Waterford 53-Unit Residential Development
(City of Waterford, CA)

(Rezone (REZONE) 2024-0002, Design Review (ASPR) 2024-0002, and Tentative Subdivision Map (TMAP) 2024-0001)

INITIAL STUDY – MITIGATED NEGATIVE DECLARATION

PUBLIC REVIEW DRAFT

December 2024

City of Waterford
101 E Street
Waterford, CA 95386

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Tables

1 INTRODUCTION

Precision Civil Engineering, Inc. (PCE) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Waterford (City) to address the environmental effects of the proposed Waterford 53-Unit Residential Development ("Project" or "proposed Project"). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code *Section 21000 et. seq*. The City of Waterford is the Lead Agency for this proposed Project. The site and the proposed Project are described in detail in SECTION 2 ENVIRONMENTAL CHECKLIST FORM.

1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, *Section 15000*, et seq.), also known as the CEQA Guidelines, *Section 15064 (a)(1)* states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels.

A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines *Section 15371*). According to CEQA Guidelines *Section 15070*, a ND or mitigated ND shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or

b. The IS identified potentially significant effects, but:

> *1. Revisions in the project plans or proposals made by or agreed to by the applicant before the 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 is prepared, and*
>
> *2. There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.*

1.2 Document Format

This IS/MND contains five (5) chapters plus appendices. SECTION 1 INTRODUCTION provides bases of the IS/MND's regulatory information and an overview of the Project. SECTION 2 ENVIRONMENTAL CHECKLIST FORM provides a detailed description of Project components. SECTION 3 DETERMINATION concludes that based on the Initial Study, a mitigated negative declaration will be prepared, identifies the environmental factors potentially affected based on the analyses contained in this IS, and includes with the Lead Agency's determination based upon those analyses. SECTION 4 EVALUATION OF ENVIRONMENTAL IMPACTS presents the CEQA checklist and environmental analyses for all impact areas and the mandatory findings of significance. A brief discussion of the reasons why the Project impact is anticipated to be potentially significant, less than significant with mitigation incorporated, less than significant, or why no impacts are expected is included. SECTION 5 MITIGATION MONITORING AND REPORTING

PROGRAM presents the mitigation measures recommended in the IS/MND for the Project. The IPaC List and CNDDB Occurrence Report (Appendix A), CalEEMod Results (Appendix B), CHRIS Search Record (Appendix C), and NAHC SLF Results Letter (Appendix D) are provided at the end of this document.

2 ENVIRONMENTAL CHECKLIST FORM

This section describes the components of the proposed Project in more detail, including Project location, Project objectives, and required Project approvals.

2.1 Project Title

Waterford 53-Unit Residential Development (Rezone (REZONE) 2024-0002, Design Review (ASPR) 2024-0002, and Tentative Subdivision Map (TMAP) 2024-0001)

2.2 Lead Agency Name and Address

City of Waterford
101 E Street
Waterford, CA 95386

2.3 Contact Person and Phone Number

Lead Agency

City of Waterford
Planning Division
Mark Niskanen, Planning Manager
(209) 599-8377

Applicant

Moe Jawad
3319 M Street
Merced, CA 95348
(209) 201-5839

2.4 Study Prepared By

Precision Civil Engineering
1234 O Street
Fresno, CA 93721
(559) 449-4500

2.5 Project Location

The Project site is within the jurisdiction of the City of Waterford, in the County of Stanislaus, in California. The area is located on the north side of Washington Road between South Pasadena Avenue and South Reinway Avenue (Figure 2-1), consisting of one (1) parcel that total approximately 3.61 acres (Figure 2-2). The area is identified by the Stanislaus County Assessor as Assessor's Parcel Number (APN) 080-045-023. The site is a portion of Section 33, Township 3 South, Range 11 East, Mount Diablo Base and Meridian.

2.6 Latitude and Longitude

The centroid of the Project Area is 37.63619197916994, -120.77157770325616.

Figure 2-1 Waterford Residential Subdivision Project Location

Figure 2-2 Waterford Residential Subdivision Project Site Aerial

2.7 General Plan Designation

The Project site has a City of Waterford 2025 General Plan land use designation of MF – Multi-Family Residential (Figure 2-3). According to the General Plan, the purpose of the MF land use designation is *"to provide duplexes, triplexes, fourplexes, condominiums, zero-lot-line as well as single-family detached units on appropriate sized lots."* The MF land use designation is compatible with the R-2, R-3, P-Q, and P-D zoning districts. The residential density permitted within the MF land use designation is 12 dwelling units per acre (du/ac) to 36 du/ac.

2.8 Zoning

The Project site is within the PC (RH) (Ord. 01-06) – Planned Community District (Residential High) zoning district (Figure 2-4). According to the Waterford Municipal Code (WMC), the RH zone has a permitted residential density of 12 du/ac to 36 du/ac.

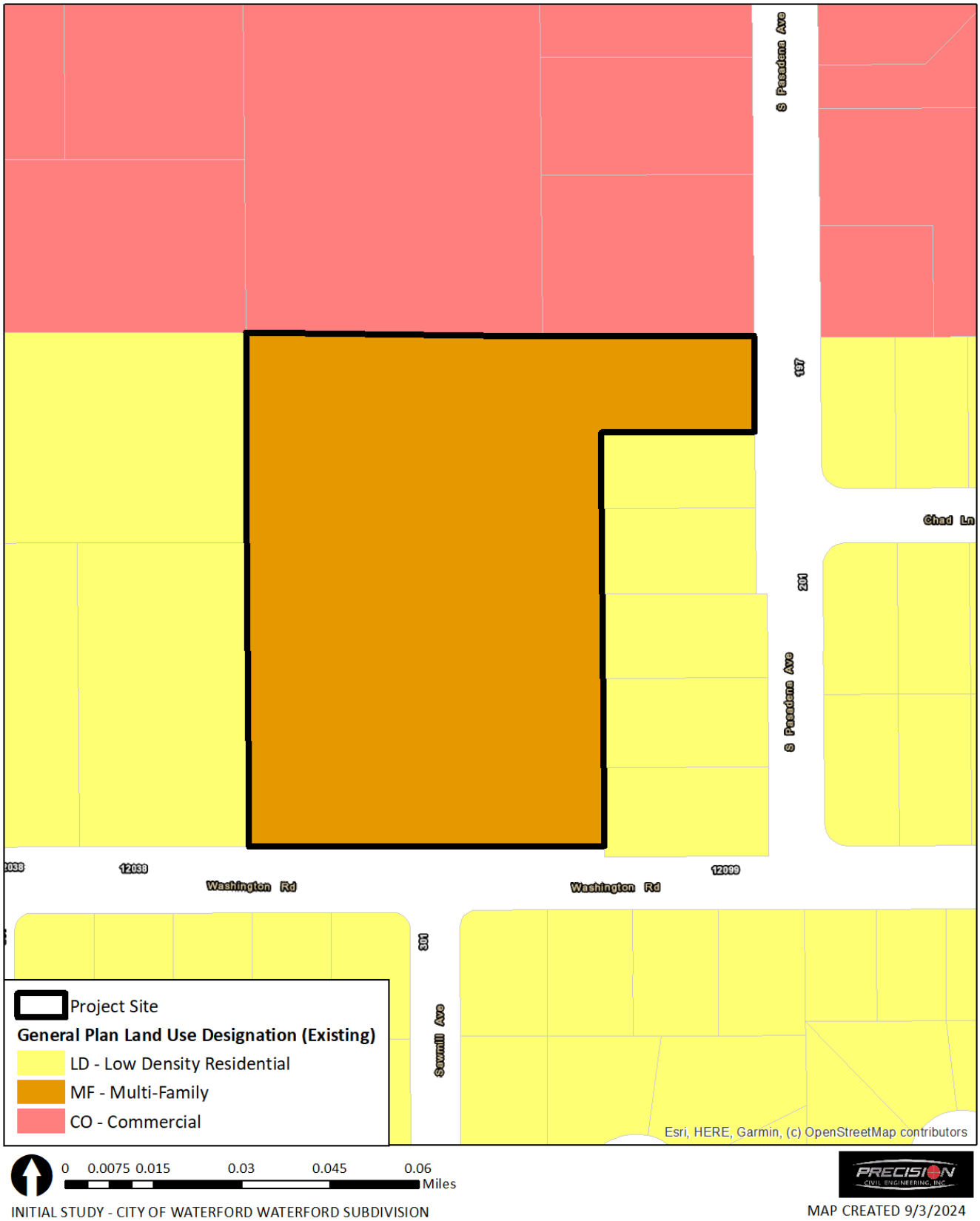


Figure 2-3 General Plan Land Use Designation Map (Existing)

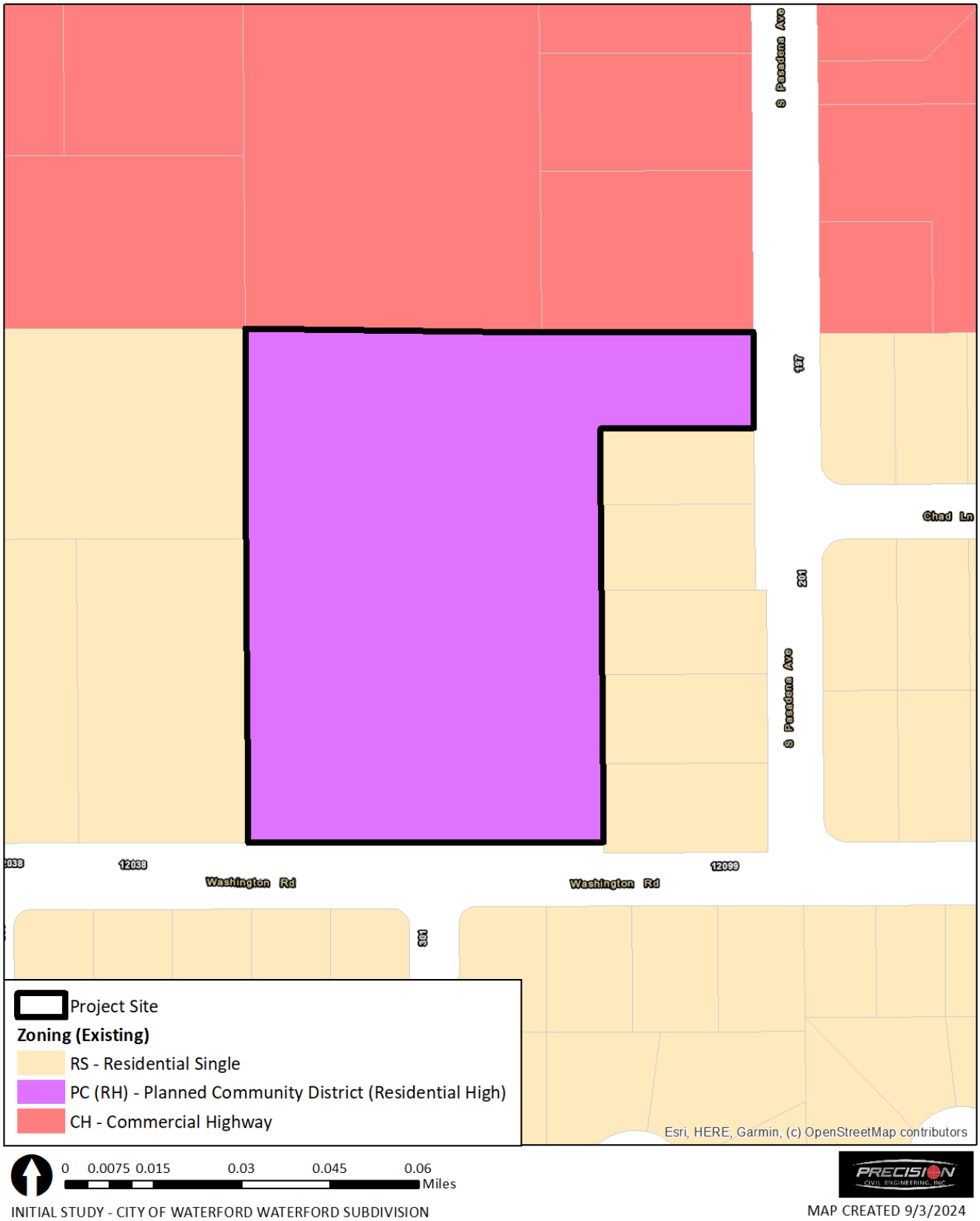


Figure 2-4 Zoning District Map (Existing)

2.9 Description of Project

Rezone (REZONE No. 2024-0002), Design Review (ASPR No. 2024-0002), and Tentative Subdivision Map (TMAP No. 2024-0001) are requested by Moe Jawad (Applicant) and pertain to one (1) parcel totaling approximately 3.61 acres that is located on the north side of Washington Road between South Pasadena Avenue and South Reinway Avenue in Waterford, CA (APN 080-045-023). The Project consists of the following components.

