast of the Intersection of 12th Avenue and Hayden Drive
Hanford, California

Dear Mr. Duda:

Introduction

This report presents the results of vehicle miles traveled (VMT) screening for the subject project.

Project Description

The proposed project site is located on APN 011-060-057, southeast of the intersection of 12th Avenue and Hayden Drive in Hanford, California. The proposed building is a 15,000-square-foot medical clinic. Site access will be via one right-in/right-out driveway on 12th Avenue and one driveway connecting to Hayden Drive.

Trip Generation

Empirical data provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (TGM) are used to estimate the number of trips anticipated to be generated by the Project. The TGM presents separate data sets for Medical-Dental Office Building – Stand Alone (ITE Land Use 720) and Clinic (ITE Land Use 630). The description of Medical-Dental Office Building – Stand Alone provided in the TGM is as follows:

“A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility. General office building (Land Use 710) and clinic (Land Use 630) are related uses.”

The description of Clinic provided in the TGM is as follows:

“A clinic is a facility that provides limited diagnostic and outpatient care but is unable to provide prolonged in-house medical and surgical care. A clinic may have a lab facility and supporting pharmacy but typically does

not have the equipment and medical personnel available at an urgent care site. A clinic typically offers a wide range of services which makes it distinct from a medical office building that typically houses specialized or individual physicians. Hospital (Land Use 610), free-standing emergency room (Land Use 650), and medical-dental office building (Land Use 720) are related uses.”

Tables 1 and 2 present trip generation estimates for the Project.

Table 1
Project Trip Generation – ITE Land Use 720

ITE Land Use	Area (sq. ft.)	Daily		A.M. Peak Hour (occurs between 7:00 and 9:00 A.M.)					P.M. Peak Hour (occurs between 4:00 and 6:00 P.M.)				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
720	15,000	36.00	540	3.10	79:21	37	10	47	3.93	30:70	18	41	59

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers 2021*
 Rates are in trips per 1,000 square feet of gross floor area.

Table 2
Project Trip Generation – ITE Land Use 630

ITE Land Use	Area (sq. ft.)	Daily		A.M. Peak Hour (occurs between 7:00 and 9:00 A.M.)					P.M. Peak Hour (occurs between 4:00 and 6:00 P.M.)				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
630	15,000	37.60	564	2.75	81:19	33	8	41	3.69	30:70	16	39	55

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers 2021*
 Rates are in trips per 1,000 square feet of gross floor area.

Vehicle Miles Traveled (VMT)

Senate Bill 743 (Steinberg, 2013), which was codified in California Public Resources Code § 21099, required changes to the guidelines implementing the California Environmental Quality Act (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 1500, et seq.) as to the analysis of transportation impacts. Per Public Resources Code § 21099(b)(1):

“The Office of Planning and Research shall prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, the office shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section.”

In January 2019, the Natural Resources Agency certified the Office of Planning and Research's (OPR) proposed revisions, which resulted in the creation of Section 15064.3 of the CEQA Guidelines. Section 15064.3(a) describes its purpose as:

“This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, ‘vehicle miles traveled’ refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.”

OPR created a Technical Advisory (December 2018) (TA)¹ as guidance for evaluating vehicle miles traveled (VMT) impacts. The TA is incorporated herein by reference. VMT significance thresholds are recommended by OPR beginning on page 8 of the TA. Beginning on page 10 of the TA, OPR states:

“Public Resources Code section 21099 directs OPR to propose criteria for determining the significance of transportation impacts. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in selecting a significance threshold that may be appropriate for their particular projects. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to ‘consider thresholds of significance . . . recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence.’ (CEQA Guidelines, § 15064.7, subd. (c).) Based on OPR's extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State's long-term climate goals, OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold.

“Fifteen percent reductions in VMT are achievable at the project level in a variety of place types. [citing CAPCOA (2010) *Quantifying Greenhouse Gas Mitigation Measures*, p. 55, available at <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>]

“Moreover, a fifteen percent reduction is consistent with SB 743's direction to OPR to select a threshold that will help the State achieve its climate goals. As described above, section 21099 states that the criteria for determining significance must ‘promote the reduction in greenhouse gas emissions.’ In its document *California Air Resources Board 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*¹⁵, CARB assesses VMT reduction per capita consistent with its evidence-based modeling scenario that would achieve State climate goals

¹ https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

of 40 percent GHG emissions reduction from 1990 levels by 2030 and 80 percent GHG emissions reduction levels from 1990 by 2050. Applying California Department of Finance population forecasts, CARB finds per-capita light-duty vehicle travel would need to be approximately 16.8 percent lower than existing, and overall per-capita vehicle travel would need to be approximately 14.3 percent lower than existing levels under that scenario. Below these levels, a project could be considered low VMT and would, on that metric, be consistent with 2017 Scoping Plan Update assumptions that achieve climate state climate goals.”

According to the California Air Resources Board’s (CARB) webpage²:

“Senate Bill 375 requires CARB to develop and set regional targets for greenhouse gas (GHG) emission reductions from passenger vehicles. CARB has set regional targets, indexed to years 2020 and 2035, to help achieve significant additional GHG emission reductions from changed land use patterns and improved transportation in support of the State's climate goals, as well as in support of statewide public health and air quality objectives. Metropolitan planning organizations (MPOs) must prepare a sustainable communities strategy (SCS) that will reduce GHG emissions to achieve these regional targets, if feasible to do so.”

The same CARB webpage identifies a thirteen percent (13%) target for GHG emission reduction from passenger vehicles (indexed to year 2035)³ for the Kings County Association of Governments (KCAG) MPO.

OPR’s recommendation “that a per capita or per employee VMT that is fifteen percent below that of existing development” is a valid threshold for the City of Hanford (City) because it is consistent with CARB’s thirteen percent (13%) GHG vehicle emission reduction target to which KCAG’s members, including the City, are subject. It is reasonable to conclude that a reduction in VMT directly corresponds to a reduction in GHG emissions from passenger vehicles and that a proposed project that is estimated to generate a per capita or per employee VMT that is more than fifteen percent (15%) below that of existing development will result in GHG emission reduction consistent with CARB’s thirteen percent (13%) reduction target for the KCAG metropolitan planning organization (MPO). For purposes of the City’s VMT evaluation efforts, it is appropriate to utilize OPR’s recommended fifteen-percent-below-existing-development VMT threshold because it is consistent CARB’s applicable GHG emission reduction target.

The TA suggests that screening thresholds be utilized to identify projects that are expected to cause a less-than-significant impact. Page 12 of the TA indicates:

“Many agencies use ‘screening thresholds’ to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. (See e.g., CEQA Guidelines, §§ 15063(c)(3)(C), 15128, and Appendix G.) As explained below, this technical advisory suggests that lead agencies may screen out VMT

² <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>

³ <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>

impacts using project size, maps, transit availability, and provision of affordable housing.”

With respect to map-based screening, the TA states:

“Residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are currently below threshold VMT (see recommendations below). Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.”

KCAG created an online VMT mapping tool that identifies VMT per capita and VMT per employee by traffic analysis zone (TAZ). The mapping tool is available at: <https://www.arcgis.com/apps/webappviewer/index.html?id=84b4b47b08ac41af88779212180ff36c>. A print generated using the mapping tool is attached.

The KCAG mapping tool reflects a VMT per employee of 9.31 for the TAZ in which the Project will be located, which is more than fifteen percent (15%) below the County VMT per employee average of 17.7.

KCAG’s mapping tool was created utilizing trip-based transportation models created for the eight (8) San Joaquin Valley MPOs to satisfy the requirements of SB 375. The modeling process is described in the *Documentation for the EIGHT SAN JOAQUIN VALLEY MPO TRAFFIC MODELS TO MEET THE REQUIREMENTS OF SB 375* (August 30, 2012)⁴, which is incorporated herein by reference.

According to Appendix VIII of KCAG’s 2018 Regional Transportation Plan (RTP), the 2012 transportation model was revalidated for a 2015 base year and is described on Appendix VIII page 26 as:

“The KCAG model was revalidated to a 2015 base year for the 2018 RTP. The revalidation included new inventories of base year housing and employment, updates to the road network and transit coverage to reflect recent changes in the transportation system, and updated traffic counts to represent the 2015 base year. The KCAG model traffic validation is based on several criteria, including vehicle-miles of travel, total volume by road type, and percent of links within acceptable limits.”

Revalidation efforts utilized traffic data provided by the City. The RTP, which was adopted by KCAG and can be found at:

https://www.kingscog.org/vertical/Sites/%7BC427AE30-9936-4733-B9D4-140709AD3BBF%7D/uploads/KCAG_2018_RTPSCS_Full_Document.pdf,

and the City’s underlying traffic data are incorporated herein by reference.

⁴ <https://www.mcagov.org/DocumentCenter/View/195/Traffic-Model>

Page 26 of Appendix VIII describes KCAG's VMT projection process as follows:

“Vehicle miles of travel (VMT) were estimated from the travel demand model by multiplying link volumes by link distances. The model estimates intrazonal trips (trips remaining within a TAZ) but does not assign these trips to the model road network. The intrazonal trips were multiplied by the estimated intrazonal distances to calculate intrazonal VMT.”

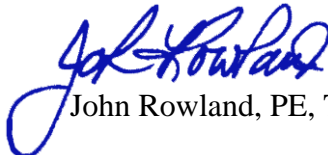
The TA states:

“Of land use projects, residential, office, and retail projects tend to have the greatest influence on VMT. For that reason, OPR recommends the quantified thresholds described above for purposes of analysis and mitigation.”

The KCAG mapping tool indicates that the proposed Project is located in an area of low VMT and may be presumed to cause a less-than-significant transportation impact.

Thank you for the opportunity to provide this VMT screening discussion. Please feel free to contact our office if you have any questions.

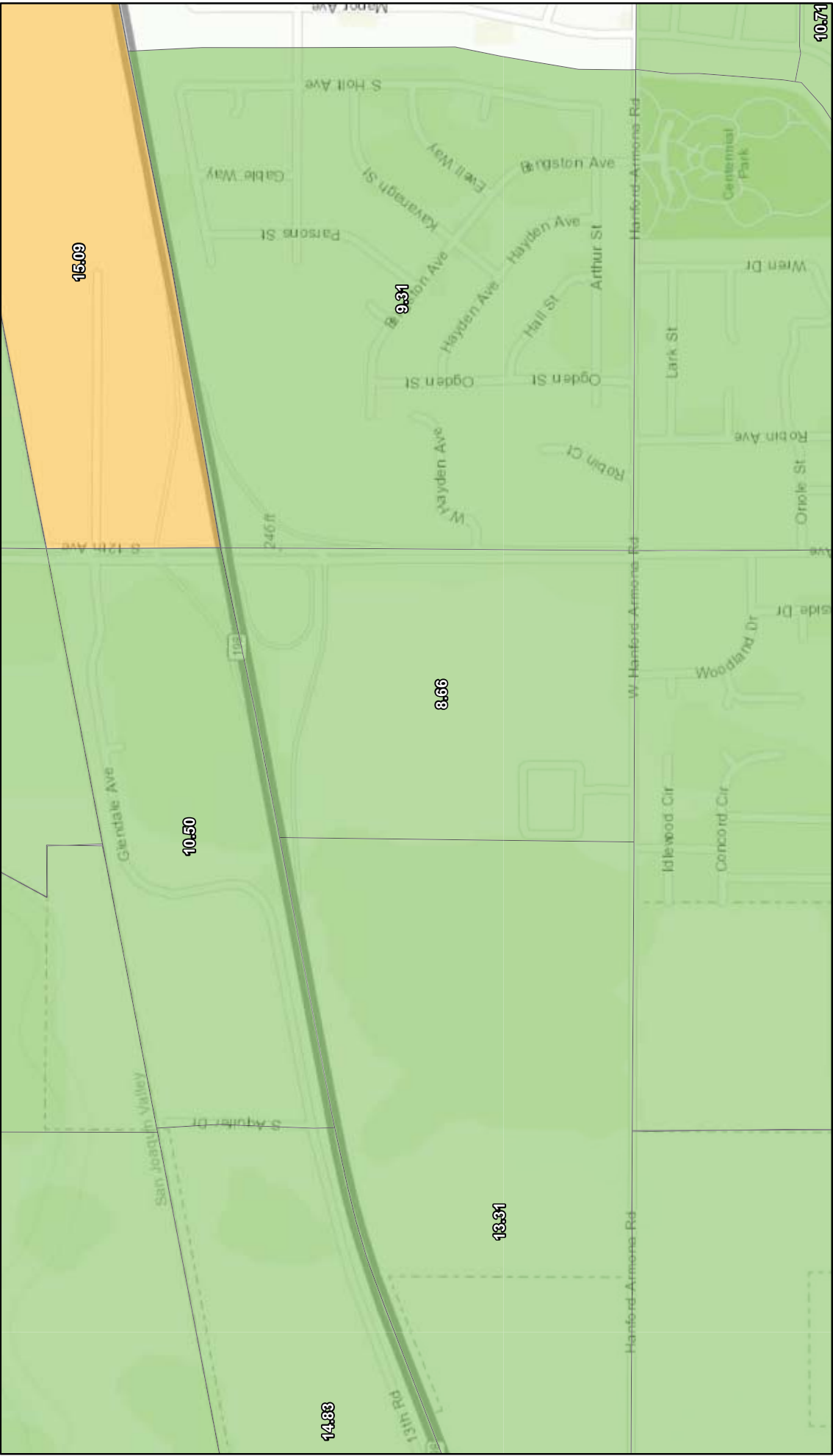
PETERS ENGINEERING GROUP


John Rowland, PE, TE



Attachment: KCAG Screening Tool Output

ArcGIS Web Map



10/3/2022, 11:34:11 AM

Vehicle Miles Traveled per Employee

- < 15.0 (15% or More Below County Average)
- 15.0 - 17.7 (14% Below County Average to Average)