- Rezone (REZONE No. 2024-0002) would rezone the Project site from Planned Community, Residential High (P-C) (RH) to Planned Community (P-C). This allows the Project to deviate from RH development standards. Proposed deviations to development standards in the RH zone district are listed in Table 2-1. The permitted density remains the same (i.e., 12 du/ac to 36 du/ac).
- Tentative Subdivision Map (TMAP No. 2024-0001) subdivides the parcel into 53 lots for the development of residential units (Lots 1 to 53), ranging from 1,500 square-foot (sf.) to 1,860 sf. Each lot is proposed to be developed with one unit (14.7 du/ac). The Project also proposes a filtration basin and an internal network of local streets and sidewalks with one (1) point of ingress/egress on Pasadena Avenue and one (1) point of ingress/egress on Washington Road on Lot 'A'. Lots 'B' through Lot 'E' are located between residential lots for sidewalk purposes. Figure 2-6 shows the proposed tentative subdivision map.
- Design Review (ASPR No. 2024-0002) would permit the development of 53 residential units on the Project site, including seven (7) 2-story stand-alone units (i.e., single-family detached units) and 46 duplex units (i.e., single-family attached units). Figure 2-7 shows the layout of the structures. The development includes three (3) types of floor plans, which are 1,333 sf., 1,481 sf., and 1,485 sf. Two (2) types of elevations are provided for each floor plan. The development is proposed to be gated, with two (2) 19-foot wide swing gate at the ingress/egress from Washington Road and a 25-foot wide iron gate for vehicular access to Pasadena Avenue.

Table 2-1 Deviations to RH Development Standards

Development Standard	RH Zone District Standards	Proposed Project
Minimum site area (sq. ft.)	7,500	1,500
Minimum site width (ft.)	65	25
Minimum yards: Front (ft.)	15	5
Minimum yards: Side (ft.)	6/10	5/5
Minimum yards: Rear (ft.)	15	5
Maximum coverage	60%	Approximately 63%

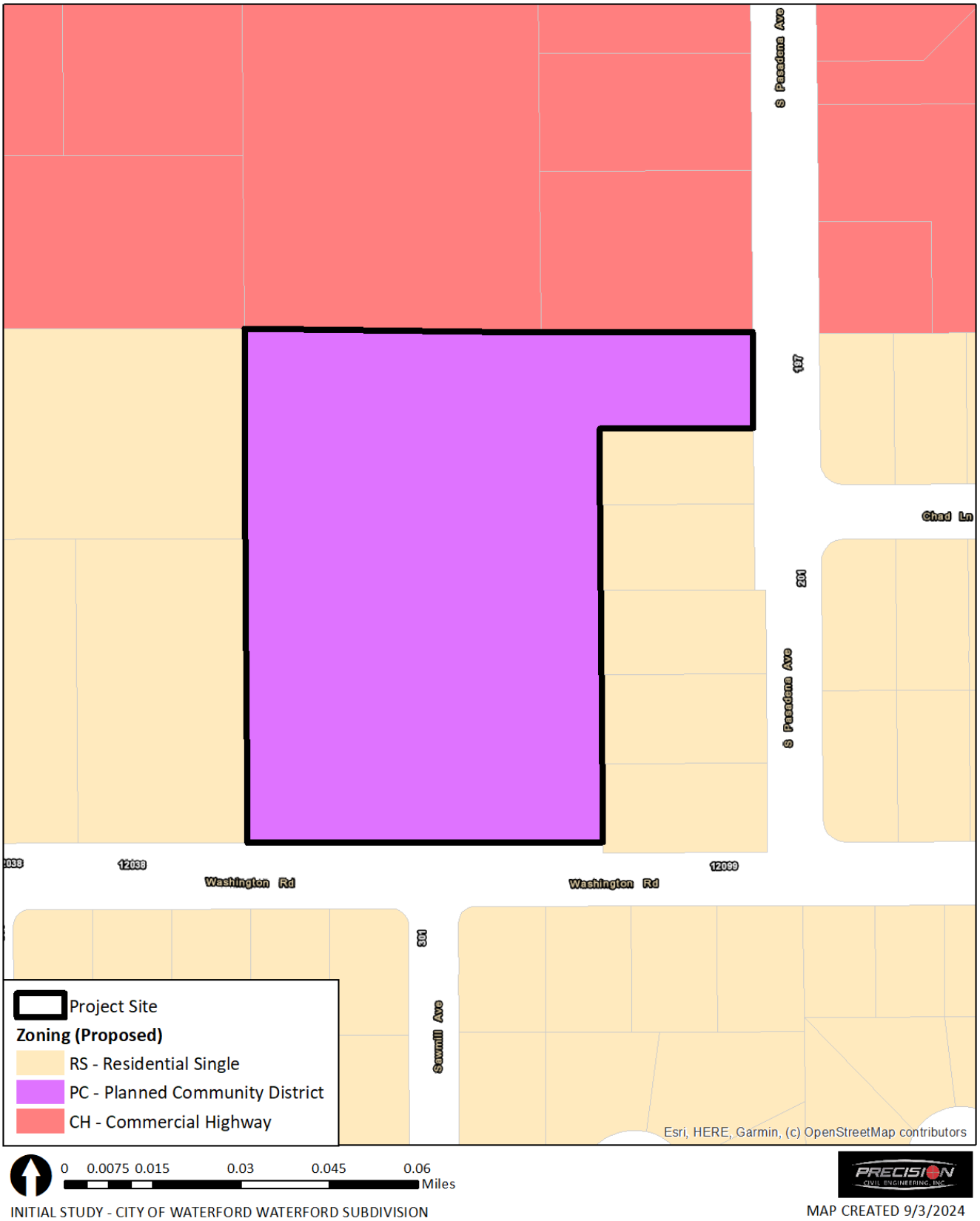


Figure 2-5 Zoning District Map (Proposed)

Figure 2-6 Tentative Subdivision Map

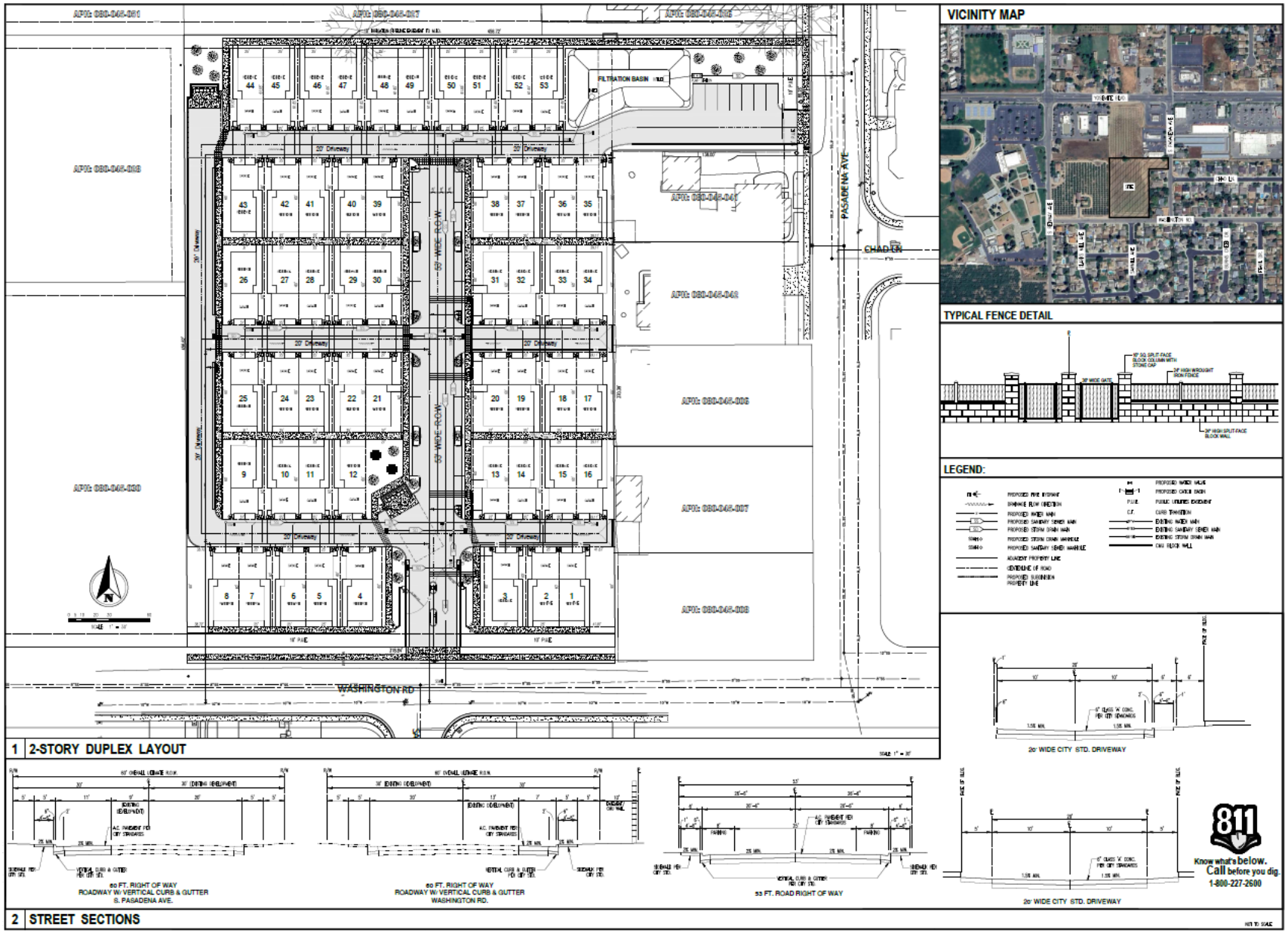


Figure 2-7 Site Plan Layout

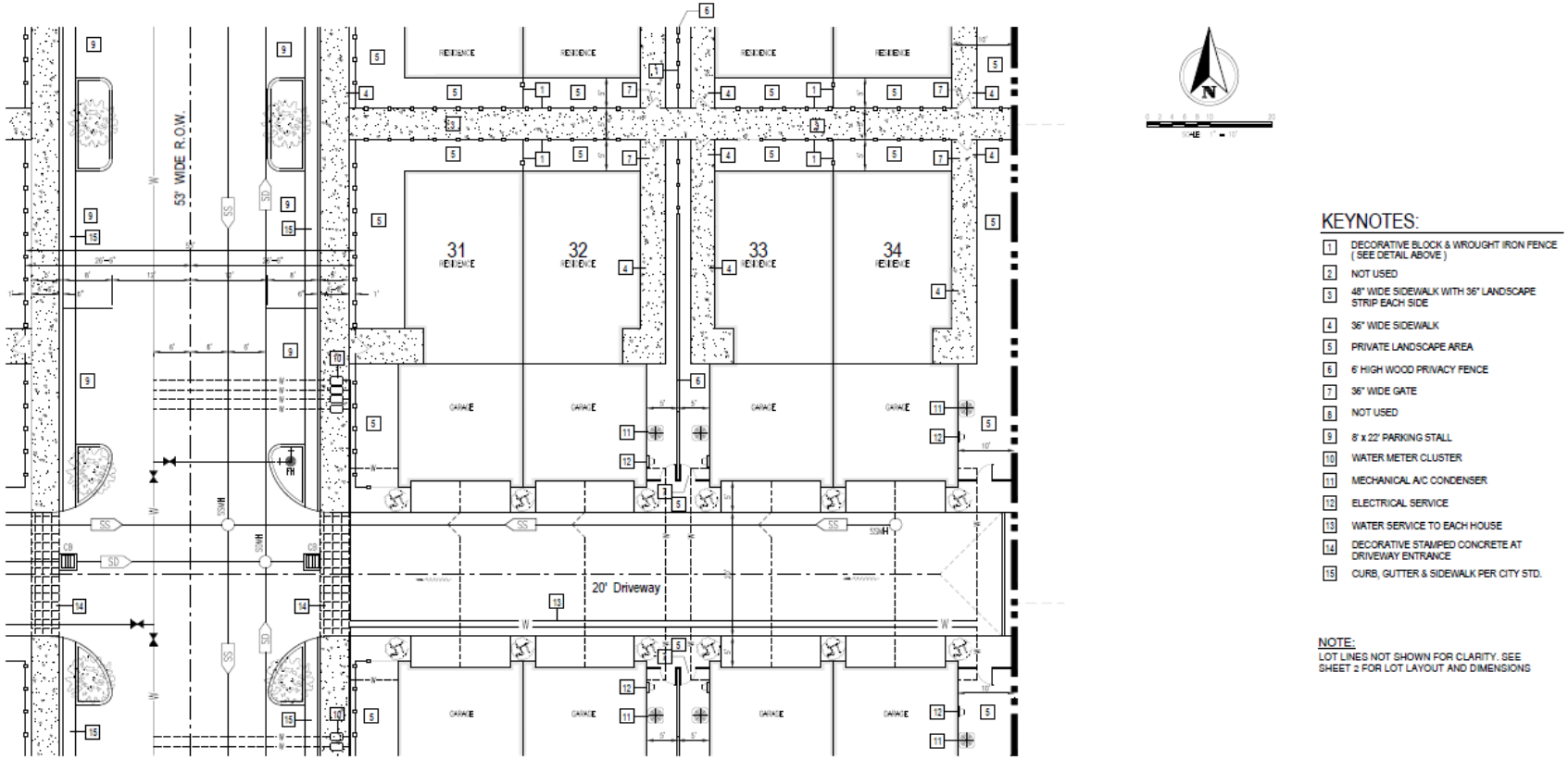


Figure 2-8 Typical Layout for Duplex Units

2.10 Project Setting and Surrounding Land Uses

Project Setting

The Project site has been vacant and annually disked for more than two (2) decades. The Project site is currently undeveloped with no exiting structures or improvements. The Project site is relatively flat with a sandy loam soil type that is mostly well drained with more than 80-inch water table depth. The existing biotic site conditions and resources of the site can be defined primarily as ruderal and are highly disturbed due to annual disking. There are no trees, shrubs, or water features on the site. See Figure 2-9 and Figure 2-10 for photos of the Project site.

Figure 2-9 Image of Project site from the southwest corner looking north (source: Google Street View, June 2023)

Figure 2-10 Image of Project site from the northeast corner looking west (source: Google Street View, June 2023)

Surrounding Land Uses

As referenced in Table 2-2, the Project site is surrounded by vacant land and commercial use to the north, single-family residences to the south and east, and agricultural use to the west. The properties to the north are planned and zoned for commercial uses and properties to the south, east, and west are planned for residential uses within the City of Waterford.

Table 2-2 Existing Uses, General Plan Designations, and Zoning districts of Surrounding Properties

Direction from the Project site	Existing Land Use	Planned Land Use	Zoning District
North	Vacant, Commercial (auto repair)	CO – Commercial	CH – Commercial Highway
South	Single-family residences	LD – Low Density Residential	RS – Residential Single
East	Single-family residences	LD – Low Density Residential	RS – Residential Single
West	Agriculture (row crops)	LD – Low Density Residential	RS – Residential Single

2.11 Site Preparation

Site preparation would include typical grading activities and minor excavation for installation of utility infrastructure for conveyance of water, sewer, stormwater, and irrigation. Site preparation, building, grading, encroachment, and site utilities permits would be subject to review and approval by the appropriate agency and/or department to ensure compliance with applicable codes and regulations. Compliance would be verified through the building permit and inspection process.

2.12 Project Construction and Phasing

The proposed Project does not anticipate any phasing and is expected to start construction in the third quarter of 2025 and conclude in 2028. Occupancy is expected to occur after 2028.

2.13 Project Components

This section describes the overall components of the Project, such as the proposed buildings, landscaping, vehicle and pedestrian circulation, and utilities.

Site Layout and Elevations

As shown in Figure 2-6, the Project proposes the construction of seven (7) single-family units and 46 duplex units on 53 lots (14.7 du/ac), in addition to a filtration basin, a pocket park, public landscaping, two (2) trash enclosures, and roadway improvements (i.e., curb, gutter, sidewalks, and lighting). Each unit is designed to have a similar layout.

Site Design Features

The layout of the site is shown in Figure 2-7. The typical layout for duplex units is shown in Figure 2-8. Two (2) trash enclosures are located to the northeast corner and next to the pocket park on the site. A filtration basin is proposed on the north boundary of the site, to the east of Lot 53. A six (6)-foot tall decorative concrete masonry unit (CMU) is proposed along the north and south boundaries of the subdivision and along Pasadena Avenue. A six (6)-foot tall wood fence is proposed along the east and west boundaries of the site. The development is proposed to be gated, with two (2) 19-foot wide swing gate at the ingress/egress from Washington Road and a 25-foot wide iron gate for vehicular access to Pasadena Avenue.

Building Design Features

There are three (3) types of floor plans, as shown in Figure 2-11. The smallest floor plan is 1,333 square feet (sf.) per unit. The first floor is 547-sf., with a two (2)-car garage, a kitchen, dining, living room, and a powder room. The second floor is 786-sf., with three (3) bedrooms and two (2) bathrooms. The next floor plan is 1,481 sf. per unit. The first floor is 547-sf., with the same layout as the 1,333-sf. floor plan. The second floor is 934-sf., with three (3) bedrooms and two (2) bathrooms. The largest floor plan is 1,485 sf. per unit. The first floor is 553-sf., with a two (2)-car garage, a kitchen, dining, living room, and a powder room. The second floor is 932 sf., with four (4) bedrooms and two (2) bathrooms.

There are two (2) types of elevations for each floor plan, as shown in Figure 2-12. Elevation A of the 1,333-sf. and 1,485-sf. floor plan, and elevation B of the 1,481-sf. floor plan has vertical paneling and stucco. Elevation B of the 1,333-sf. floor plan and 1,485-sf. floor plan has horizontal paneling and stucco. Elevation A of the 1,481-sf. floor plan is solely stucco. The overall color and roof tile used for each elevation are the same.

Some energy-efficient designs of the Project include lighting, solar panels, low-E windows, class C type roof, and NEEA-rated heat pump water heater. The Project would be built in accordance with all mandatory indoor water use requirements as outlined in the 2022 California Green Building Standards Code, Title 24, Part 11, *Section 4.303 – Indoor Water Use* and verified through the building permit process. As a residential development that contains plumbing fixtures and fittings, the Project shall comply with water-conserving measures for water closets, urinals, showerheads, and faucets. The Project proposes the use of low flow plumbing fixtures with flow rates that comply with requirements. In addition, as a residential development, the Project would be required to install submeters to measure water usage of individual units in accordance with the California Plumbing Code.

Site Circulation and Parking

Vehicular access to the site would be provided by one (1) point of ingress/egress from Washington Road and one (1) point of ingress/egress from Pasadena Avenue. Internal circulation within the site would be provided by private streets, including a north-south 53-foot-wide main right-of-way and 20-foot-wide driveways. All roadways within the proposed subdivision would be designed in accordance with City Standards and would have curbs, gutter, and sidewalk. A 10-feet wide public utility easement (PUE) along Washington Road and along Pasadena Avenue frontages are proposed to be dedicated to the City of Waterford for rights-of-way purposes. The rights-of-way would be improved in accordance with City Standards. Turning radii are also proposed within the subdivision per Stanislaus Consolidated Fire Protection District and City Standards for emergency access and solid waste vehicle access.

A garage for two (2) parking spaces are provided for each dwelling unit. 22 uncovered parking spaces are proposed along the internal private street of the subdivision.

Open Space and Landscaping

Landscaping is proposed on the northeast and northwest corner of the site. A pocket park is proposed to the east of Lot 12. Two (2) table and bench sets and trees are proposed to be included in the pocked park. Some landscaping is also proposed along the 53-foot right-of-way within the development. A total of 24 trees are proposed in these areas.

The Project would be built in accordance with all mandatory outdoor water use requirements as outlined in the 2022 California Green Building Standards Code, Title 24, Part 11, *Section 4.304 – Outdoor Water Use* and verified through the building permit process. As a residential development that contains landscaping including trees, shrubs, ground cover/annual plants, and lawn, the Project shall comply with the updated Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Chapter 2.7, Division 2), as implemented and enforced through the building permit process.

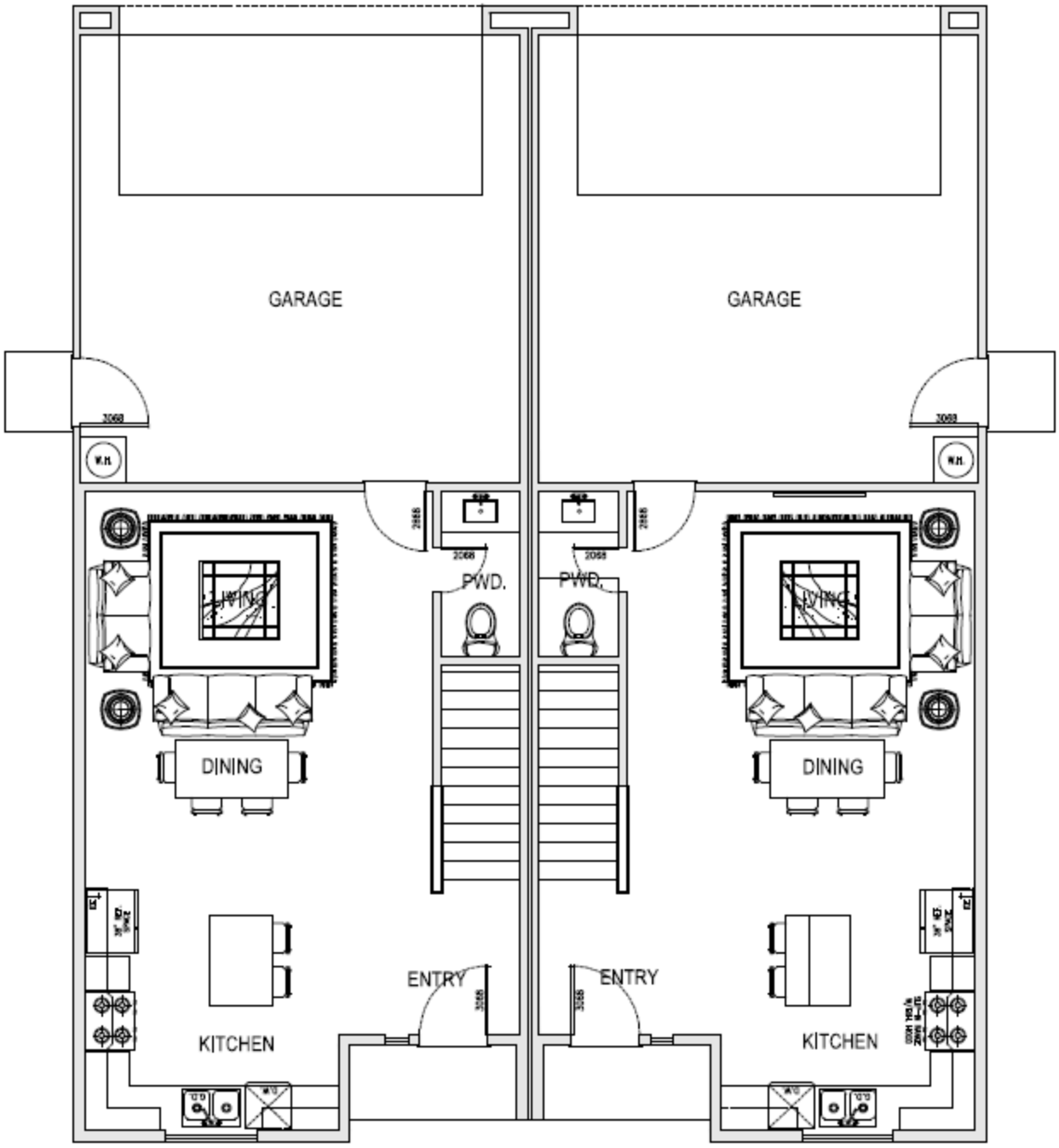
Public Services and Utilities

The Project is within City limits and thus, would be required to connect to water, wastewater, and stormwater services. Natural gas, electricity, telecommunications, and solid waste services are provided by private companies. In addition, the Project would be subject to fees for the construction, acquisition, and improvements for public services including but not limited to fire protection services, police protection services, and schools. Water, wastewater, and stormwater services are described further below. Figure 2-6 shows the proposed location of water, sewer, and drainage pipelines throughout the Project site.