1:9,028



Fresno County Dept. PWP, Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., Intermap, USGS, METI/NASA, EPA, USDA

Appendix F

Traffic Study

TRAFFIC STUDY

Proposed Medical Clinic

***Southeast of the Intersection of
12th Avenue and Hayden Drive***

Hanford, California

Prepared For:

Family HealthCare Network
305 East Center Avenue
Visalia, California 93291

Date:

December 16, 2022

Job No.:

22-072.01



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Mr. Jay Kelly
Family HealthCare Network
305 East Center Avenue
Visalia, California 93291

December 16, 2022

Subject: Traffic Study
Proposed Medical Clinic
Southeast of the Intersection of 12th Avenue and Hayden Drive
Hanford, California

Dear Mr. Kelly:

1.0 INTRODUCTION

This report presents the results of a traffic study for a medical clinic in Hanford, California. This analysis focuses on the anticipated effect of vehicle traffic resulting from the project and traffic operations in the vicinity of the project site.

2.0 PROJECT DESCRIPTION

The proposed project site is located on APN 011-060-057, southeast of the intersection of 12th Avenue and Hayden Drive in Hanford, California. The proposed building is a 15,000-square-foot medical clinic. Site access will be via one right-in/right-out driveway on 12th Avenue and one driveway connecting to Hayden Drive.

A vicinity map is presented in the attached Figure 1, Site Vicinity Map, and a site plan is presented Figure 2, Site Plan, following the text of this report.

3.0 STUDY AREA AND TIME PERIOD

The study locations were determined in consultation with City of Hanford staff. This report includes analysis of the intersections of 12th Avenue and Hayden Drive.

The study time periods are the weekday a.m. and p.m. peak hours determined between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m. The peak hours are analyzed for the following conditions:

- Existing Conditions;
- Existing-Plus-Project Conditions;
- Near-Term With-Project Conditions (includes pending projects), and;
- Cumulative Year 2043 Conditions.

4.0 LANE CONFIGURATIONS AND INTERSECTION CONTROL

The existing lane configurations and intersection control at the study intersection are illustrated in Figure 3, Lane Configurations.

5.0 GENERAL PLAN ROADWAY DESIGNATIONS

The City of Hanford 2035 General Plan designates the roadways at the study intersection as follows:

12th Avenue: arterial street

Hayden Drive: local street

6.0 EXISTING TRAFFIC VOLUMES

Existing traffic volumes were determined by performing manual turning movement counts at the study intersection between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m. The traffic count data sheets are presented in Appendix A and include the date the counts were performed. The existing peak-hour turning movement volumes are presented in Figure 4, Existing Peak Hour Traffic Volumes.

7.0 PROJECT TRIP GENERATION

Data provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, (hereinafter referred to as the TGM), are typically used to estimate the number of trips anticipated to be generated by proposed projects. ITE Land Use 630, Clinic, is described in the TGM as, “A clinic is a facility that provides limited diagnostic and outpatient care but is unable to provide prolonged in-house medical and surgical care. A clinic may have a lab facility and supporting pharmacy but typically does not have the equipment and medical personnel available at an urgent care site. A clinic typically offers a wide range of services which makes it distinct from a medical office building that typically houses specialized or individual physicians.” The average size of the clinics included in the TGM data is on the order of 15,000 to 20,000 square feet. Table 1 presents trip generation estimates for the project.

Table 1
Project Trip Generation Estimate

Land Use	Units	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Clinic (630)	15 ksf	37.60	564	2.75	81:19	33	8	41	3.69	30:70	16	39	55

Reference: *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers 2021

Rates are reported in trips per 1,000 square feet of building area.

ksf = 1,000 square feet

8.0 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of Project trips was estimated based on existing traffic volumes, available routes, complementary land uses, and engineering judgment. The estimated percentage distribution of Project trips is presented in Figure 5, Project Trip Distribution Percentages. The peak-hour Project trips presented in Table 1 were assigned to the adjacent road network

in accordance with the trip distribution percentages in Figure 5. Project traffic volumes at the study intersection are presented in Figure 6, Peak-Hour Project Traffic Volumes.

9.0 EXISTING-PLUS-PROJECT TRAFFIC VOLUMES

Peak-hour existing-plus-Project traffic volumes are presented in Figure 7, Existing-Plus-Project Peak-Hour Traffic Volumes.

10.0 PENDING AND APPROVED PROJECTS

The traffic analyses for the near-term and long-term conditions consider the effects of traffic expected to be generated by pending and approved projects in the study area. The City of Hanford provided a list of projects and the project status that were considered in the near-term and long-term conditions analysis scenarios. The following project was considered:

- Hampton Inn (102 rooms) northeast of the intersection of 12th Avenue and Hayden Drive

11.0 NEAR-TERM WITH-PROJECT TRAFFIC VOLUMES

The near-term with-Project peak-hour turning movement volumes are presented in Figure 8, Near-Term With-Project Peak-Hour Traffic Volumes. The near-term volumes include the existing traffic volumes, trips expected to be generated by the Hampton Inn, and Project trips.

12.0 CUMULATIVE TRAFFIC VOLUMES (YEAR 2043)

Cumulative traffic volumes for the year 2043 were projected based on information obtained from the Kings County travel model maintained by the Kings County Association of Governments (KCAG). The KCAG travel model output is presented in Appendix B. The future traffic volumes were projected utilizing an Increment Method where possible. The Increment Method is applied by taking the difference between the base year and horizon year traffic volumes obtained from the travel model and adding it to the existing traffic volumes. Future turning movements were forecast based on the methods presented in Chapter 8 of the Transportation Research Board National Cooperative Highway Research Program Report 255 entitled “*Highway Traffic Data for Urbanized Area Project Planning and Design.*” A minimum annual growth rate of one percent was maintained on each movement. The year 2043 cumulative traffic volumes are presented in Figure 9, Cumulative (Year 2043) Peak Hour Traffic Volumes.

13.0 OPERATIONAL ANALYSIS CRITERIA

Policy T29 of the City of Hanford 2035 General Plan states: “*Maintain a peak hour Level of Service E on streets and intersections within the area bounded by Highway 198, 10th Avenue, 11th Avenue, and Florinda Avenue, inclusive of these streets. Maintain a peak hour Level of Service D on all other streets and intersections with the Planned Growth Boundary.*”

The Transportation Research Board *Highway Capacity Manual*, 6th Edition, (HCM) defines level of service (LOS) as, “A quantitative stratification of a performance measure or measures that represent quality of service, measured on an A-F scale, with LOS A

representing the best operating conditions from the traveler’s perspective and LOS F the worst.” Automobile mode LOS characteristics for both unsignalized and signalized intersections are presented in Tables 2 and 3.

Table 2
Level of Service Characteristics for Unsignalized Intersections

Level of Service	Average Vehicle Delay (seconds)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Table 3
Level of Service Characteristics for Signalized Intersections

Level of Service	Description	Average Vehicle Delay (seconds)
A	Volume-to-capacity ratio is no greater than 1.0. Progression is exceptionally favorable or the cycle length is very short.	<10
B	Volume-to-capacity ratio is no greater than 1.0. Progression is highly favorable or the cycle length is very short.	>10-20
C	Volume-to-capacity ratio is no greater than 1.0. Progression is favorable or cycle length is moderate.	>20-35
D	Volume-to-capacity ratio is high but no greater than 1.0. Progression is ineffective or cycle length is long. Many vehicles stop and individual cycle failures are noticeable.	>35-55
E	Volume-to-capacity ratio is high but no greater than 1.0. Progression is unfavorable and cycle length is long. Individual cycle failures are frequent.	>55-80
F	Volume-to-capacity ratio is greater than 1.0. Progression is very poor and cycle length is long. Most cycles fail to clear the queue.	>80

Reference for Tables 2 and 3: *Highway Capacity Manual, 6th Edition*, Transportation Research Board, 2016

For purposes of this study, a traffic issue will be recognized if the Project will:

- decrease the LOS below D at an intersection; or
- exacerbate the delay at an intersection already operating at a substandard LOS (i.e., LOS E or LOS F) by increasing the average delay by 5.0 seconds or more.

Queues will be considered in the analysis to determine if excessive queues are expected to block adjacent lanes or intersections. Blocking typically results in congested conditions that may cause worse conditions at the blocked location than those identified by the LOS analyses alone.

14.0 INTERSECTION OPERATIONAL ANALYSES

The intersection LOS was determined using the computer program Synchro 11, which is based on HCM procedures for calculating levels of service. The intersection analysis sheets are presented in Appendix C.

Table 4 presents the results of the intersection analyses. For two-way stop-controlled intersections an overall intersection level of service is not defined by HCM. Therefore, the level of service and average delay per vehicle for the approach with the greatest delay is reported. Delays and LOS worse than the target LOS are indicated in bold type and are underlined.

Table 4
Intersection LOS Summary – 12th Avenue and Hayden Drive

Scenario	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Existing	Two-way stop	29.9	D	27.7	D
Existing Plus Project	Two-way stop	31.7	D	30.4	D
Near-Term With Project	Two-way stop	<u>36.1</u>	<u>E</u>	34.6	B
2043 With Project	Two-way stop	<u>78.9</u>	<u>F</u>	<u>78.8</u>	<u>F</u>

The results of the intersection operational analyses include an estimate of the 95th-percentile queue lengths at the study intersection. The calculated 95th-percentile queue lengths are presented in Table 5.

Table 5
Intersection Queuing Summary – 12th Avenue and Hayden Drive

Scenario		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Existing	Storage	S	X	S	170	DNE	>500	215	630	S	225	575	S
	A.M.		0		0		0	0	DNS		3	DNS	
	P.M.		3		3		3	0	DNS		5	DNS	
Existing Plus Project	Storage	S	X	S	170	DNE	>500	215	630	S	225	575	S
	A.M.		0		3		0	0	DNS		3	DNS	
	P.M.		3		5		5	0	DNS		5	DNS	
Near-Term With Project	Storage	S	X	S	170	DNE	>500	215	630	S	225	575	S
	A.M.		3		3		5	0	DNS		8	DNS	
	P.M.		3		5		8	0	DNS		10	DNS	
2043 With Project	Storage	S	X	S	170	DNE	>500	215	630	S	225	575	S
	A.M.		3		8		5	0	DNS		10	DNS	
	P.M.		5		25		13	0	DNS		18	DNS	

S: Shared lane

DNE: Does not exist

DNS: Does not stop

* Nearest major intersection is greater than 1,000 feet away.

X Lane not developed. Serves a residence.

15.0 DISCUSSION OF OPERATIONAL ANALYSES

The results of the intersection operational analyses indicate that the intersection of 12th Avenue and Hayden Drive is currently operating at acceptable levels of service. Calculated 95th-percentile queues are contained within the available storage length.

With development of the Project alone the intersection would continue to operate at acceptable LOS similar to the existing conditions. Calculated 95th-percentile queues are contained within the available storage length.

In the near-term condition considering development of a hotel on the north side of Hayden Drive, the LOS for the left-turn from the westbound approach would drop to E during the a.m. peak hour. This LOS is expected to be experienced by very few vehicles and peak-hour traffic signal warrants are not expected to be satisfied.

In the year 2043 condition, the LOS for the left-turn from the westbound approach would drop to F during the a.m. peak hour, and the LOS on the eastbound approach will also be F. Peak-hour traffic signal warrants are expected to be satisfied by the year 2043. Installation of traffic signals is expected to cause the intersection to operate at acceptable LOS. Tables 6 and 7 present the results of the signalized analysis. The improved intersection analysis sheets are presented in Appendix D.

Table 6
Improved Intersection LOS Summary – 12th Avenue and Hayden Drive

Scenario	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
2043 With Project Improved	Signals	7.4	A	9.0	A

Table 7
Improved Intersection Queuing Summary – 12th Avenue and Hayden Drive

Scenario		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2043 With Project Improved	Storage	S	TBD	S	S	170	>500	215	630	S	225	575	S
	A.M.		6			8	0	9	198		45	101	
	P.M.		6			15	18	15	177		72	144	

S: Shared lane

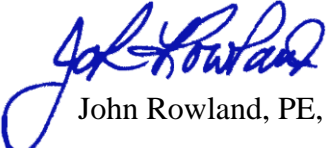
TBD: To be determined

16.0 CONCLUSIONS

Standard traffic engineering principles and methods were employed to establish the existing conditions, to estimate the number of trips expected to be generated by the Project, and to analyze the traffic conditions that may occur in the future. The conclusion of this traffic study is that the Project alone will not cause traffic issues requiring improvements. Traffic signals are not expected to be warranted in the near-term condition. By the year 2043, it is expected that traffic signals will be required at the intersection of 12th Avenue and Hayden Drive.

Thank you for the opportunity to perform this traffic study. Please feel free to call our office if you have any questions.

PETERS ENGINEERING GROUP


John Rowland, PE, TE



Attachments: Figures

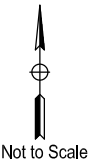
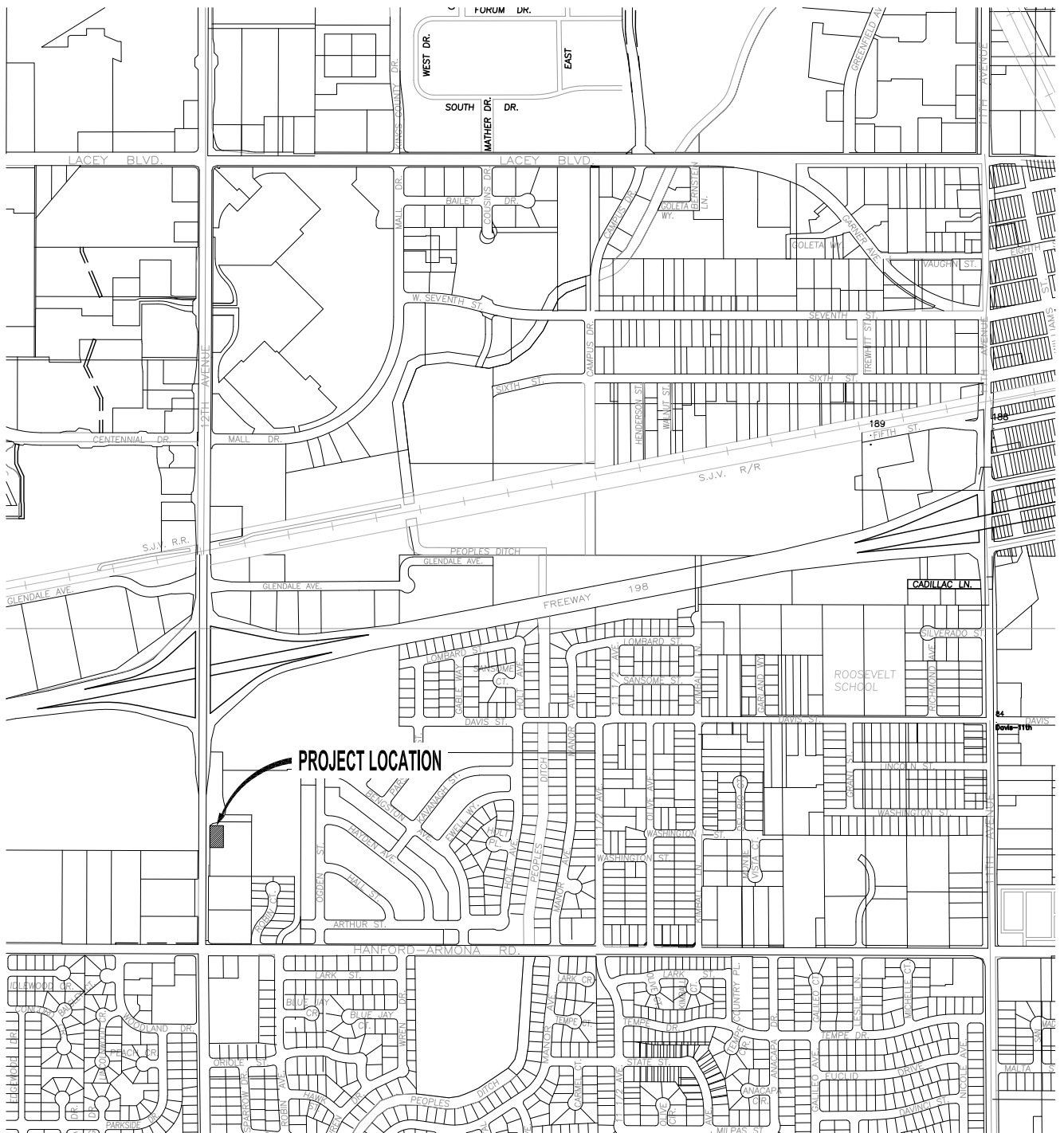
- Appendix A - Traffic Count Data Sheets
- Appendix B - Kings County Travel Model Output
- Appendix C - Intersection Analyses
- Appendix D - Intersection Analyses – Improved Conditions

FIGURES



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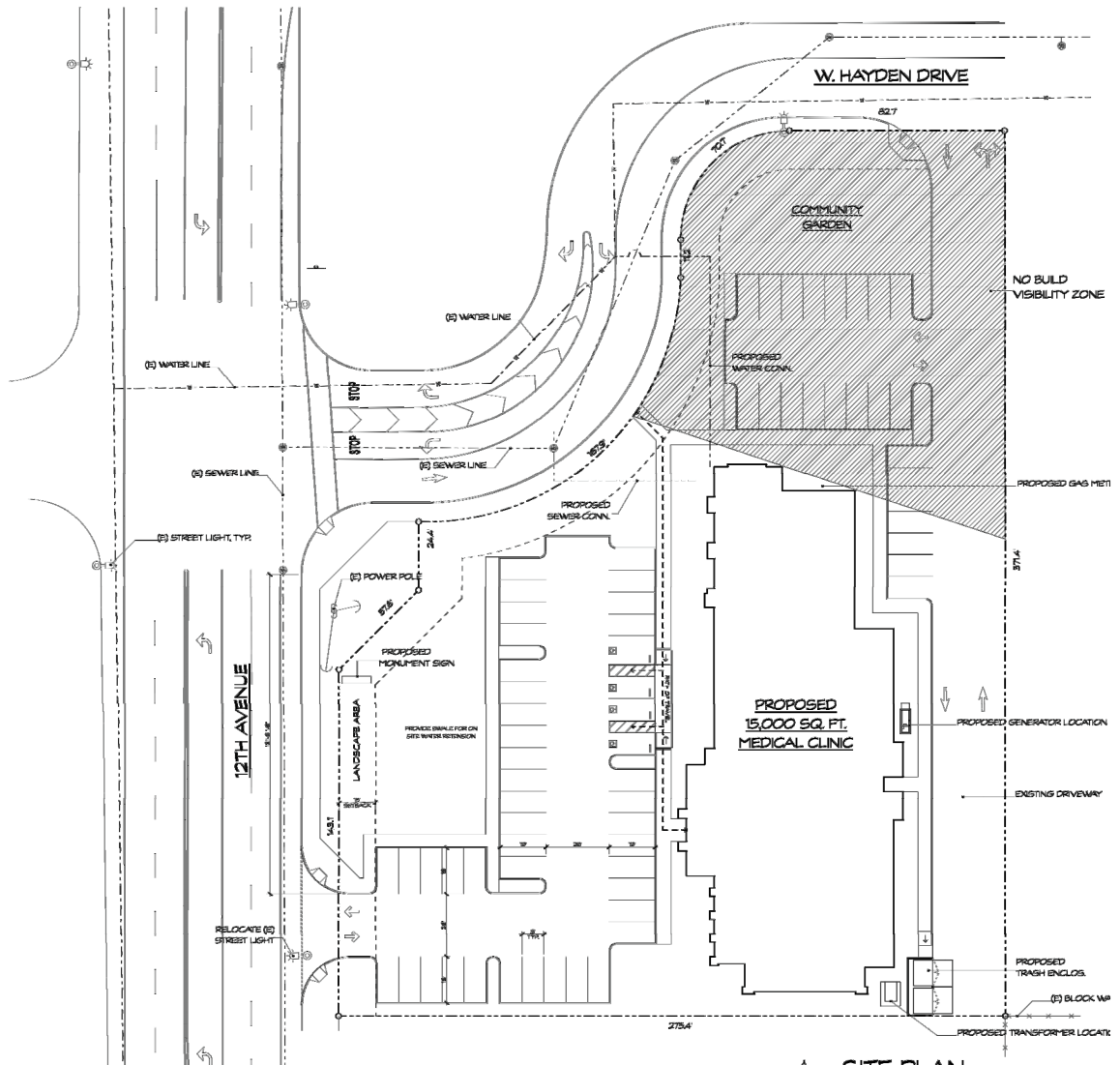


Proposed Medical Clinic
Hanford, California

SITE VICINITY MAP



PETERS ENGINEERING GROUP

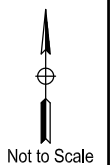


Proposed Medical Clinic
Hanford, California

SITE PLAN

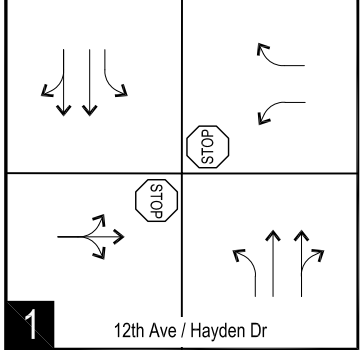
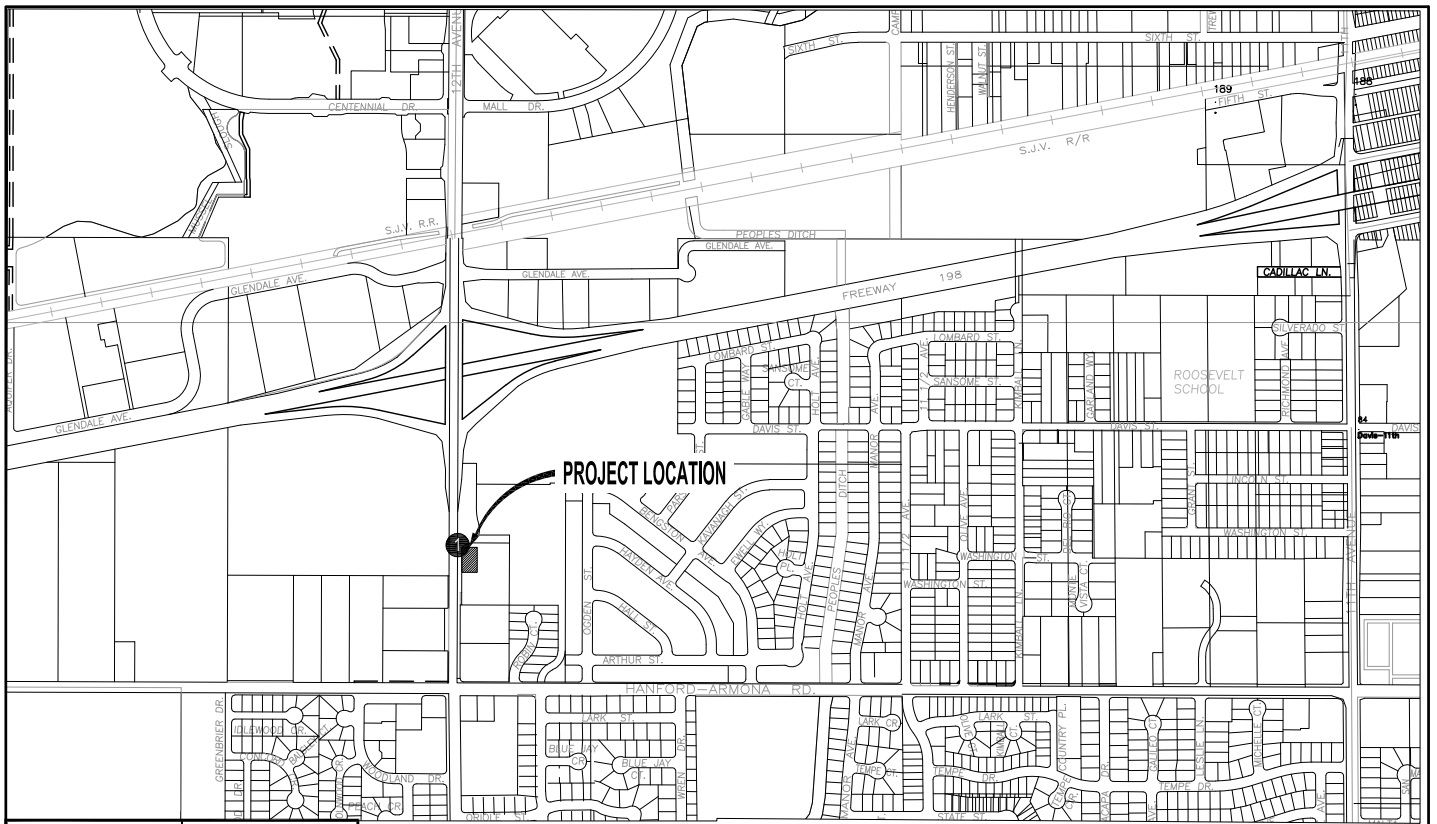