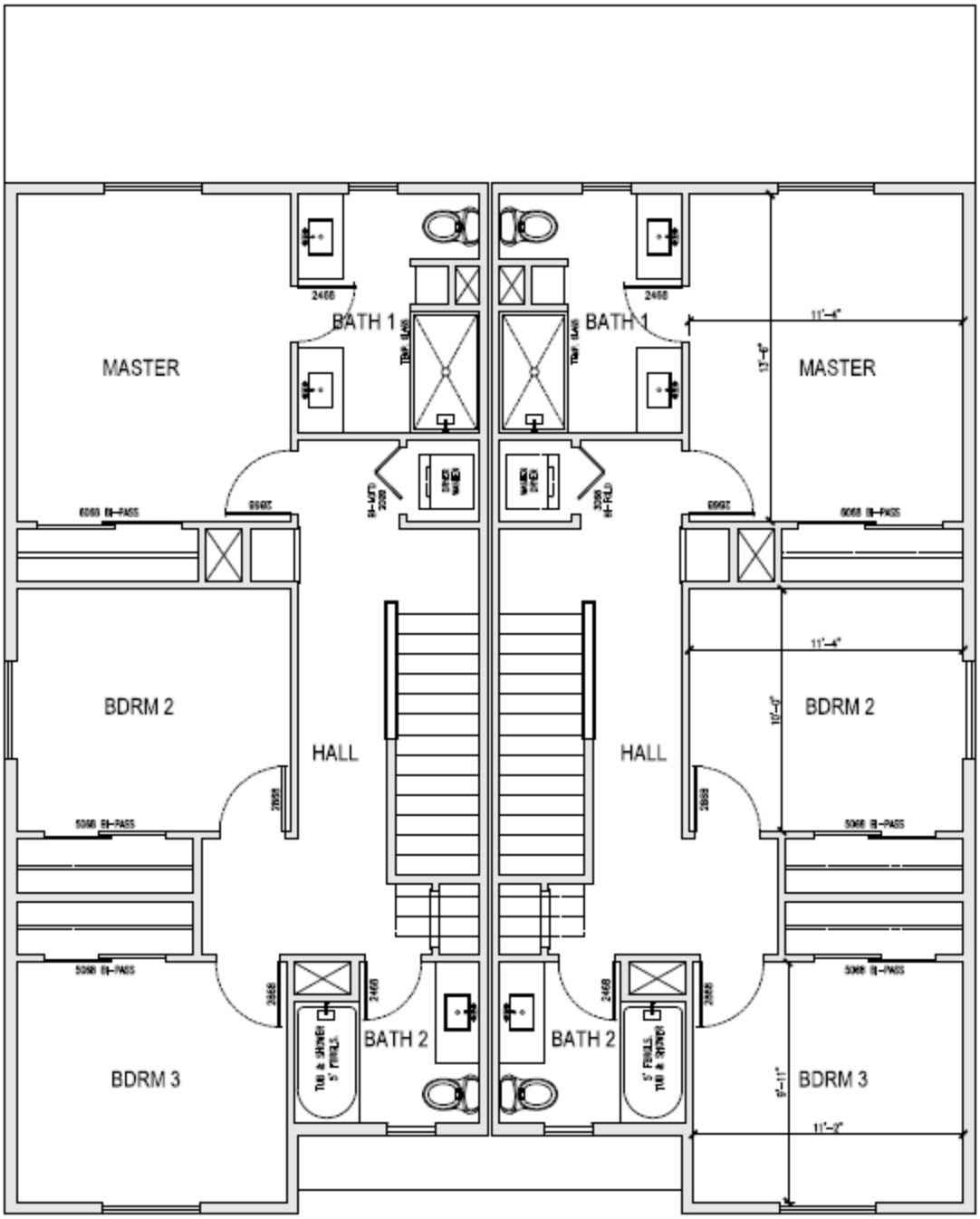
Domestic water service would be provided to the site through proposed water mains located throughout the site. These pipelines would connect to the City system through a connection point on Pasadena Avenue.

Sanitary sewer service would be provided to the site through sewer mains located throughout the site. These pipelines would connect to the City system through a connection point on Washington Road.

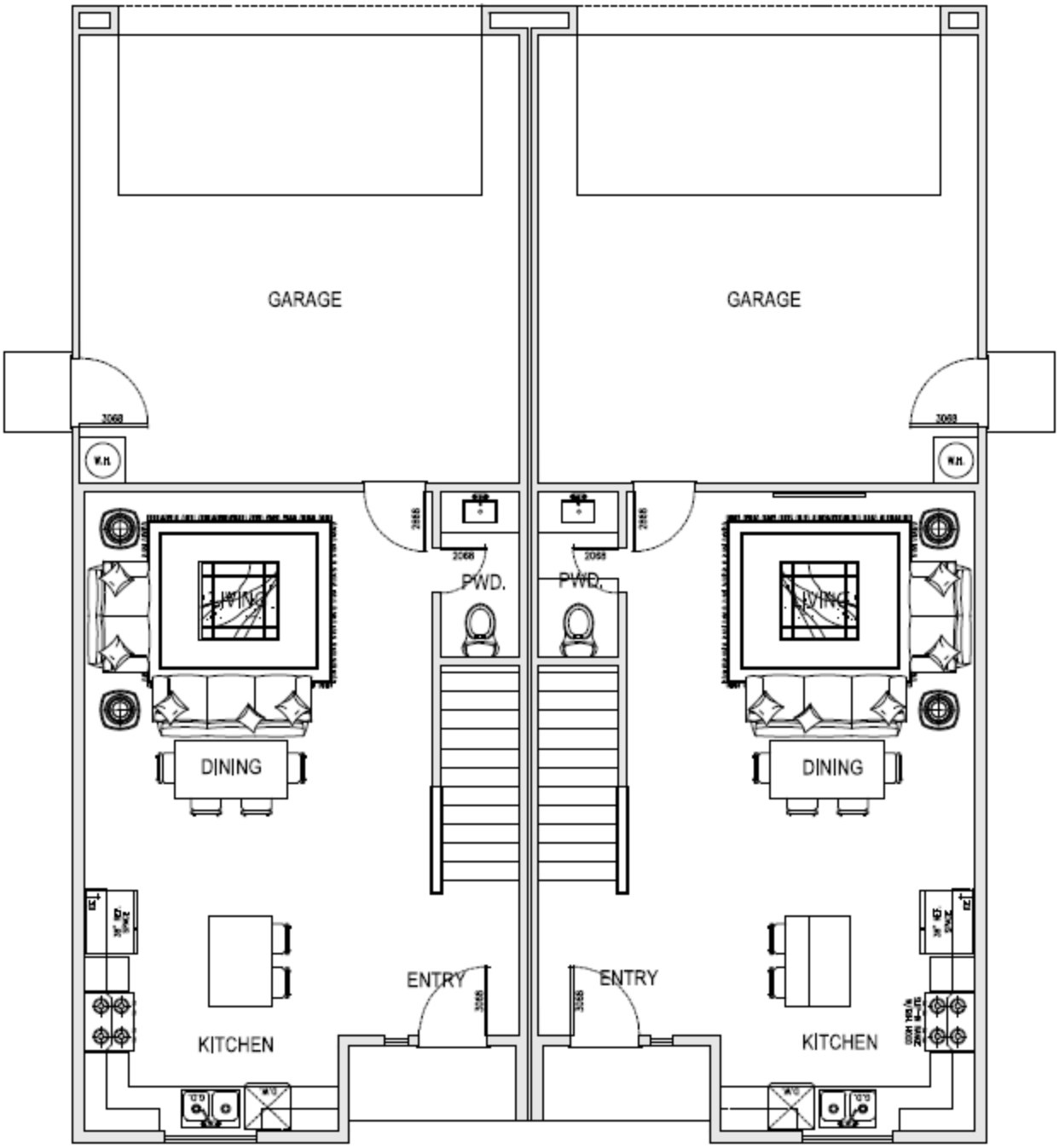
A filtration basin is proposed on the north side of the subdivision. The basin was adequately sized to accommodate stormwater runoff from the site. Based on the proposed site grading, stormwater runoff will generally drain toward the basin through storm drains throughout the site. A pump station to the east of the basin would then drain the water within the basin to the City system through a connection point on Pasadena Road.



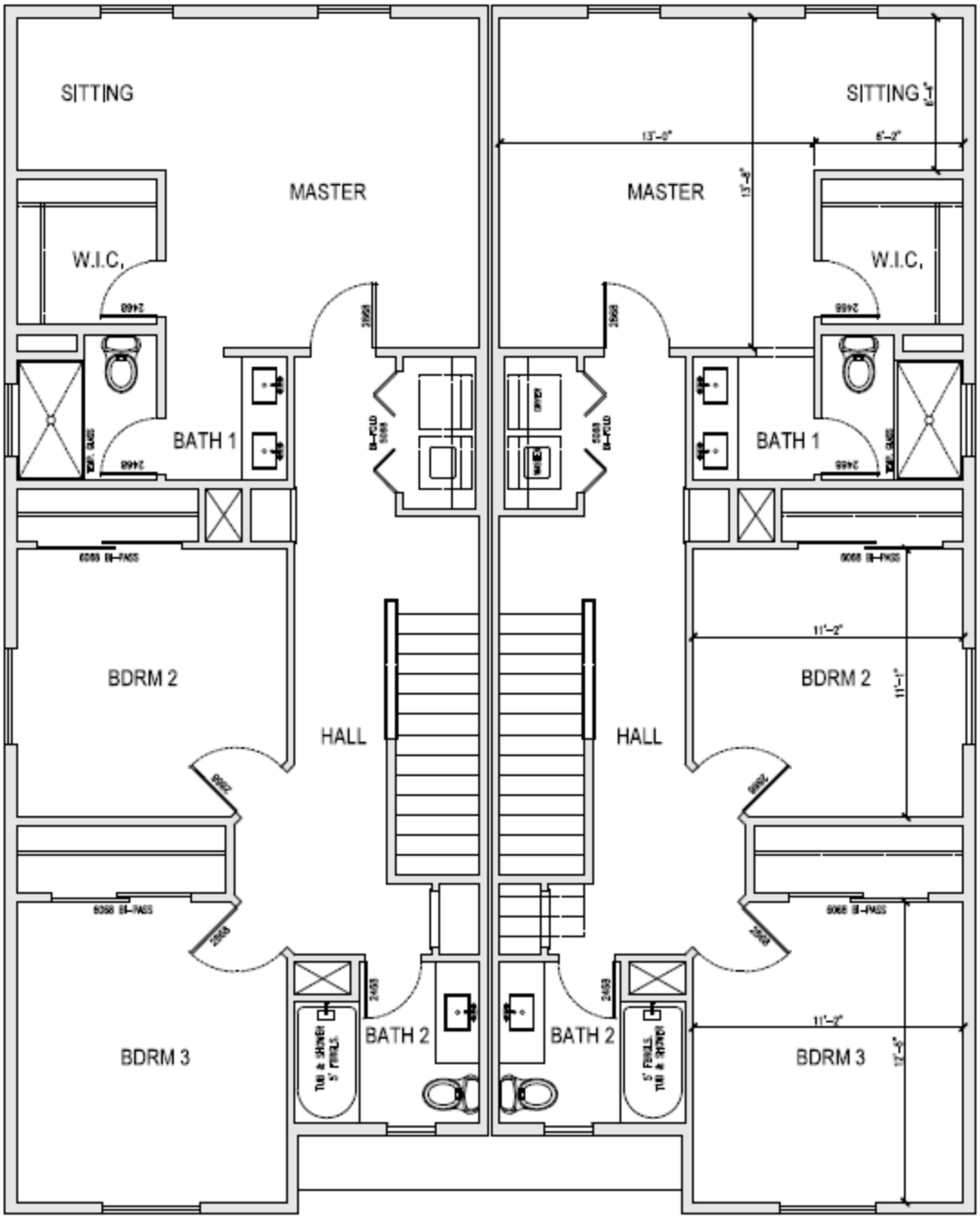
Plan 1333
1rst Floor - 547 s.f.
1/8" = 1'-0"



PLAN 1333
2nd Floor - 786 s.f.
1/8" = 1'-0"