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Not to Scale

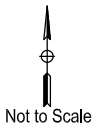
Figure 2

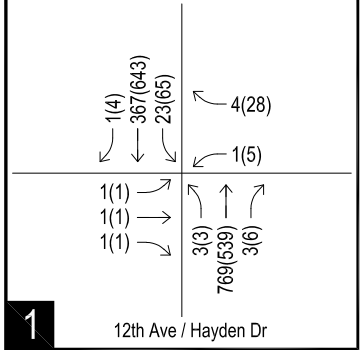
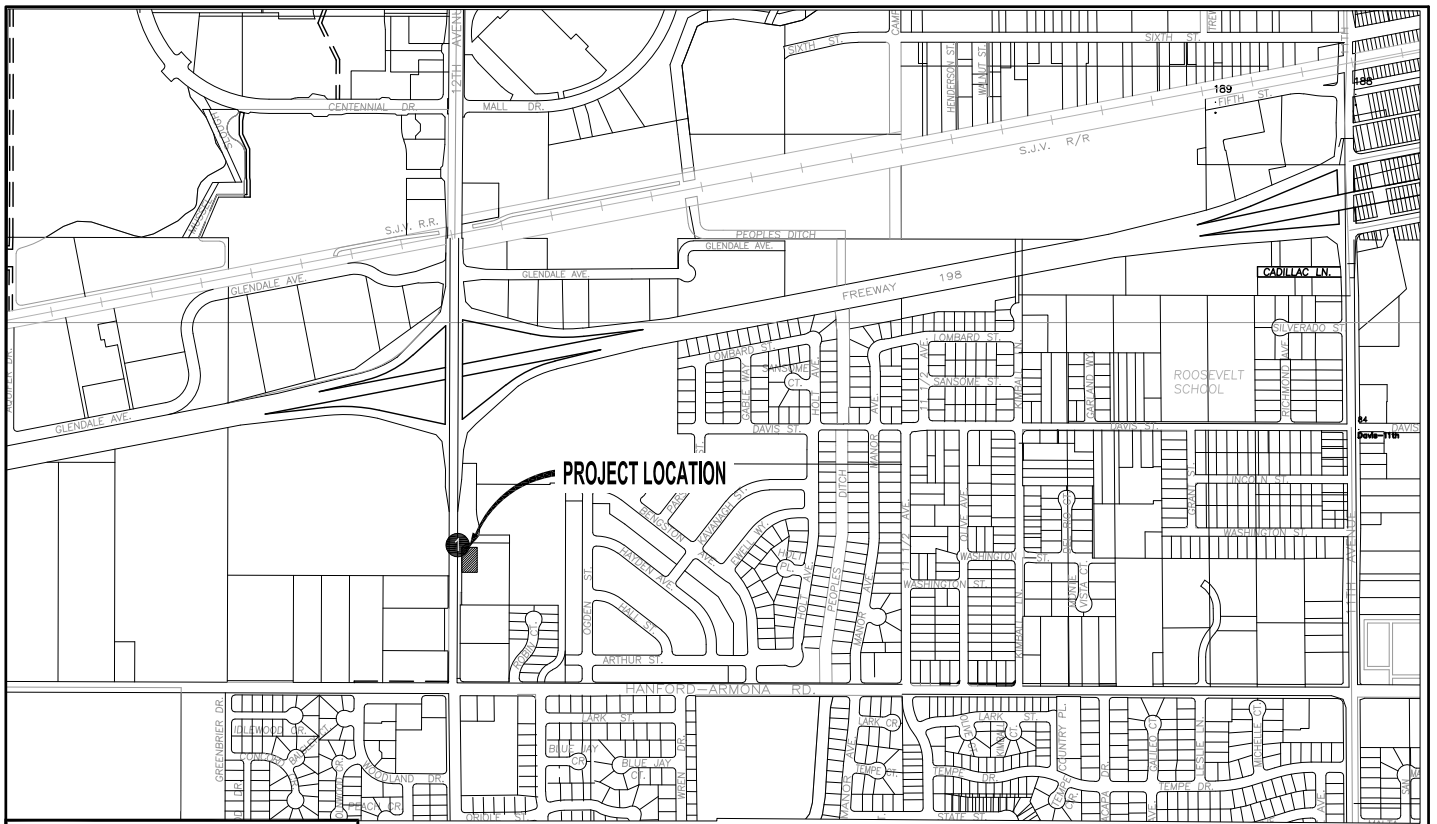


- LEGEND**
- STUDY AREA INTERSECTIONS
 - PROJECT SITE
 - SIGNALIZED INTERSECTION
 - STOP SIGN
 - DIRECTION OF TRAVEL



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Hanford, California

LANE CONFIGURATIONS





LEGEND

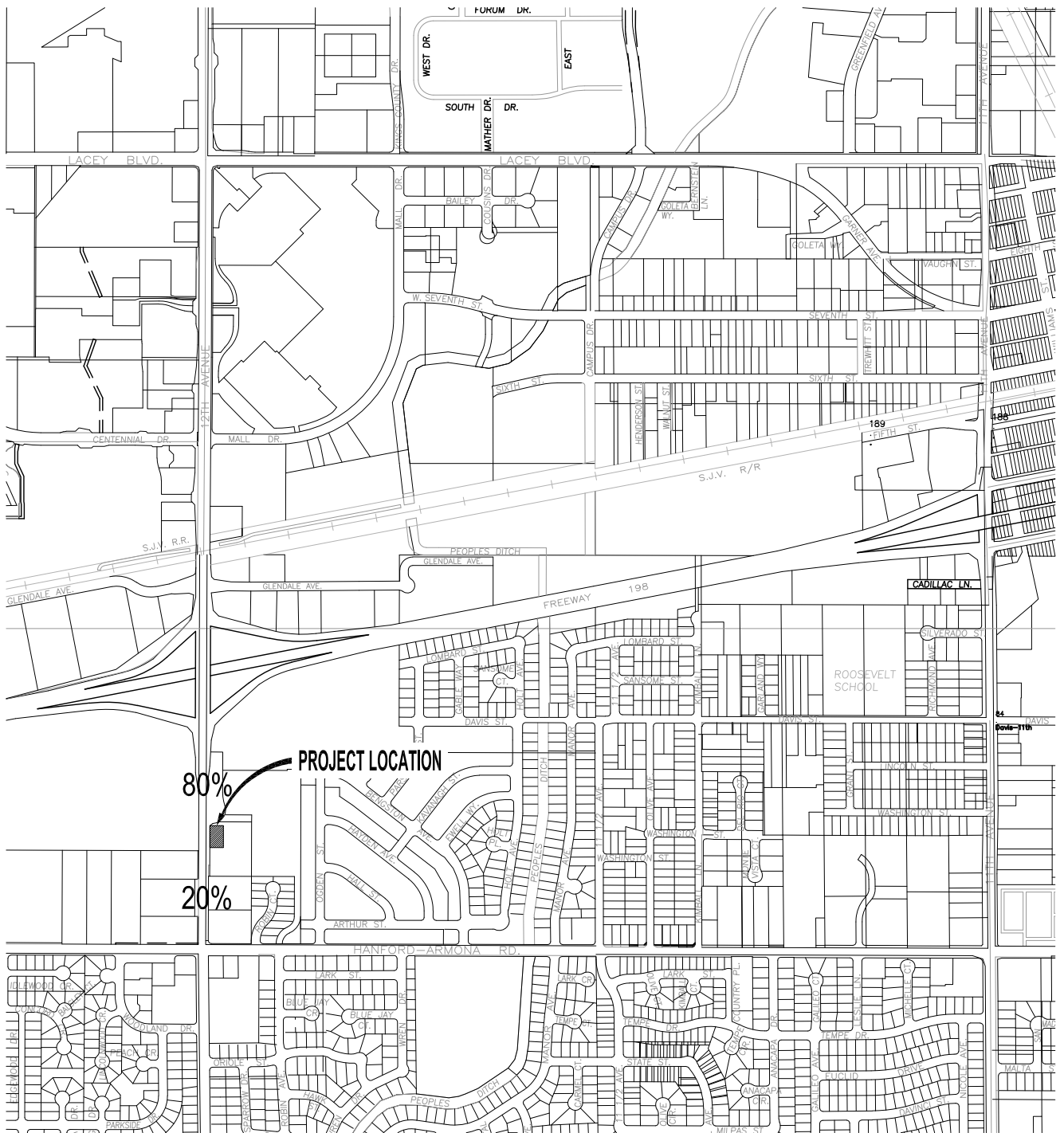
-  STUDY AREA INTERSECTIONS
-  PROJECT SITE
- XX (YY) AM (PM) VOLUMES

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Hanford, California

EXISTING PEAK-HOUR TRAFFIC VOLUMES



Not to Scale

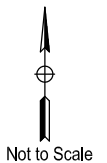


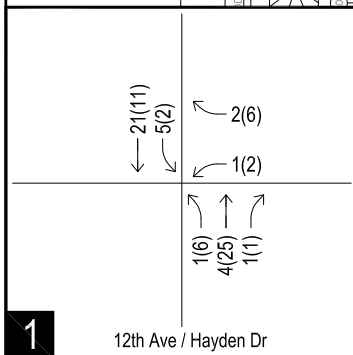
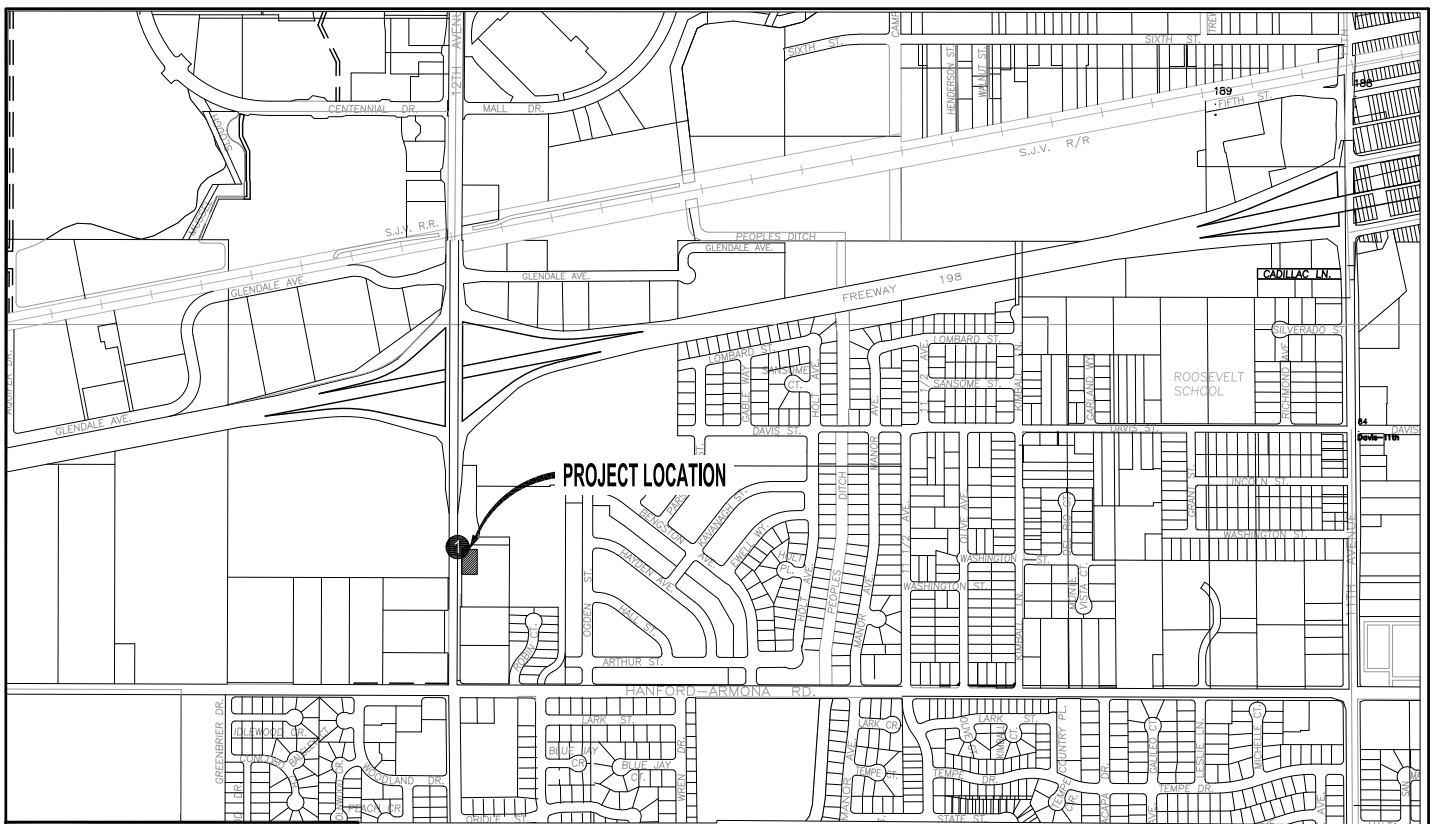
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Hanford, California

PROJECT TRAFFIC DISTRIBUTION PERCENTAGES





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LEGEND

-  STUDY AREA INTERSECTIONS
-  PROJECT SITE
- XX (YY) AM (PM) VOLUMES

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Hanford, California

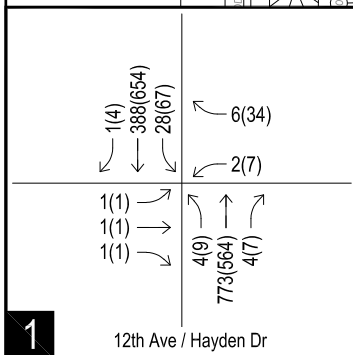
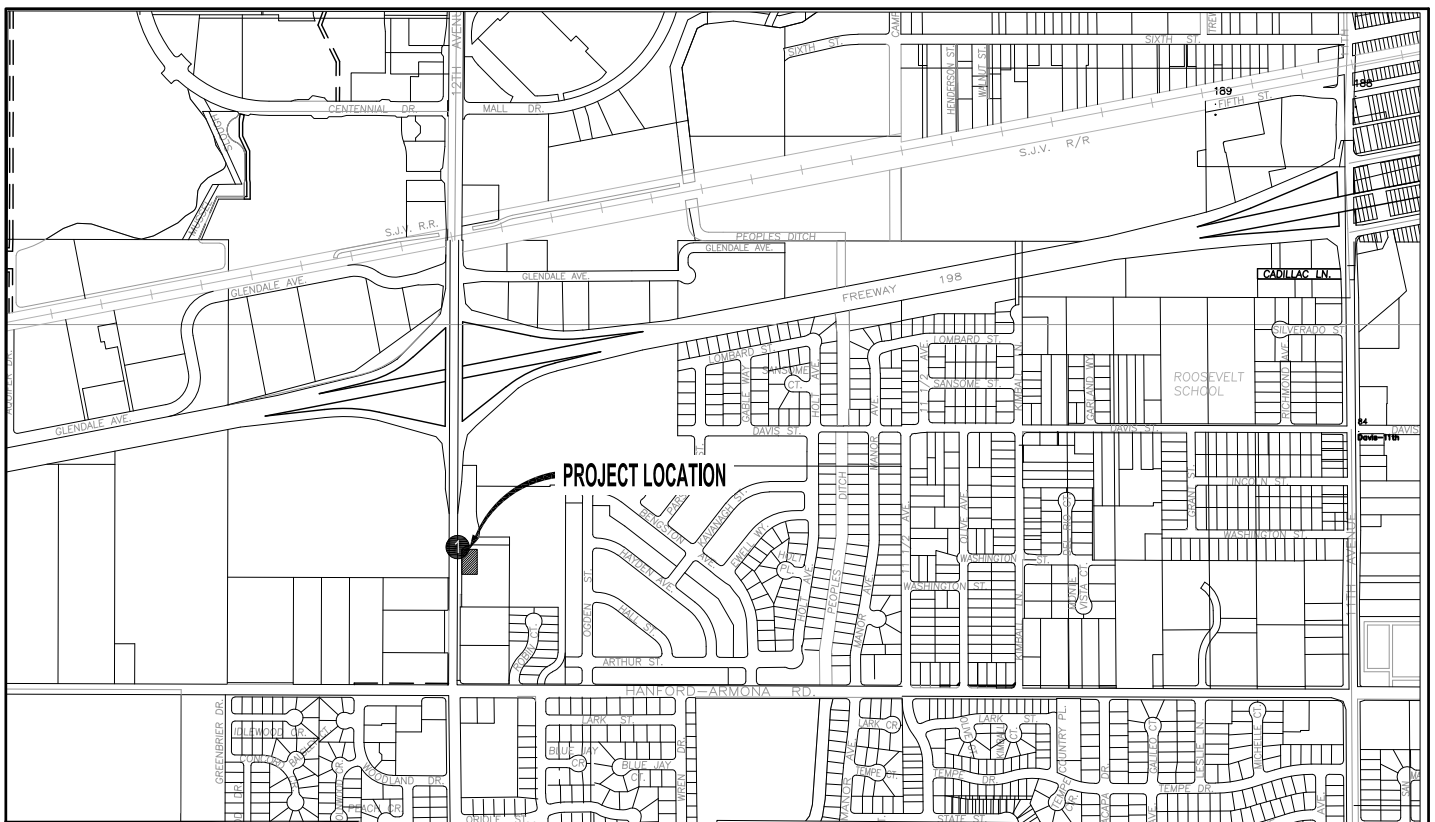
PEAK-HOUR PROJECT TRAFFIC VOLUMES





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Figure 6



LEGEND

-  STUDY AREA INTERSECTIONS
-  PROJECT SITE
- XX (YY) AM (PM) VOLUMES

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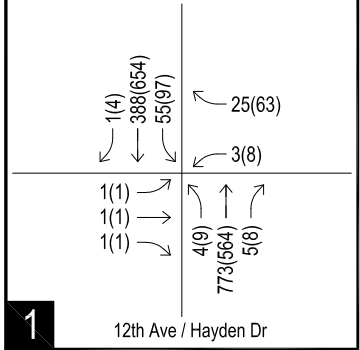
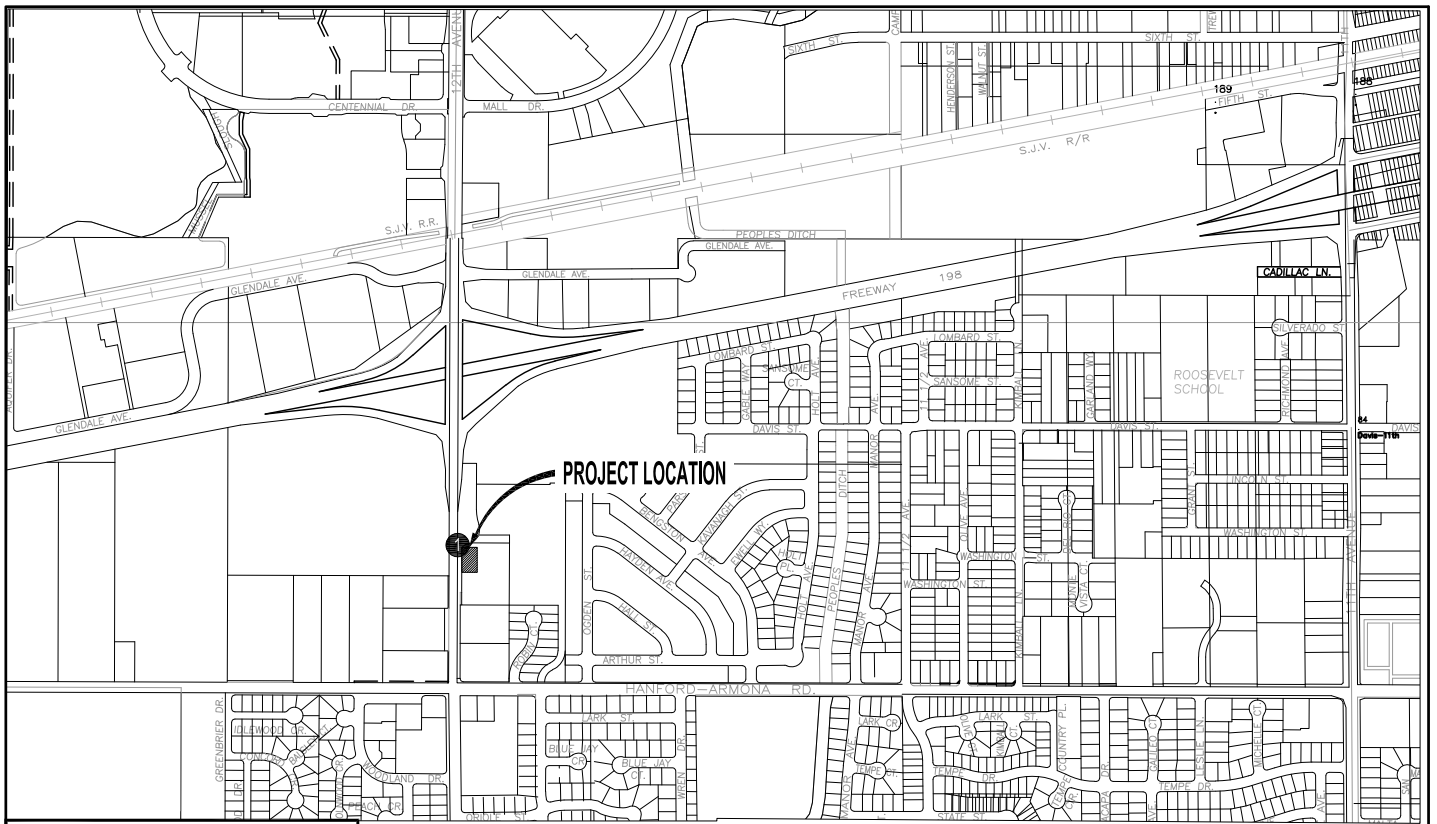
EXISTING PLUS PROJECT PEAK-HOUR TRAFFIC VOLUMES





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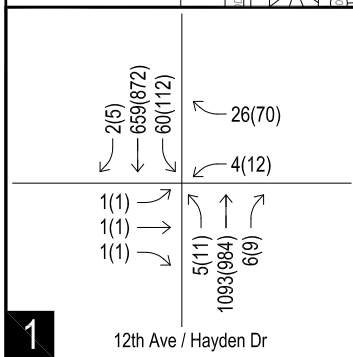
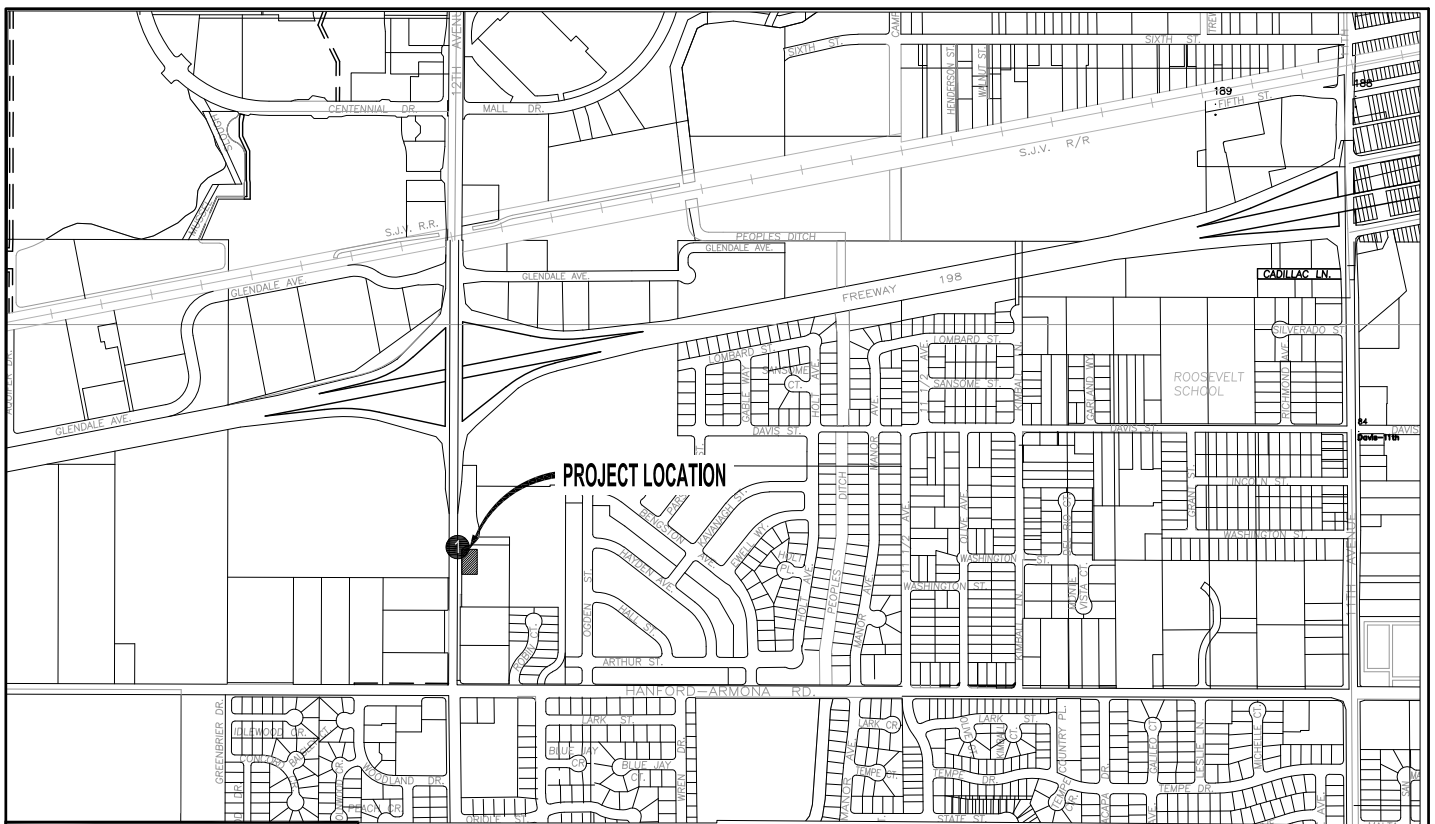