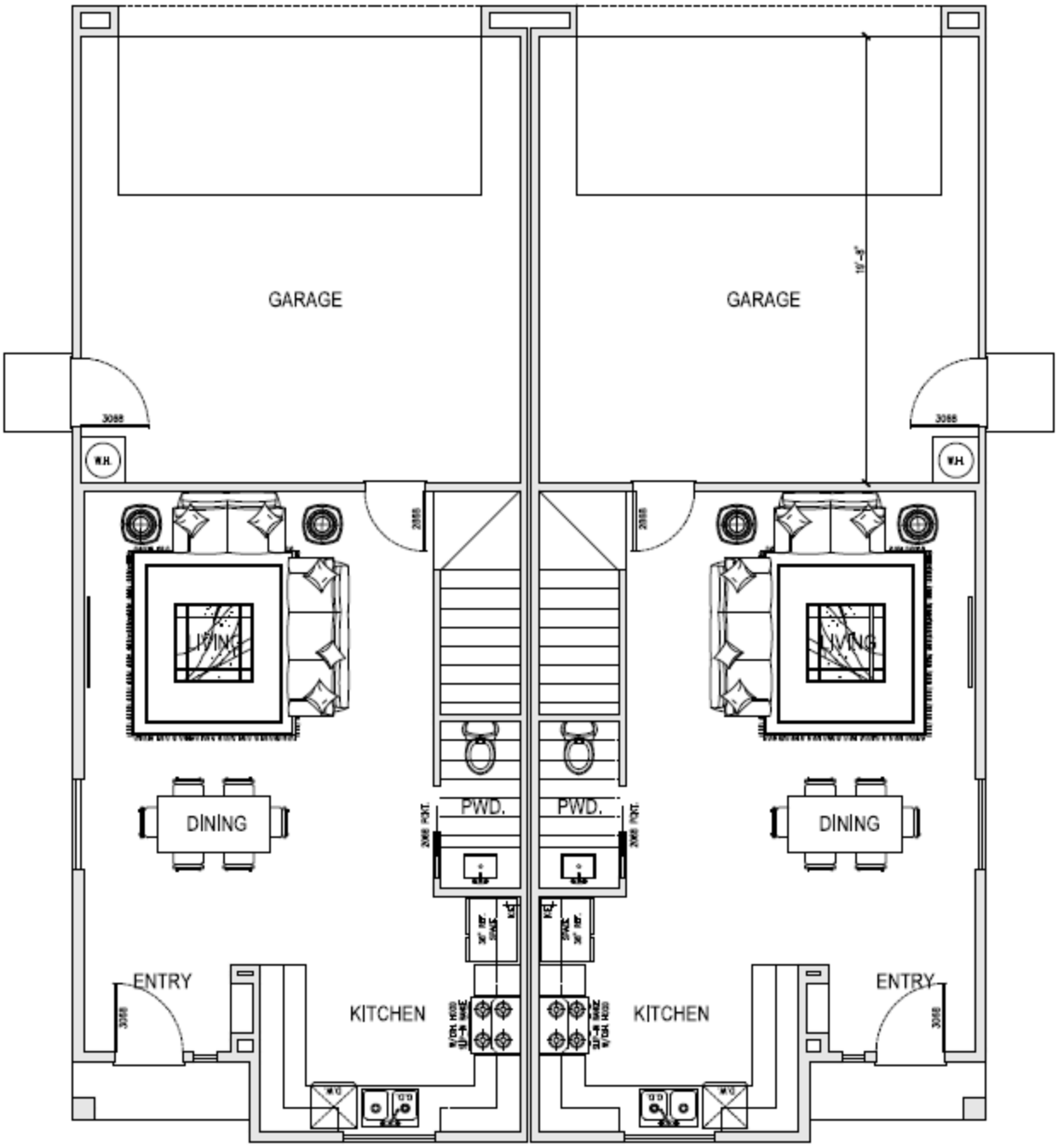


Plan 1481
1rst Floor - 547 s.f.
1/8" = 1'-0"

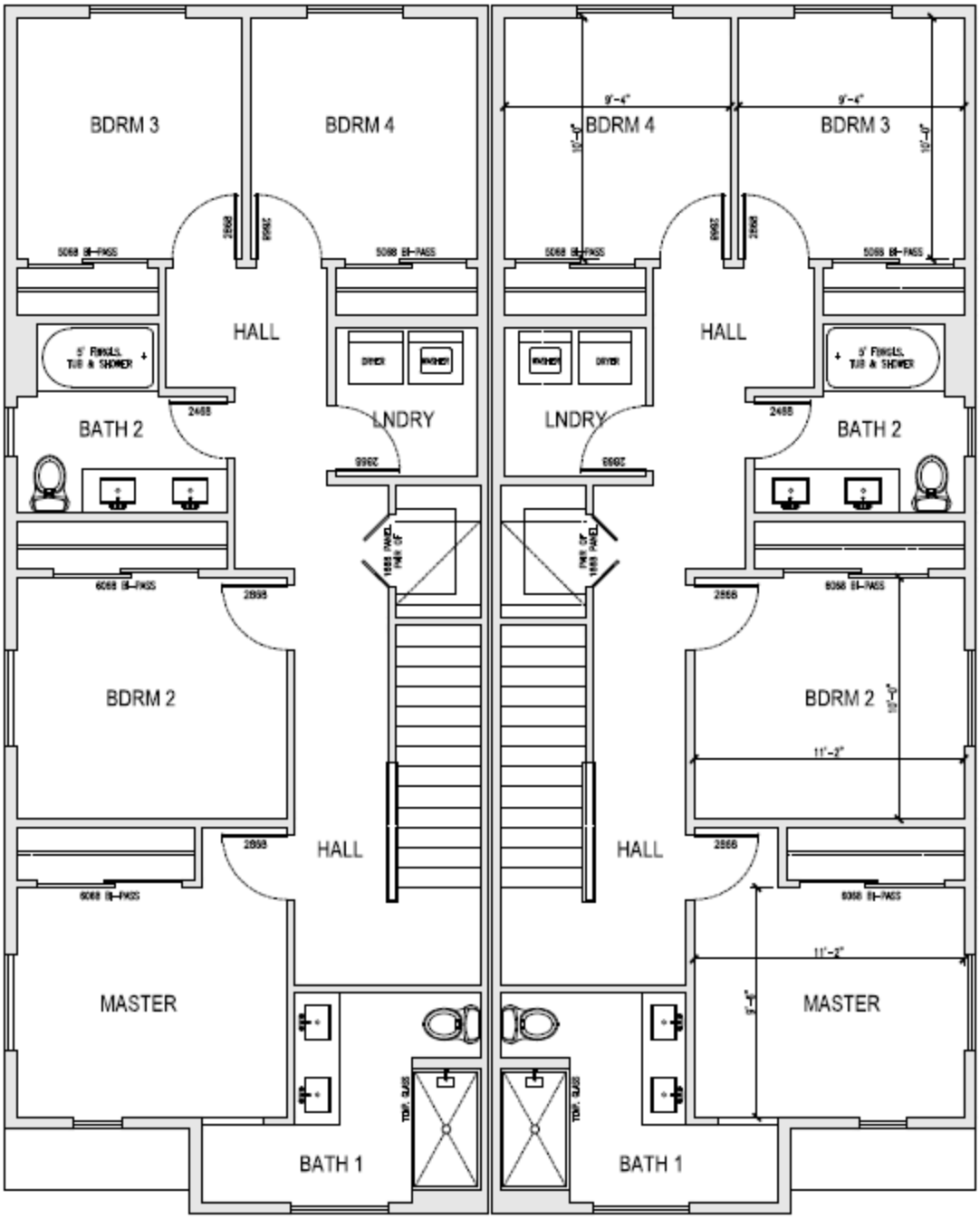


Plan 1481
2nd Floor - 934 s.f.

1/8" = 1'-0"



PLAN 1485
1rst Floor - 553 s.f.
1/8" = 1'-0"



PLAN 1485
2nd Floor - 932 s.f.
1/8" = 1'-0"

Figure 2-11 Floor Plans


304
Stonegate
42
Wise Owl
14
Frost


ROOF TILE


Sidewalk

333. A


304
Stonegate
42
Wise Owl
14
Frost


ROOF TILE


Sidewalk

333. B


304
Stonegate
42
Wise Owl
14
Frost


ROOF TILE


sidewalk

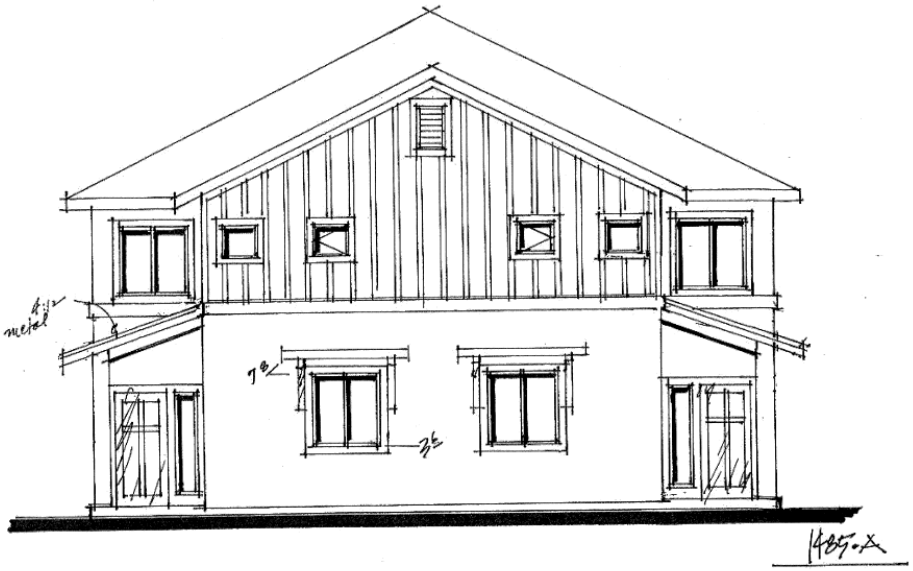
1481-A


304
Stonegate
42
Wise Owl
14
Frost


ROOF TILE


sidewalk

1481-B



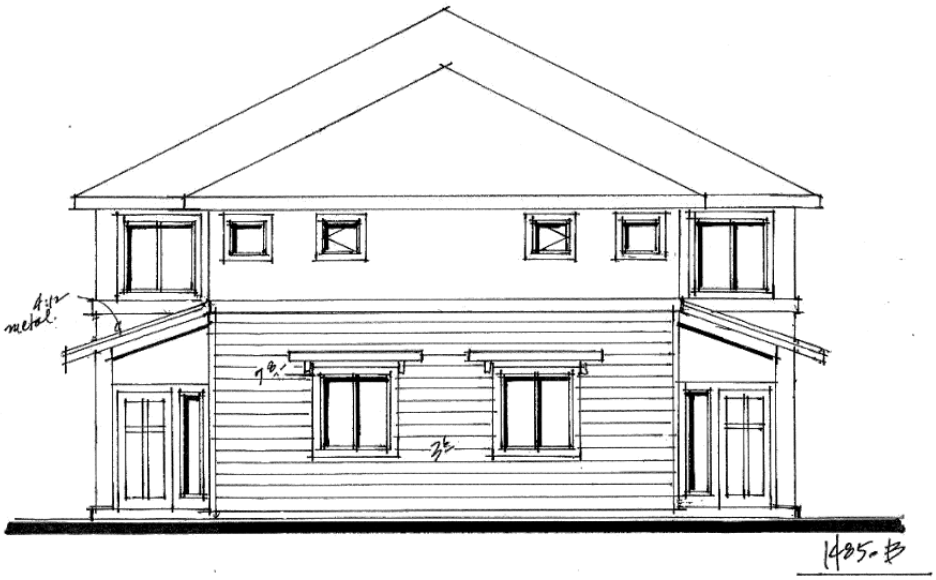


Figure 2-12 Elevations

2.14 Required Project Approvals

The City of Waterford requires the following review, permits, and/or approvals for the proposed Project. Other approvals not listed below may be required as identified through the entitlement process.

- Rezone
- Tentative Subdivision Map
- Design Review
- Environmental Review

In addition, other agencies may have the authority to issue permits prior to implementation of the Project including but not limited to: San Joaquin Valley Air Pollution Control District, Pacific Gas & Electric, Modesto Irrigation District, and California Regional Water Quality Control Board.

2.15 Consultation with California Native American Tribes

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 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.

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.

A consultation list of tribes with traditional lands or cultural places located within Stanislaus County was requested and received from the California Native American Heritage Commission (NAHC) on September 10, 2024. The listed tribes include Amah Mutsun Tribal Band, Northern Valley Yokut/Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Wuksachi Indian Tribe/Eshom Valley Band. The NAHC also conducted a Sacred Lands File (SFL) search which was negative.

The City of Waterford conducted formal tribal consultation for the proposed Project pursuant to AB 52 (Chapter 532, Statutes 2014) on September 6, 2024. Letters were sent to Wuksachi Indian Tribe/Eshom Valley Band, Chicken Ranch Rancheria of Me-Wuk Indians, Northern Valley Yokut Tribe, Calaveras Band of Mi-Wuk Indians, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Nashville Enterprise Miwok-Maidu-Nishinam Tribe. Consultation for AB 52 ended on October 6, 2024. No responses have been received.

3 DETERMINATION

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☒ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use Planning
- ☐ Mineral Resources
- ☒ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☒ Tribal and Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire

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

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

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

"Less Than Significant with Mitigation Incorporation" means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the Project, the impact is less than significant. For purposes of this Initial Study "mitigation incorporated into the Project" means mitigation originally described in the GP PEIR and applied to an individual Project, as well as mitigation developed specifically for an individual Project.