LEGEND



-  STUDY AREA INTERSECTIONS
-  PROJECT SITE
- XX (YY) AM (PM) VOLUMES

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Hanford, California

NEAR-TERM WITH PROJECT PEAK-HOUR TRAFFIC VOLUMES



LEGEND

-  STUDY AREA INTERSECTIONS
-  PROJECT SITE
- XX (YY) AM (PM) VOLUMES

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CUMULATIVE (YEAR 2043) WITH PROJECT PEAK-HOUR TRAFFIC VOLUMES



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Figure 9

APPENDIX A

TRAFFIC COUNT DATA SHEETS



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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:

GHD
30 River Park Place West Ste 220
Fresno, CA 93720

LOCATION 12th Ave @ Hayden Ave
COUNTY Kings
COLLECTION DATE Thursday, May 23, 2019

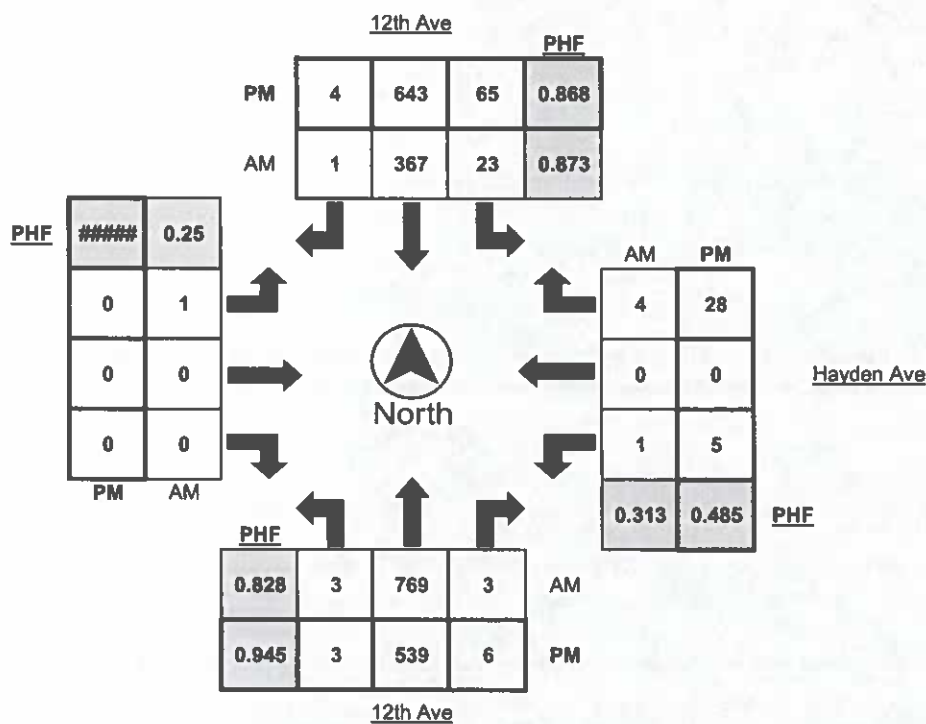
LATITUDE 36.315397°
LONGITUDE -119.672988°
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	85	0	7	2	58	0	5	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	178	1	8	2	73	0	3	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	2	232	0	10	7	85	1	6	0	0	0	0	1	0	0	0
7:45 AM - 8:00 AM	1	218	0	5	6	105	0	6	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	141	2	7	8	104	0	11	1	0	0	0	0	0	4	0
8:15 AM - 8:30 AM	2	128	4	6	11	83	0	3	0	0	0	0	3	0	2	2
8:30 AM - 8:45 AM	0	92	0	3	6	69	0	5	0	0	0	0	0	0	4	2
8:45 AM - 9:00 AM	0	120	1	7	13	63	0	3	1	0	0	0	2	0	1	1
TOTAL	5	1194	8	53	55	640	1	42	2	0	0	0	6	0	11	5

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	1	139	0	0	17	151	2	2	2	0	0	0	2	0	8	0
4:15 PM - 4:30 PM	1	126	0	4	10	147	2	1	0	0	0	0	1	0	4	0
4:30 PM - 4:45 PM	0	134	1	4	12	170	2	2	0	0	0	0	0	0	2	0
4:45 PM - 5:00 PM	1	141	3	0	13	145	0	2	0	0	0	0	1	0	3	0
5:00 PM - 5:15 PM	0	123	2	2	26	179	0	1	0	0	0	0	2	0	15	0
5:15 PM - 5:30 PM	2	141	0	1	14	149	2	3	0	0	0	0	2	0	8	0
5:30 PM - 5:45 PM	1	142	2	4	8	133	2	2	4	0	2	0	2	0	8	0
5:45 PM - 6:00 PM	1	149	3	1	13	149	0	3	0	0	0	0	4	0	5	0
TOTAL	7	1095	11	16	113	1223	10	16	6	0	2	0	14	0	51	0

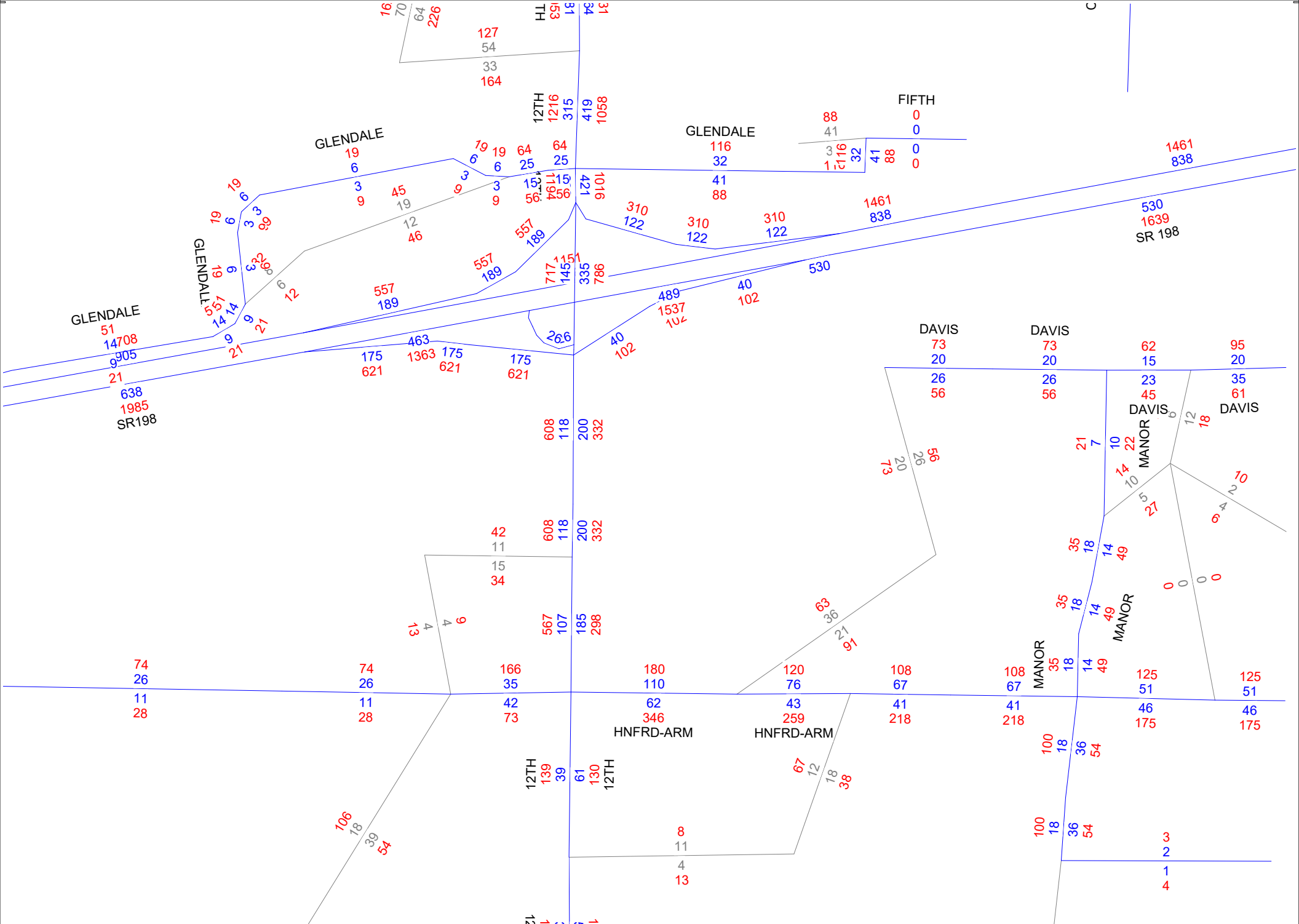
PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	3	769	3	30	23	367	1	26	1	0	0	0	1	0	4	0
4:30 PM - 5:30 PM	3	539	6	7	65	643	4	8	0	0	0	0	5	0	28	0

	PHF	Trucks
AM	0.888	4.8%
PM	0.932	1.2%

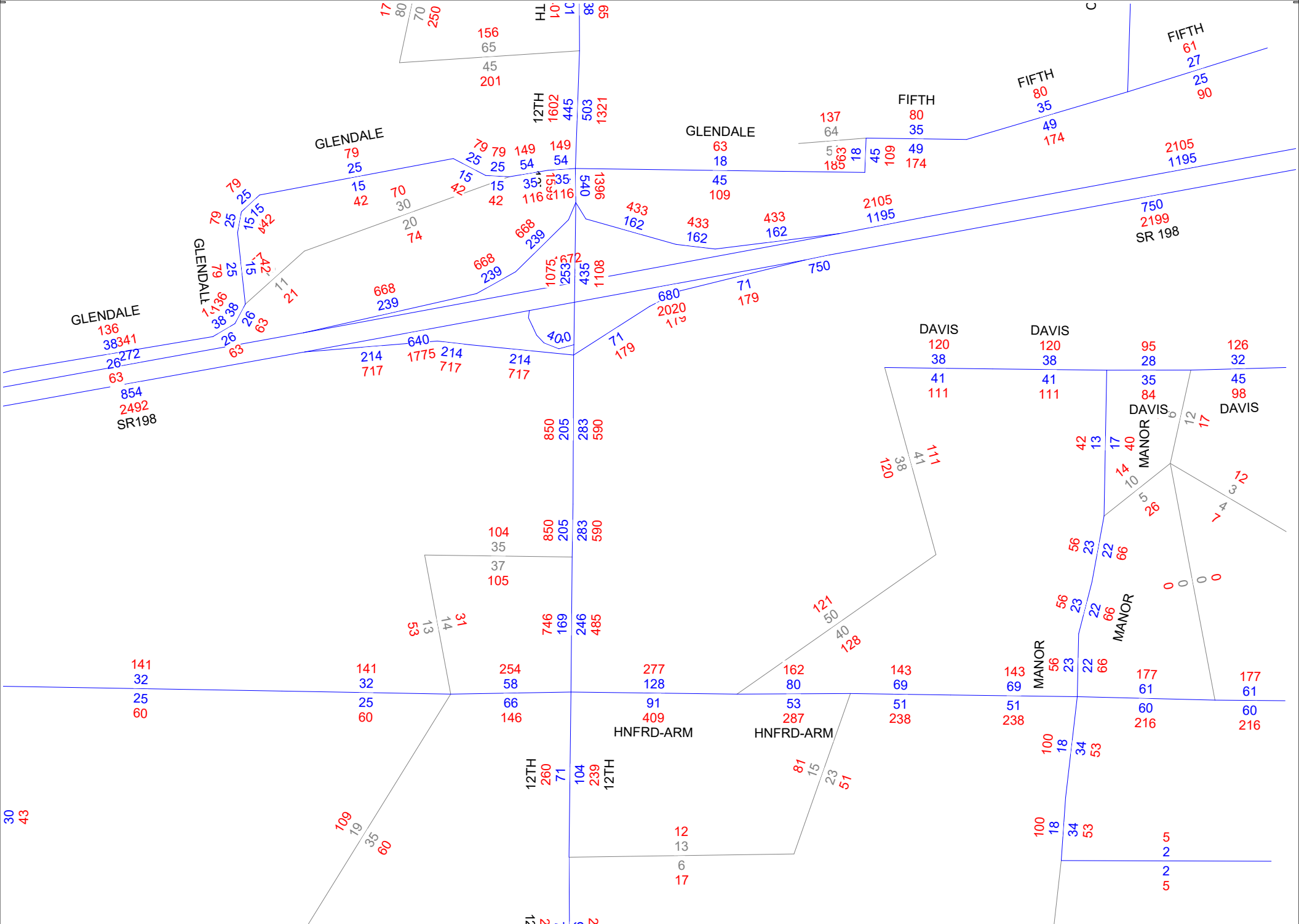


APPENDIX B

KINGS COUNTY TRAVEL MODEL OUTPUT



2021 Kings County Travel Demand Model
AM and PM Peak Hour Traffic Volumes



2042 Kings County Travel Demand Model
AM and PM Peak Hour Traffic Volumes

APPENDIX C

INTERSECTION ANALYSES



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Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕		↕	↕	↕		↕	↕	
Traffic Vol, veh/h	1	1	1	1	0	4	3	769	3	23	367	1
Future Vol, veh/h	1	1	1	1	0	4	3	769	3	23	367	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	1	1	1	1	0	5	3	874	3	26	417	1
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	913	1353	209	1143	-	439	418	0	0	877	0	0
Stage 1	470	470	-	882	-	-	-	-	-	-	-	-
Stage 2	443	883	-	261	-	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	-	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	-	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	224	145	788	151	0	557	1116	-	-	747	-	-
Stage 1	535	551	-	301	0	-	-	-	-	-	-	-
Stage 2	556	355	-	713	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	216	139	788	146	-	557	1116	-	-	747	-	-
Mov Cap-2 Maneuver	216	139	-	146	-	-	-	-	-	-	-	-
Stage 1	533	532	-	300	-	-	-	-	-	-	-	-
Stage 2	550	354	-	686	-	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	21		15.2		0			0.6				
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	1116	-	-	229 146 557	747	-	-					
HCM Lane V/C Ratio	0.003	-	-	0.015 0.008 0.008	0.035	-	-					
HCM Control Delay (s)	8.2	-	-	21 29.9 11.5	10	-	-					
HCM Lane LOS	A	-	-	C D B	A	-	-					
HCM 95th %tile Q(veh)	0	-	-	0 0 0	0.1	-	-					

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕		↕	↕	↕		↕	↕	
Traffic Vol, veh/h	1	1	1	5	0	28	3	539	6	65	643	4
Future Vol, veh/h	1	1	1	5	0	28	3	539	6	65	643	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	1	1	1	5	0	30	3	580	6	70	691	4

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1129	1425	348	1075	-	293	695	0	0	586	0	0
Stage 1	833	833	-	589	-	-	-	-	-	-	-	-
Stage 2	296	592	-	486	-	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	-	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	-	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	160	136	651	175	0	706	903	-	-	992	-	-
Stage 1	331	384	-	464	0	-	-	-	-	-	-	-
Stage 2	691	495	-	534	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	144	126	651	164	-	706	903	-	-	992	-	-
Mov Cap-2 Maneuver	144	126	-	164	-	-	-	-	-	-	-	-
Stage 1	330	357	-	463	-	-	-	-	-	-	-	-
Stage 2	659	494	-	494	-	-	-	-	-	-	-	-









Approach	EB		WB		NB			SB				
HCM Control Delay, s	25		12.9		0			0.8				
HCM LOS	D		B									

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	903	-	-	183 164 706	992	-	-
HCM Lane V/C Ratio	0.004	-	-	0.018 0.033 0.043	0.07	-	-
HCM Control Delay (s)	9	-	-	25 27.7 10.3	8.9	-	-
HCM Lane LOS	A	-	-	D D B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1 0.1 0.1	0.2	-	-

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕		↕	↕	↕↕		↕	↕↕	
Traffic Vol, veh/h	1	1	1	2	0	6	4	773	4	28	388	1
Future Vol, veh/h	1	1	1	2	0	6	4	773	4	28	388	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	1	1	1	2	0	7	5	878	5	32	441	1
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	955	1399	221	1176	-	442	442	0	0	883	0	0
Stage 1	506	506	-	891	-	-	-	-	-	-	-	-
Stage 2	449	893	-	285	-	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	-	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	-	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	208	136	774	143	0	555	1093	-	-	743	-	-
Stage 1	509	531	-	298	0	-	-	-	-	-	-	-
Stage 2	551	351	-	690	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	198	129	774	137	-	555	1093	-	-	743	-	-
Mov Cap-2 Maneuver	198	129	-	137	-	-	-	-	-	-	-	-
Stage 1	506	508	-	297	-	-	-	-	-	-	-	-
Stage 2	542	349	-	658	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	22.2		16.6		0		0.7					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	1093	-	-	213 137 555	743	-	-					
HCM Lane V/C Ratio	0.004	-	-	0.016 0.017 0.012	0.043	-	-					
HCM Control Delay (s)	8.3	-	-	22.2 31.7 11.6	10.1	-	-					
HCM Lane LOS	A	-	-	C D B	B	-	-					
HCM 95th %tile Q(veh)	0	-	-	0 0.1 0	0.1	-	-					

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕		↕	↕	↕		↕	↕	
Traffic Vol, veh/h	1	1	1	7	0	34	9	564	7	67	654	4
Future Vol, veh/h	1	1	1	7	0	34	9	564	7	67	654	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	1	1	1	8	0	37	10	606	8	72	703	4
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1172	1483	354	1126	-	307	707	0	0	614	0	0
Stage 1	849	849	-	630	-	-	-	-	-	-	-	-
Stage 2	323	634	-	496	-	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	-	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	-	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	149	125	645	161	0	692	894	-	-	968	-	-
Stage 1	324	378	-	439	0	-	-	-	-	-	-	-
Stage 2	666	474	-	527	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	132	115	645	149	-	692	894	-	-	968	-	-
Mov Cap-2 Maneuver	132	115	-	149	-	-	-	-	-	-	-	-
Stage 1	320	350	-	434	-	-	-	-	-	-	-	-
Stage 2	624	469	-	485	-	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	26.8		13.9		0.1			0.8				
HCM LOS	D		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	894	-	-	168	149	692	968	-	-			
HCM Lane V/C Ratio	0.011	-	-	0.019	0.051	0.053	0.074	-	-			
HCM Control Delay (s)	9.1	-	-	26.8	30.4	10.5	9	-	-			
HCM Lane LOS	A	-	-	D	D	B	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.2	0.2	-	-			

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕		↕	↕	↕↕		↕	↕↕	
Traffic Vol, veh/h	1	1	1	3	0	25	4	773	5	55	388	1
Future Vol, veh/h	1	1	1	3	0	25	4	773	5	55	388	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	1	1	1	3	0	28	5	878	6	63	441	1
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1017	1462	221	1238	-	442	442	0	0	884	0	0
Stage 1	568	568	-	891	-	-	-	-	-	-	-	-
Stage 2	449	894	-	347	-	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	-	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	-	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	188	124	774	129	0	555	1093	-	-	742	-	-
Stage 1	468	497	-	298	0	-	-	-	-	-	-	-
Stage 2	551	351	-	634	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	166	113	774	119	-	555	1093	-	-	742	-	-
Mov Cap-2 Maneuver	166	113	-	119	-	-	-	-	-	-	-	-
Stage 1	466	455	-	297	-	-	-	-	-	-	-	-
Stage 2	520	349	-	578	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	24.7		14.4		0		1.3					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	1093	-	-	186 119 555	742	-	-					
HCM Lane V/C Ratio	0.004	-	-	0.018 0.029 0.051	0.084	-	-					
HCM Control Delay (s)	8.3	-	-	24.7 36.1 11.8	10.3	-	-					
HCM Lane LOS	A	-	-	C E B	B	-	-					
HCM 95th %tile Q(veh)	0	-	-	0.1 0.1 0.2	0.3	-	-					

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	1	1	8	0	63	9	564	8	97	654	4
Future Vol, veh/h	1	1	1	8	0	63	9	564	8	97	654	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	1	1	1	9	0	68	10	606	9	104	703	4
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1236	1548	354	1191	-	308	707	0	0	615	0	0
Stage 1	913	913	-	631	-	-	-	-	-	-	-	-
Stage 2	323	635	-	560	-	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	-	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	-	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	133	114	645	144	0	691	894	-	-	967	-	-
Stage 1	296	353	-	438	0	-	-	-	-	-	-	-
Stage 2	666	473	-	483	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	109	101	645	130	-	691	894	-	-	967	-	-
Mov Cap-2 Maneuver	109	101	-	130	-	-	-	-	-	-	-	-
Stage 1	293	315	-	433	-	-	-	-	-	-	-	-
Stage 2	594	468	-	429	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	30.4		13.5		0.1		1.2					
HCM LOS	D		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	894	-	-	145	130	691	967	-	-			
HCM Lane V/C Ratio	0.011	-	-	0.022	0.066	0.098	0.108	-	-			
HCM Control Delay (s)	9.1	-	-	30.4	34.6	10.8	9.2	-	-			
HCM Lane LOS	A	-	-	D	D	B	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.3	0.4	-	-			

Warrant 3: Peak Hour

1: 12th Ave & Hayden Dr

Near-Term With Project

Intersection Information

	Major Street	Minor Street
Street Name	12th Ave	Hayden Dr
Direction	NB/SB	EB/WB
Number of Lane	2	2
Approach Speed	40	30

Warrant 3 Met? **No**

Details

Low Population? **No**

Condition A Met? **No**

Condition B Met? **No**

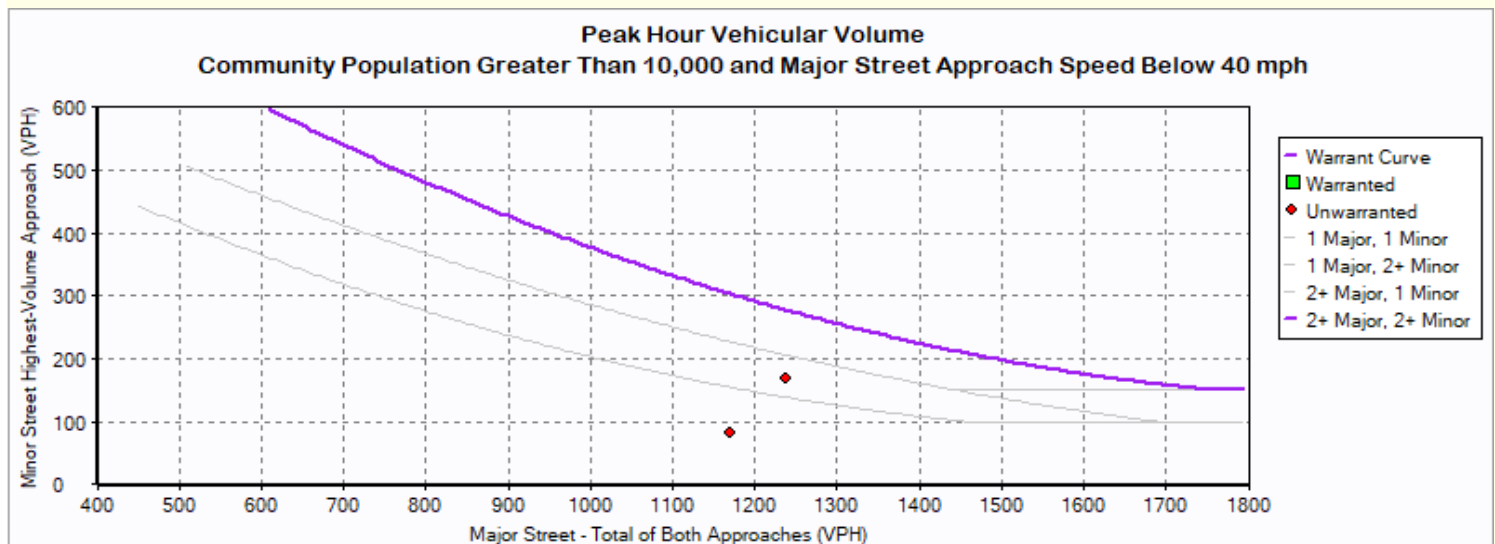
Notes 0 Hours met (1 required)

Notes 0 Hours met (1 required)