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

3.2 Determination

On the basis of this initial evaluation (to be completed by the Lead Agency):

☐ 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 (EIR) is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Approved By:

Mark Niskanen, Planning Manager — Date
City of Waterford, Planning Division

4 EVALUATION OF ENVIRONMENTAL IMPACTS

4.1 AESTHETICS

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

4.1.1 Environmental Setting

Generally, aesthetics may include scenic vistas and scenic resources (e.g. trees, rock outcroppings, historic buildings, and highways). Waterford's visual features predominately include urbanized and agricultural land uses.

City of Waterford General Plan

The Waterford General Plan Open Space and Conservation Element helps to protect natural resources and habitats as well as enhancing important attributes to provide recreation for its residents. The General Plan identifies nine (9) designated scenic corridors. General Plan policies applicable to the visual appearance and character of the City include:

> ***Policy OS-A-3 Promote the Projection and Enhancement of Designated Scenic Routes.*** *Historically, the City of Waterford has developed along routes and corridors which have come to be part of the City's identity. The City has designated many of these scenic routes for special development review regulation in the past. This practice has served the City well and will be continued into the future.*

City of Waterford Municipal Code

The City of Waterford Municipal Code (WMC) outlines performance standards which "ensure compatibility between land uses by setting limits, whether generic or quantitative, for dust, heat, electrical disturbances, fumes, vapors, odor, noise, lighting, and so forth." Performance standards related to lighting and glare include:

Section 17.44.080 – Lighting

Exterior lighting shall be designed and maintained in a manner so that glare and reflections are contained within the boundaries of the parcel, and shall be hooded and directed downward and away from adjoining properties and public rights-of-way. The use of blinking, flashing or unusually high intensity or bright lights shall not be allowed. All lighting fixtures shall be appropriate to the use they are serving, in scale, intensity and height.

Section 17.44.090 – Glare

***B.** From Outdoor Lighting. Parking lot lighting shall comply with Chapter 17.54. Site lighting shall be designed and installed to confine direct light rays to the site. Minimum illumination at ground level shall be 0.5 foot-candles, and shall not exceed 0.5 foot-candles in an R district. Security lighting in any district may be indirect or diffused, or shall be shielded or directed away from adjoining properties and public rights-of-way. Lighting for outdoor court or field games within three hundred feet of an R district shall require approval of a use permit.*

City of Waterford Improvement Standards

The City's Improvement Standards regulate the design and construction of streetlights and streetlight placement on cul-de-sacs, minor residential, collector, and major streets. These lighting standards ensure that all work conforms to the applicable sections of the specifications entitled "Standard Specifications, State of California, Business and Transportation Agency, Department of Transportation" and in accordance with the National Electrical Code. The luminaire and design of the lighting also prevents substantial light and glare. Decorative streetlights are also regulated to ensure the use of LED luminaire, numbering, materials, and design of all types of light.

California Scenic Highway Program

The California Scenic Highway Program was established in 1963 with the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. There are no officially designated State Scenic Highways in the City of Waterford, inclusive of the Project site. The closest eligible State Scenic Highway is State Route (SR) 49, located approximately 31.5 miles northeast of the Project site. [1]

4.1.2 Impact Assessment

*Except as provided in PRC Section 21099, **would the Project**:*

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

[1] Caltrans. California State Scenic Highway System Map. Accessed on September 4, 2024, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

No Impact. The Project site is undeveloped and surrounded by single-family residences to the south and east, vacant and commercial uses to the north, and agriculture to the west. The site is generally flat and there are no long-range scenic views (e.g., mountain ranges) that can be seen from the Project site. The nearest scenic corridor designated by the General Plan is Highway 132/Yosemite Boulevard, which is approximately 500 feet north of the Project site. The Project would have no impact on scenic corridors since it is not within the vicinity/has no view of the corridor. As a result, the Project would not adversely affect scenic vistas and no impact would occur because of the Project.

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

No Impact. According to the California State Scenic Highway Program, there are no officially designated State Scenic Highways in the City of Waterford, inclusive of the Project site. As such, the proposed Project would not damage scenic resources, including trees, rock out-croppings, and historic buildings within a state scenic highway and no impact would occur.

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

Less than Significant Impact. The Project site is in an urbanized area surrounded by residential and commercial uses. Although the site is currently vacant, development of the Project site will not have a significantly different character from the surrounding area, which is primarily developed with similar residential uses. Further, the proposed use is subject to compliance with applicable zoning and other regulations governing scenic quality, which will ensure the minimization of any visual impact by upholding the visual character or quality of public views of the site and its surroundings. The Project would be subject to compliance with applicable policies and regulations that govern scenic quality including but not limited to the General Plan, Waterford Municipal Code (WMC), and California Building Code (CBC). Compliance would ensure that development of the site would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, a less than significant impact would occur because of the Project.

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

Less than Significant Impact. Generally, lighting impacts are associated with artificial lighting in evening hours either through interior lighting from windows or exterior lighting (e.g., street lighting, parking lot lighting, landscape lighting, cars, and trucks). Development of the Project site would incrementally increase the amount of light from streetlights, exterior lighting, and vehicular headlights. Such sources could create adverse effects on day or nighttime views in the area.

Project construction would also introduce light and glare resulting from construction activities such as construction equipment traversing the site that could adversely affect day or nighttime views. Although construction activities are anticipated to occur primarily during daylight hours, it is possible that some activities could occur during dusk or early evening hours (WMC *Section 8.22.040* permits construction work to take place between 7:00 am and 7:00 pm on weekdays and 8:00 am and 9:00 pm on weekends and legal holidays). Construction during these time periods could result in light and glare from construction vehicles or equipment. However, construction would occur

primarily during daylight hours and would be temporary in nature. Once construction is completed, any light and glare from these activities would cease to occur.

Once developed, the Project would be required to comply with the applicable General Plan policies and the enforceable requirements and restrictions contained in the WMC intended to prevent light and glare impacts (See Environmental Setting). Further, compliance with Title 24 lighting requirements as verified through the Building Permit process would reduce impacts related to nighttime light. The lighting requirements cover outdoor spaces including regulations for mounted luminaires (i.e., high efficacy, motion sensor controlled, time clocks, energy management control systems, etc.). As such, conditions imposed on the Project by the City pursuant to the General Plan, Waterford Municipal Code, and Title 24 would result in a less than significant impact.

4.1.3 Mitigation Measures

None required.

4.2 AGRICULTURE AND FORESTRY RESOURCES

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?			X	
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

4.2.1 Environmental Setting

The Project site is located within the City of Waterford city limits and is planned and zoned for residential use. The site is generally flat and does not contain any geologic formations. The Project site is surrounded to the east and south by residential uses, to the west by row crop orchards, and to the north by vacant land. The Project site is currently vacant with no off-site street improvements. The existing biotic conditions and resources of the site can be defined primarily as grassland and herbaceous vegetation with heavy alteration due to mowing and disking. There are no trees, shrubs, or water features on the site.

Farmland Monitoring and Mapping Program

The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP) that provides maps and data for analyzing land use impacts to farmland. The FMMP produces the Important Farmland

Finder as a resource map that shows quality (soils) and land use information. Agricultural land is rated according to soil quality and irrigation status, in addition to many other physical and chemical characteristics. The highest quality land is called "Prime Farmland" which is defined by the FMMP as *"farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.* [2] Maps are updated every two (2) years. According to the most recently updated FMMP, California Important Farmland Finder, the Project site is primarily classified as "Prime Farmland" with a portion classified as "Urban and Built-Up Land" as defined below. [3] Figure 4-1 shows the farmland type classification within the Project vicinity. Table 4-1 shows the acreage of each farmland type on the Project site.

- Prime Farmland (P): Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Urban and Built Up Land: Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures per 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Table 4-1 Farmland Type on the Project site

	Project Site
Prime Farmland	3.16 acres
Urban and Built Up Land	0.47 acres

California Land Conservation Act

The California Land Conservation Act of 1965 (i.e., the Williamson Act) allows local governments to enter contracts with private landowners to restrict parcels of land for agricultural or open space uses. In return, property tax assessments of the restricted parcels are lower than full market value since the restricted parcels are assessed according to their restricted use rather than their development potential free of such restriction. The minimum initial term of a Williamson Act contract is 10 years and automatically renews annually upon its anniversary date; as such, the contract length is essentially indefinite unless appropriately cancelled. The Project site is not subject to the Williamson Act.

City of Waterford General Plan

The General Plan establishes goals, policies, and implementation program regarding the conservation of agricultural land within the city's Sphere of Influence (SOI), as listed below.

[2] California Department of Conservation. Important Farmland Categories. Accessed on September 5, 2024, https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx
[3] California Department of Conservation. (2018). California Important Farmland Finder. Accessed on September 5, 2024, https://maps.conservation.ca.gov/DLRP/CIFF/

Goal Area UE-A: Urban Expansion

Policy UE-3 The City Shall Accommodate Urban Development on Non-Prime Soils Whenever Feasible. *The City of Waterford is situated within a portion of the County containing large tracts of "Prime" agricultural soils. Fortunately, some areas surrounding the City do not have extensive tracts of Prime agricultural soils and urban expansion can be accommodated without significantly impacting the agricultural resources of the region.*

Goal Area OS-B: Open Space for the Managed Protection of Resources.

Policy OS-B-1 Protect Agricultural Areas Outside the City's Urban Growth Area from Urban Impacts. *Regional agricultural cropland provides an economic base for the City of Waterford and the long-term economic health of the City is directly linked to conserving the productive capacity of the regional farmland. In light of this, the City has established urban expansion policies directing urban growth away from "prime" agricultural soils. To the same degree, policies are needed to protect farmland along the urban interface and to promote open space policies which protect farmland and the farming industry.*

Policy OS-B-2 Relieve Pressures on Converting Areas Containing Large Concentrations of "Prime" Agricultural Soils to Urban Uses by Providing Adequate Urban Development Land Within the Waterford City Urban Growth Area. *Generally, overly restrictive growth and development policies within a city can translate into increased development pressure on rural areas. The City of Waterford is committed to providing adequate and economically competitive development land within its urban growth area to reduce rural development pressures on the valuable agricultural lands outside the City's urban growth area and in the surrounding region.*

Goal Area SD-4: Agricultural Resources

Policy SD-4.1 Preserve the City's Prime Agricultural Soils*. Agriculture and the agricultural economy of the region are the underpinning of a sound economic base of the City of Waterford. Central to the maintenance of that economic base is the preservation of the most productive agricultural soils in the region.*

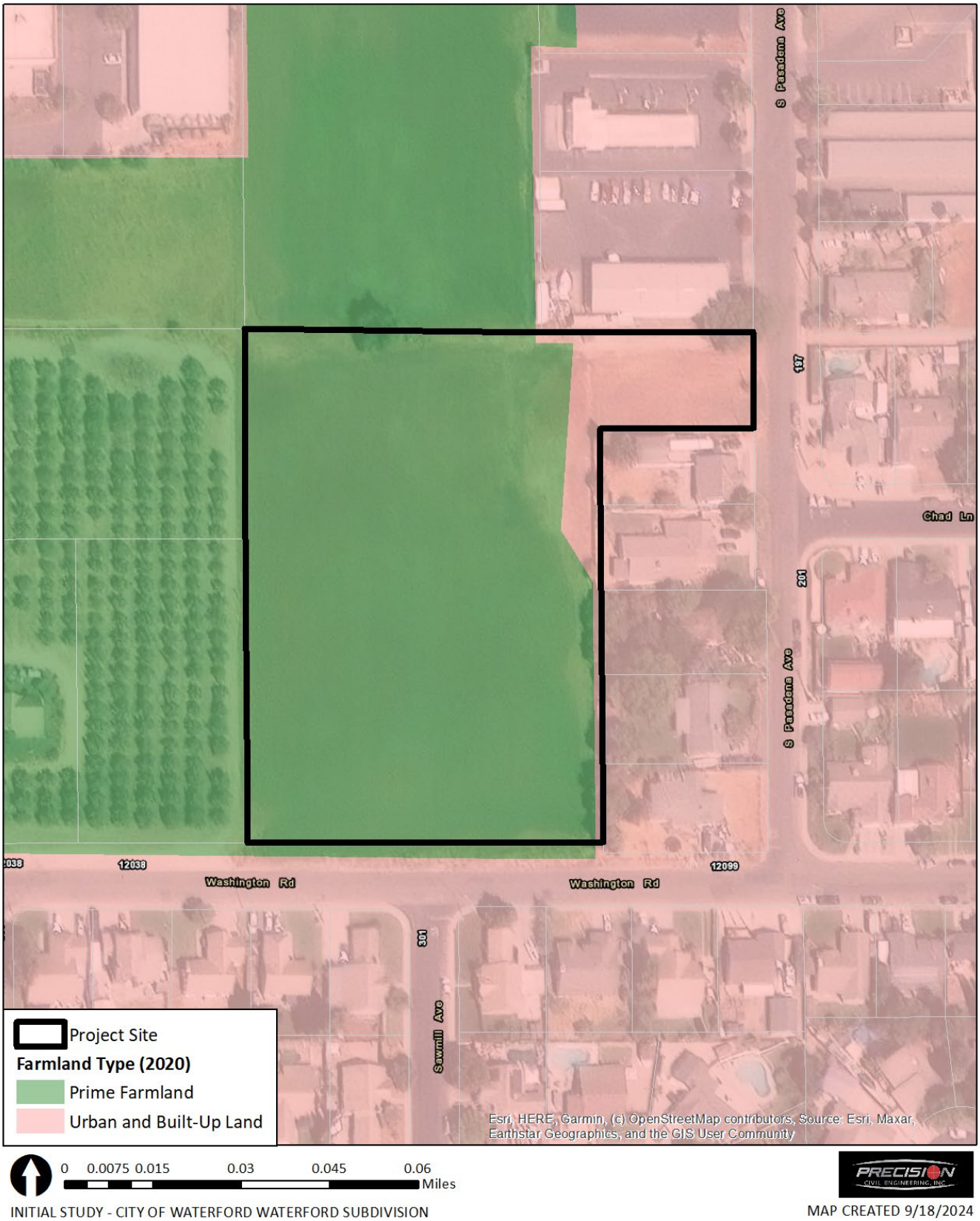


Figure 4-1 Farmland Type

4.2.2 Impact Assessment

Would the Project:

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural* use?

Less than Significant Impact. According to the FMMP, California Important Farmland Finder, the majority of the Project site is designated as "Prime Farmland", with the remainder classified as "Urban and Built-Up Land". Table 4-1 shows the acreage of agricultural land on the Project site. The site is located within the city limits of Waterford with a residential land use designation. Therefore, development of the Project would convert Prime Farmland to a non-agricultural use.

However, while the Project would result in the conversion of agricultural lands to a non-agricultural use, this conversion was evaluated under the Waterford General Plan PEIR (SCH #2005072029). According to the PEIR, projects proposed on unimproved land zoned for or planned for urban uses and that will result in the loss of 20 or more acres of prime farmland or farmland of statewide significance would be considered as having a significant impact. Since the Project site is zoned and planned for urban uses and would not convert 20 or more acres of prime farmland, it would be considered as having a "de minimus contribution" to an otherwise significant cumulative impact. Additionally, "The Waterford Vision 2025 General Plan Update reduces the potential adverse effects of regional growth by providing a compact urban setting where growth and development can occur, thus reducing the amount of agricultural land that is consumed by the urbanization process. Secondly, the plan designates growth areas which exhibit characteristics associated with less productive agricultural lands.

While these areas designated for urban growth contain some inclusions of "prime" and other important soils and may be under Williamson Act contract, their conversion to urban uses must be considered as a lesser impact compared to alternative growth and development scenarios in the region."

The Vision 2025 General Plan PEIR determined that while the conversion of this farmland to a non-agricultural use would be significant, it also determined that mitigation was not feasible, thereby resulting in a Significant and Unavoidable Impact. The Project has been deemed to be consistent with the General Plan and therefore, this impact is considered to be consistent with the findings of the PEIR. As a result, impacts would be less than significant.

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

No Impact. The Project site is not zoned for agricultural use and is not subject to the Williamson Act. Therefore, the Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract and no impact would occur.

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

No Impact. The Project site is not planned or zoned for forest land or timberland as defined by PRC 12220 (g). Further, the Project would not cause the rezoning of forest land, timberland, or timberland zoned Timberland Production. As a result, the Project would not conflict with existing zoning for, or cause rezoning of, forest land,

timberland, or timberland zoned Timberland Production as defined by PRC 4526 or GC 5110(g) and no impact would occur.

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

No Impact. The Project site does not contain forest land and is not planned or zoned for forest land or forest uses. Implementation of the Project would therefore not result in the loss of forest land or conversion of forest land to non-forest use. As a result, no impact would occur.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant Impact. As described in criterion a), Project site is primarily designated as "Prime Farmland." As analyzed under criterion a), the Project would have a less than significant impact on the conversion of farmland to non-agricultural use since development of the site to an urbanized use was previously analyzed in the General Plan PEIR. In addition, the Project site is largely surrounded by urbanized uses. As such, the proposed development would be generally consistent with the existing environment of the adjacent urbanized neighborhood and would follow the pattern of growth as planned in the General Plan. As a result, the Project would not involve additional changes in the existing environment that could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use that is not considered in the General Plan. Therefore, a less than significant impact would occur because of the Project.

4.2.3 Mitigation Measures

None required.

4.3 AIR QUALITY

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

4.3.1 Environmental Setting

The City of Waterford lies within the central portion of the San Joaquin Valley Air Basin (SJVAB) that is bounded by the Sierra Nevada Mountain range to the east, Coastal Ranges to the west, and Tehachapi mountains to the south. The San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates air quality in eight (8) counties including: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. The SJVAPCD oversees the SJVAB.

Impacts on air quality result from emissions generated during short-term activities (construction) and long-term activities (operations). Construction-related emissions consist mainly of exhaust emissions (NOx, PM_{10} and $PM_{2.5}$) from construction equipment and other mobile sources, and fugitive dust (PM_{10} and $PM_{2.5}$) emissions from earth moving activities. Operational emissions are source specific and consist of permitted equipment and activities and non-permitted equipment and activities.

Air pollution in the SJVAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that produce emissions. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. Four (4) main sources of air pollutant emissions in the SJVAB are motor vehicles, industrial plants, agricultural activities, and construction activities. All four (4) of the major pollutant sources affect ambient air quality throughout the SJVAB. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air. Air pollutants can remain in the atmosphere for long periods and can build to unhealthful levels when stagnant conditions that are common in the San Joaquin Valley occur. Pollutants are transported downwind from urban areas with many emission sources which are also recirculated back to the urban areas.

Further, the SJVAB is in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. Air quality standards have been set to protect

public health, particularly the health of vulnerable people. Therefore, if the concentration of those contaminants exceeds the norm, some susceptible individuals in the population are likely to experience health effects. Concentration of the pollutant in the air, the length of time exposed and the individual's reaction are factors that affect the extent and nature of the health effects.

San Joaquin Valley Air Pollution Control District

The SJVAPCD is the agency primarily responsible for ensuring that National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are not exceeded and that air quality conditions are maintained in the SJVAB, within which the Project is located. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the Federal Clean Air Act and the California Clean Air Act .

The SJVAPCD rules and regulations that may apply to projects that will occur during buildout of the Project include but are not limited to the following:

> ***Rule 2010 – Permits Required.*** *The purpose of this rule is to require any person constructing, altering, replacing or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate. This rule also explains the posting requirements for a Permit to Operate and the illegality of a person willfully altering, defacing, forging, counterfeiting or falsifying any Permit to Operate.*
>
> ***Rule 2201 – New and Modified Stationary Source Review Rule.*** *The purpose of this rule is to provide for the following:*
>
> *The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards; and*
>
> *No net increase in emissions above specified thresholds from new and modified Stationary Sources of all nonattainment pollutants and their precursors.*
>
> ***Rule 4001 – New Source Performance Standards.*** *This rule incorporates the New Source Performance Standards from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR).*
>
> ***Rule 4002 – National Emission Standards for Hazardous Air Pollutants.*** *This rule incorporates the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR) and the National Emission Standards for Hazardous Air Pollutants for Source Categories from Part 63, Chapter I, Subchapter C, Title 40, Code of Federal Regulations (CFR).*
>
> ***Rule 4102 – Nuisance.*** *The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.*
>
> ***Rule 4601 – Architectural Coatings.*** *The purpose of this rule is to limit VOC emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements.*

Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. *The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.*

Regulation VIII – Fugitive PM_{10} Prohibitions. *The purpose of Regulation VIII (Fugitive PM_{10} Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM_{10}) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions.*

Rule 9510 – Indirect Source Review. *The purposes of this rule are to:*

1. Fulfill the District's emission reduction commitments in the PM10 and Ozone Attainment Plans.

2. Achieve emission reductions from the construction and use of development projects through design features and on-site measures.

3. Provide a mechanism for reducing emissions from the construction of and use of development projects through off-site measures.

Thresholds of Significance

To assist local jurisdictions in the evaluation of air quality impacts, the SJVAPCD has published the *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI). SJVAPCD recommends a three (3)-tiered approach to air quality analysis based on Project size to allow quick screening for CEQA impacts:

1. **Small Project Analysis Level (SPAL):** based on the District's New Source Review, the District pre-quantified emissions and determined values as thresholds of significance for criteria pollutants. Residential, commercial, retail, industrial, educational, and recreational land uses are eligible to use this for screening. The SPAL was published on November 13, 2020, by the SJVAPCD to determine potential impacts in GAMAQI. [4] SPAL is based on a CalEEMod version 2016.3.2.
2. **Cursory Analysis Level (CAL):** CAL is used to determine significance on Projects that exceed the SPAL criteria. Analysis includes using CalEEMod to estimate emissions and air pollutants.
3. **Full Analysis Level (FAL):** this level of analysis is usually required for an EIR. It requires a full air quality report that describes impacts on the public.

GAMAQI also includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, the SJVAPCD-recommended thresholds of significance are used to determine whether implementation of the proposed Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact on human health and welfare. The thresholds of significance are summarized, as follows:

[4] San Joaquin Valley Air Pollution Control District. (2020). "Small Project Analysis Levels (SPAL)". Accessed on September 4, 2024, https://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI-SPAL.PDF

Criteria Air Pollutants

SJVAPCD adopted thresholds of significance for criteria air pollutants, as shown in Table 4-2. The thresholds of significance are based on a calendar year basis. For construction emissions, the annual emissions are evaluated on a rolling 12-month period. The following summarizes these thresholds:

Short-Term Emissions of Particulate Matter (PM_{10}): Construction impacts associated with the proposed Project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if Project-generated emissions would exceed 15 tons per year (TPY).

Short-Term Emissions of Ozone Precursors (ROG and NOX): Construction impacts associated with the proposed Project would be considered significant if the Project generates emissions of Reactive Organic Gases (ROG) or NO_X that exceeds 10 TPY.

Long-Term Emissions of Particulate Matter (PM_{10}): Operational impacts associated with the proposed Project would be considered significant if the Project generates emissions of PM_{10} that exceed 15 TPY.

Long-Term Emissions of Ozone Precursors (ROG and NOX): Operational impacts associated with the proposed Project would be considered significant if the Project generates emissions of ROG or NOX that exceeds 10 TPY.

Table 4-2 SJVAPCD Recommended Air Quality Thresholds of Significance.[5]

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emission (tons/year)
CO	100	100
NO_X	10	10
ROG	10	10
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Conflict with or Obstruct Implementation of Applicable Air Quality Plan

Air Quality Plans (AQPs) are plans for reaching the attainment of air quality standards. The applicable AQP for the SJVAB is the GAMAQI. Due to the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if the Project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} would exceed the SJVAPCD's significance thresholds, then the Project would be considered to be conflicting with the AQP. In addition, if the Project would result in a change in land use and corresponding increases in vehicle miles traveled, the Project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans. Vehicle Miles Traveled are analyzed in Section 5.17.

[5] SJVAPCD. (2015). Guidance for Assessing and Mitigating Air Quality Impacts. Accessed on September 4, 2024, https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF

Local Mobile-Source CO Concentrations

Local mobile source impacts associated with the proposed Project would be considered significant if the Project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e., 9.0 ppm for 8 hours or 20 ppm for 1 hour).

Toxic Air Contaminants

Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than one (1).

As recommended by the SJVAPCD, the latest approved California Air Pollution Control Officer's Association (CAPCOA) methodology was utilized as the TAC screening methodology. According to the CAPCOA Guidance Document titled "Health Risk Assessments for Proposed Land Use Projects," there are two types of land use projects that have the potential to cause long-term public health risk impacts. These project types are as follows:

- Type A: Land use Projects with toxic emissions that impact receptors, and
- Type B: Land use Project that will place receptors in the vicinity of existing toxics sources.

In this Guidance document, Type A projects examples are (project impacts receptors):

- combustion related power plants,
- gasoline dispensing facilities,
- asphalt batch plants,
- warehouse distribution centers,
- quarry operations, and
- other stationary sources that emit toxic substances.

Odor

The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Specific land uses that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The SJVAPCD has identified these common types of facilities that have been known to produce odors in the SJVAB and has prepared screening levels for potential odor sources ranging from one to two miles of distance from the odor-producing facility to sensitive receptors. Odor impacts would be considered significant if the Project has the potential to frequently expose members of the public to objectionable odors.