Minor Approach Time Delay Condition Met? **Not Met**

Minor Approach Volume Condition Met? **Met**

Total Entering Intersection Volume Condition Met? **Not Met**



Warrant 3: Peak Hour
1: 12th Ave & Hayden Dr

Near-Term With Project

Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)
7:30	1,171	83
16:45	1,239	168

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕		↕	↕	↕		↕	↕	
Traffic Vol, veh/h	1	1	1	4	0	26	5	1093	6	60	659	2
Future Vol, veh/h	1	1	1	4	0	26	5	1093	6	60	659	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
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
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	1	1	1	4	0	28	5	1188	7	65	716	2
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1451	2052	359	1691	-	598	718	0	0	1195	0	0
Stage 1	847	847	-	1202	-	-	-	-	-	-	-	-
Stage 2	604	1205	-	489	-	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.6	-	7	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.6	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.55	-	3.35	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	89	53	629	59	0	438	859	-	-	563	-	-
Stage 1	317	369	-	191	0	-	-	-	-	-	-	-
Stage 2	445	249	-	521	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	76	47	629	53	-	438	859	-	-	563	-	-
Mov Cap-2 Maneuver	76	47	-	53	-	-	-	-	-	-	-	-
Stage 1	315	327	-	190	-	-	-	-	-	-	-	-
Stage 2	414	248	-	459	-	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	50.1		22.5		0			1				
HCM LOS	F		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	859	-	-	83 53 438	563	-	-					
HCM Lane V/C Ratio	0.006	-	-	0.039 0.082 0.065	0.116	-	-					
HCM Control Delay (s)	9.2	-	-	50.1 78.9 13.8	12.2	-	-					
HCM Lane LOS	A	-	-	F F B	B	-	-					
HCM 95th %tile Q(veh)	0	-	-	0.1 0.3 0.2	0.4	-	-					

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕		↕	↕	↕		↕	↕	
Traffic Vol, veh/h	1	1	1	12	0	70	11	984	9	112	872	5
Future Vol, veh/h	1	1	1	12	0	70	11	984	9	112	872	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	230	-	-	230	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	1	1	1	13	0	75	12	1058	10	120	938	5
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1734	2273	472	1797	-	534	943	0	0	1068	0	0
Stage 1	1181	1181	-	1087	-	-	-	-	-	-	-	-
Stage 2	553	1092	-	710	-	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	-	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	-	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	57	40	541	51	0	493	729	-	-	654	-	-
Stage 1	203	264	-	232	0	-	-	-	-	-	-	-
Stage 2	487	291	-	393	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	41	32	541	42	-	493	729	-	-	654	-	-
Mov Cap-2 Maneuver	41	32	-	42	-	-	-	-	-	-	-	-
Stage 1	200	216	-	228	-	-	-	-	-	-	-	-
Stage 2	406	286	-	319	-	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	78.8		29.9		0.1			1.3				
HCM LOS	F		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	729	-	-	52 42 493	654	-	-					
HCM Lane V/C Ratio	0.016	-	-	0.062 0.307 0.153	0.184	-	-					
HCM Control Delay (s)	10	-	-	78.8 125 13.6	11.7	-	-					
HCM Lane LOS	B	-	-	F F B	B	-	-					
HCM 95th %tile Q(veh)	0	-	-	0.2 1 0.5	0.7	-	-					

Warrant 3: Peak Hour

2043 With Project

1: 12th Ave & Hayden Dr

Intersection Information

	Major Street	Minor Street
Street Name	12th Ave	Hayden Dr
Direction	NB/SB	EB/WB
Number of Lane	2	2
Approach Speed	40	30

Warrant 3 Met? **Yes**

Details

Low Population? **No**

Condition A Met? **No**

Condition B Met? **Yes**

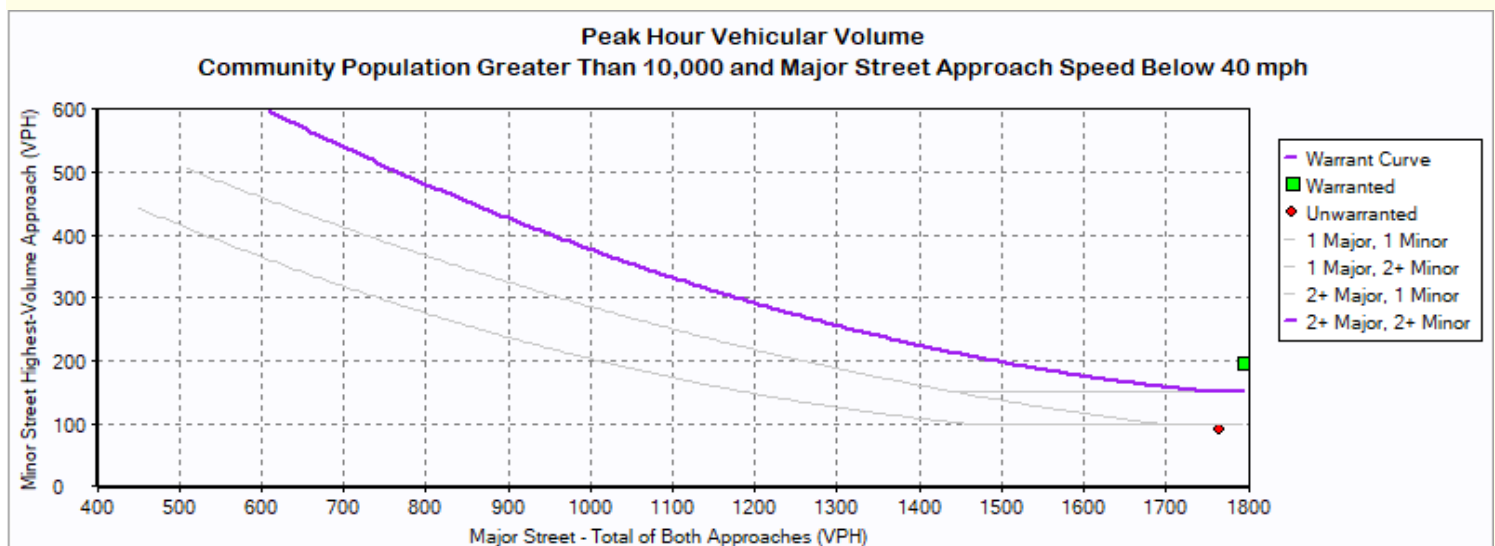
Notes 0 Hours met (1 required)

Notes 1 Hours met (1 required)

Minor Approach Time Delay Condition Met? **Not Met**

Minor Approach Volume Condition Met? **Met**

Total Entering Intersection Volume Condition Met? **Not Met**



Warrant 3: Peak Hour
1: 12th Ave & Hayden Dr

2043 With Project

Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)
7:30	1,765	90
16:45	1,881	194

APPENDIX D

INTERSECTION ANALYSES

IMPROVED CONDITIONS






















PETERS ENGINEERING GROUP

A CALIFORNIA CORPORATION

1: 12th Ave & Hayden Dr
HCM 6th Signalized Intersection Summary

Cumulative (Year 2043) With Project-AM-Improved








12/16/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	4	1	26	5	1093	6	60	659	2
Future Volume (veh/h)	1	1	1	4	1	26	5	1093	6	60	659	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	1	1	1	4	1	28	5	1188	7	65	716	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	162	20	20	241	13	66	12	1711	10	117	1932	5
Arrive On Green	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.48	0.48	0.07	0.54	0.54
Sat Flow, veh/h	483	483	483	1188	297	1547	1739	3536	21	1739	3549	10
Grp Volume(v), veh/h	3	0	0	5	0	28	5	583	612	65	350	368
Grp Sat Flow(s),veh/h/ln	1450	0	0	1485	0	1547	1739	1735	1822	1739	1735	1824
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.6	0.1	8.9	8.9	1.2	3.9	3.9
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.1	0.0	0.6	0.1	8.9	8.9	1.2	3.9	3.9
Prop In Lane	0.33		0.33	0.80		1.00	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	203	0	0	254	0	66	12	839	882	117	945	993
V/C Ratio(X)	0.01	0.00	0.00	0.02	0.00	0.43	0.42	0.69	0.69	0.55	0.37	0.37
Avail Cap(c_a), veh/h	963	0	0	966	0	825	307	1129	1186	307	1129	1187
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	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	0.0	0.0	15.6	0.0	15.9	16.8	6.8	6.8	15.3	4.4	4.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	4.3	22.3	1.2	1.1	4.0	0.2	0.2
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	0.0	0.0	0.0	0.0	0.0	0.3	0.1	1.6	1.7	0.5	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	0.0	0.0	15.6	0.0	20.2	39.1	8.0	7.9	19.4	4.7	4.6
LnGrp LOS	B	A	A	B	A	C	D	A	A	B	A	A
Approach Vol, veh/h	3			33			1200			783		
Approach Delay, s/veh	15.7			19.5			8.1			5.9		
Approach LOS	B			B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	21.3		6.3	4.2	23.4		6.3				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	6.0	22.1		18.1	6.0	22.1		18.1				
Max Q Clear Time (g_c+I1), s	3.2	10.9		2.2	2.1	5.9		2.6				
Green Ext Time (p_c), s	0.0	5.6		0.0	0.0	3.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				7.4								
HCM 6th LOS				A								

1: 12th Ave & Hayden Dr
Queues

Cumulative (Year 2043) With Project-AM-Improved




















12/16/2022

							
Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	3	5	28	5	1195	65	718
v/c Ratio	0.01	0.02	0.09	0.02	0.48	0.27	0.25
Control Delay	17.0	18.8	0.6	18.8	7.4	22.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.0	18.8	0.6	18.8	7.4	22.0	3.9
Queue Length 50th (ft)	1	1	0	1	60	17	0
Queue Length 95th (ft)	6	8	0	9	198	45	101
Internal Link Dist (ft)	215	90			639		581
Turn Bay Length (ft)				230		230	
Base Capacity (vph)	749	784	727	247	2484	247	2841
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.01	0.04	0.02	0.48	0.26	0.25
Intersection Summary							

1: 12th Ave & Hayden Dr
HCM 6th Signalized Intersection Summary

Cumulative (Year 2043) With Project-PM-Improved








12/16/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	12	0	70	11	984	9	112	872	5
Future Volume (veh/h)	1	1	1	12	0	70	11	984	9	112	872	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	1	1	1	13	0	75	12	1058	10	120	938	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	167	59	45	323	0	133	28	1557	15	176	1865	10
Arrive On Green	0.08	0.08	0.08	0.08	0.00	0.08	0.02	0.43	0.43	0.10	0.51	0.51
Sat Flow, veh/h	379	708	544	1433	0	1598	1795	3636	34	1795	3653	19
Grp Volume(v), veh/h	3	0	0	13	0	75	12	521	547	120	460	483
Grp Sat Flow(s),veh/h/ln	1631	0	0	1433	0	1598	1795	1791	1879	1795	1791	1882
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	1.6	0.2	8.3	8.3	2.3	6.0	6.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.3	0.0	1.6	0.2	8.3	8.3	2.3	6.0	6.0
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	272	0	0	323	0	133	28	767	805	176	914	960
V/C Ratio(X)	0.01	0.00	0.00	0.04	0.00	0.56	0.43	0.68	0.68	0.68	0.50	0.50
Avail Cap(c_a), veh/h	947	0	0	934	0	818	305	1079	1132	345	1119	1176
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	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	15.0	0.0	15.6	17.2	8.2	8.2	15.4	5.7	5.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	3.7	9.8	1.1	1.0	4.6	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.6	0.2	1.9	2.0	0.9	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	0.0	15.0	0.0	19.2	27.1	9.2	9.2	20.0	6.1	6.1
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h	3			88			1080			1063		
Approach Delay, s/veh	14.9			18.6			9.4			7.7		
Approach LOS	B			B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	20.0		7.9	4.6	22.9		7.9				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	6.8	21.3		18.1	6.0	22.1		18.1				
Max Q Clear Time (g_c+I1), s	4.3	10.3		2.1	2.2	8.0		3.6				
Green Ext Time (p_c), s	0.1	4.8		0.0	0.0	4.8		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				9.0								
HCM 6th LOS				A								

1: 12th Ave & Hayden Dr
Queues

Cumulative (Year 2043) With Project-PM-Improved

12/16/2022

							
Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	3	13	75	12	1068	120	943
v/c Ratio	0.01	0.05	0.23	0.05	0.51	0.43	0.35
Control Delay	16.7	18.8	5.1	19.5	9.8	24.2	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.7	18.8	5.1	19.5	9.8	24.2	5.1
Queue Length 50th (ft)	1	3	0	3	114	31	45
Queue Length 95th (ft)	6	15	18	15	177	72	144
Internal Link Dist (ft)	215	90			639		581
Turn Bay Length (ft)				230		230	
Base Capacity (vph)	687	813	752	256	2100	290	2706
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.02	0.10	0.05	0.51	0.41	0.35
Intersection Summary							