Ambient Air Quality

The SJVAPCD applies the following guidance in determining whether an ambient air quality analysis should be performed: when assessing the significance of Project-related impacts on air quality, it should be noted that the impacts may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures. Under such circumstances, the SJVAPCD recommends that an ambient air quality analysis be performed.

Small Project Analysis Level

The SPAL identifies pre-quantified emissions and determined values related to project type, size, and number of vehicle trips. According to the SPAL, projects that fit specified descriptions are deemed to have a less than significant impact on air quality and as such are excluded from quantifying criteria pollutant emissions for CEQA purposes. The SPAL threshold criteria for residential projects is shown in Table 4-3.

Table 4-3 SPAL Thresholds for Industrial Projects

Land Use Type	Size and Unit	Average Daily One-Way Trips for all fleet types (Except HHDT)	Average Daily One-way for HHDT Trips only (50 mile trip length)
Single Family	155 dwelling unit	800	15
Apartment, Low Rise	224 dwelling unit	800	15
Apartment, Mid Rise	225 dwelling unit	800	15
Apartment, High Rise	340 dwelling unit	800	15
Condominiums/Townhouse	352 dwelling unit	800	15

City of Waterford General Plan

The City of Waterford General Plan Update established policies and actions related to air quality in the *Chapter 9 – Sustainable Development*, as listed below: [6]

Policy SD-1.1 *Accurately determine and fairly mitigate the local and regional air quality impacts of projects proposed in the City of Waterford.*

Policy SD-1.2 *Coordinate local air quality programs with regional programs and those of neighboring jurisdictions.*

Implementing Action SD-1.2b *Consult with the SJVUAPCD during CEQA review for discretionary projects.*

Policy SD-1.3 *Integrate land use planning, transportation planning, and air quality planning for the most efficient use of public resources and a more livable environment.*

Policy SD-1.4 *Educate the public on the impact of individual transportation, lifestyle, and land use decisions on air quality.*

Policy SD-1.5 *Provide public facilities and operations which can serve as a model for the private sector in implementation of air quality programs.*

Policy SD-1.6 *Reduce emissions of PM_{10} and other particulates with local control potential.*

4.3.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. According to the GAMAQI, projects with emissions below the thresholds of significance for criteria pollutants would be determined to *"Not conflict or obstruct implementation of the District's air quality plan."* As stated above, the SJVAPCD recommends a three-tiered approach to analyze projects for significant impacts on air quality. The first tier is the Small Project Analysis Level (SPAL), which adopts a threshold of

[6] City of Waterford. (2007). City of Waterford General Plan Update Vision 2025. Accessed September 4, 2024, https://www.cityofwaterford.org/v5/wp-content/uploads/2018/07/General-Plan-Final.pdf

significance according to the use type, size, and number of vehicle trips of a project. As demonstrated below, the proposed Project would not have any significant effects relating to air quality pursuant to SPAL.

Based on the Project description, the most applicable land use type for the proposed Project is the Single-Family Detached Housing for 7 units and Single-Family Attached Housing for 46 units. The corresponding threshold for this land use compared to the Project is shown in Table 4-4. As shown, the Project is below all thresholds and therefore, the Project is assumed to result in air quality impacts that are below the identified thresholds of significance and thus, a less than significant impact would occur.

Table 4-4 SPAL Significance Thresholds

	SPAL Threshold	Proposed Project	Below Threshold?
Size/Unit	155 dwelling units	53 dwelling units	Yes
Average Daily One-way Trips for All Fleet Types (Except Heavy-Heavy Duty Trucks (HHDT))	800	397	Yes
Average Daily One-way for HHDT trips only (50-mile trip length)	15	0	Yes

Note: Trip generation is calculated using average rate of vehicle trip generation per dwelling unit, as provided in the Trip Generation Manual 11th Edition for ITE 210, Single-Family Detached Housing (rate: 9.43) ITE 215, Single-Family Attached Housing (rate: 7.20). Trip generation and VMT are further described in Section 4.17.

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

Less than Significant Impact. The SJVAB is in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. The requirements have been set to protect public health, particularly the health of vulnerable populations. Therefore, if the concentration of those contaminants exceeds the norm, some susceptible individuals in the population are likely to experience health effects. Concentration of the pollutant in the air, the length of time exposed and the individual's reaction are factors that affect the extent and nature of the health effects as analyzed in criterion a) above, the Project would have a less than significant impact on air quality and are excluded from quantifying criteria pollutant emissions for CEQA purposes. Therefore, the Project would not result in significant cumulative health impacts because the emissions are not at a level that would be considered cumulatively significant. As such, the Project would have a less than significant impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The nearest sensitive receptors to the Project site are single-family residences located approximately five (5) feet east from the Project site.

The Project proposes residential uses within an area generally consisting of residential and commercial uses. As such, the Project would not introduce new, incompatible, or unpermitted uses that would otherwise exacerbate air pollution or environmental contaminants and negatively impact nearby sensitive receptors. In addition, as stated under criterion a) above, emissions during construction or operation would not exceed the significance thresholds and would not be anticipated to result in concentrations that reach or surpass ambient air quality standards.

Project construction would involve the use of diesel-fueled vehicles and equipment that emit diesel particulate matter (DPM), which is considered a TAC. DPM includes exhaust PM_{10} and $PM_{2.5}$. Health risks from TACs are a function of both concentration and duration of exposure. Although DPM would be emitted during construction, emissions would be temporary and last only during construction activities. In addition, construction activities would be required to comply with all rules and regulations administered by the SJVAPCD including but not limited to Rule 9510 (Indirect Source Review), Regulation VIII (Fugitive PM_{10} Prohibitions), Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 4402 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). Additionally, anticipated development on the Project site would include residential uses, which are not uses that would generate toxic emissions (i.e., Type A uses identified by the CAPCOA guidelines). As a result, impacts 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. Specific uses and operations that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The Project would not consist of such land uses; rather, the proposed Project would facilitate the development of residential uses, and thus is unlikely to produce odors that would be considered to adversely affect a substantial number of people. Therefore, a less than significant impact would occur.

4.3.3 Mitigation Measures

None required.

4.4 BIOLOGICAL RESOURCES

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

4.4.1 Environmental Setting

The Project site is located within Waterford city limits and is planned and zoned for residential use. The Project site is currently vacant with no structures. The site contains no on or off-site improvements. The existing biotic conditions and resources of the site can be defined primarily as ruderal and herbaceous vegetation with heavy alternation due to annual disking. There are no trees, shrubs, or water features on the site.

U.S. Fish and Wildlife – Special-Status Species Database

The U.S. Fish and Wildlife Service (USFWS) operates an "Information for Planning and Consultation" (IPaC) database, which is a Project planning tool for the environmental review process that provides general information on the location of special-status species that are "known" or "expected" to occur (note: the database does not provide occurrences; refer to the California Department of Fish and Wildlife – Natural Diversity Database below). [7] Specifically, the database identifies 12 endangered species, 1 bald & golden eagle, and 18 migratory birds that are potentially affected by activities on the Project site. The list of species is provided in Appendix A.

U.S. Fish and Wildlife – Critical Habitat Report

Once a species is listed under the federal Endangered Species Act, NOAA Fisheries is required to determine whether there are areas that meet the definition of Critical Habitat. Per NOAA Fisheries, Critical Habitat is defined as:

- Specific areas within the geographical area occupied by the species at the time of listing that contain physical or biological features essential to conservation of the species and that may require special management considerations or protection; and
- Specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. [8]

The process of Critical Habitat designation is complex and involves the consideration of scientific data, public and peer review, economic, national security, and other relevant impacts. According to the Critical Habitat for Threatened & Endangered Species Report updated December 10, 2021, the Project site and its immediate vicinity (0.5-mile radius from the site) are not located within a federally designated Critical Habitat. [9] The closest federally designated Critical Habitat is located approximately 2.7 miles northeast of the Project site for Greene's tuctoria (*Tuctoria greenei*) and Colusa grass (*Neostapfia colusana*).

U.S. Fish & Wildlife Service – National Wetlands Inventory

The USFWS provides a National Wetlands Inventory (NWI) with detailed information on the abundance, characteristics, and distribution of U.S. wetlands. A search of the NWI shows no federally protected wetlands

[7] U.S. Fish and Wildlife Service. Information and Planning Consultation Online System. Accessed on September 4, 2024, https://ecos.fws.gov/ipac/

[8] National Oceanic and Atmospheric Administration (NOAA). Critical Habitat. Accessed on September 4, 2024, https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat#key-regulations

[9] U.S. Fish & Wildlife. (2024). ECOS Environmental Conservation Online System - USFWS Threatened & Endangered Species Active Critical Habitat Report (updated September 4, 2024). Accessed on September 4, 2024, https://ecos.fws.gov/ecp/report/table/critical-habitat.html

(including but not limited to marsh, vernal pool, coastal, etc.) on the Project site. [10] The NWI does not identify any water features within the Project site. However, there is a water feature identified is a R5UBFx riverine habitat running along the north boundary of the Project site. R5UBFx indicates Riverine System (R) of an unknown perennial (5) with an unconsolidated bottom (UB) that is semi-permanently flooded (F) and has been excavated by humans (x) (i.e., possibly a canal). Additionally, the Project site is not within or adjacent to a riparian area nor does the site contain water features.

Environmental Protection Agency – WATERS Geoviewer

The U.S. Environmental Protection Agency (EPA) WATERS GeoViewer provides a GeoPlatform based web mapping application of water features by location. According to the WATERS GeoViewer, there are no surface water features (i.e., streams, canals, waterbodies, coastlines, catchments) within the Project site. [11]

California Department of Fish and Wildlife – Natural Diversity Database

The California Department of Fish and Wildlife (CDFW) operates the California Natural Diversity Database (CNDDB), which is an inventory of the status and locations of rare plants and animals in California in addition to the reported occurrences of such species. [12] According to the CDFW CNDDB, there are 10 special-status species that have been observed and reported to the CDFW in the Waterford Quad as designated by the United States Geological Survey (USGS). A list of occurrences within the Waterford Quad is provided in Appendix A.

Figure 4-2 shows the CNDDB-identified occurrences of animal and plant species within the five (5)-mile radius of the Project site. Table 4-5 lists all federally or state-listed special-status species CNDDB-known occurrences within the five (5)-mile radius of the Project site, organized by distance to the site. Hardhead and steelhead occurrences, which are some of the closest occurrences, are observed along the Tuolumne River. Several occurrences are listed as extirpated or possibly extirpated, meaning that the habitat has been destructed or that the element has been searched but not seen for many years. Table 4-6 provides an analysis of essential habitats and the potential for the existence of the special-status species to exist on the Project site.

Table 4-5 Special-Status Species Occurrences within 5-mile radius of Project site

Species (Common Name)	Date	Rank	Distance to site
hardhead	2008/3/27	unknown	0.2 miles southeast
steelhead	2014/1/19	unknown	0.2 miles southeast
hardhead	2007/5/23	unknown	0.7 miles east
American bumble bee	1961/9/11	unknown	1.4 miles southeast
valley elderberry longhorn beetle	1991/7/17	poor	2.1 miles southwest
California tiger salamander	1988/x/x	unknown	4.5 miles southeast
hardhead	2007/5/23	unknown	4.9 miles southwest

Extirpated or possible extirpated occurrences are not shown in the table.

[10] U.S. Fish & Wildlife Service. National Wetlands Inventory. Accessed September 4, 2024, https://www.fws.gov/wetlands/data/Mapper.html

[11] U.S. Environmental Protection Agency. WATERS GeoViewer 2.0. Accessed September 4, 2024, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=074cfede236341b6a1e03779c2bd0692

[12] California Department of Fish and Wildlife. California Natural Diversity Database. Accessed September 4, 2024, https://wildlife.ca.gov/Data/CNDDB

Table 4-6 Essential Habitats and Potential Existence of Special-Status Species on Site

Special-Status Species	Habitats	Micro Habitat	Assessment
hardhead	Klamath/North coast flowing waters Sacramento/San Joaquin flowing waters	Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	There are no flowing waters on the Project site. As such, the site does not provide suitable habitat.
steelhead	Aquatic Sacramento/San Joaquin flowing waters	-	There are no flowing waters on the Project site. As such, the site does not provide suitable habitat.
American bumble bee	Coastal prairie Great Basin grassland Valley & foothill grassland	Long-tongued; forages on a wide variety of flowers including vetches (Vicia), clovers (Trifolium), thistles (Cirsium), sunflowers (Helianthus), etc. Nests above ground under long grass or underground. Queens overwinter in rotten wood or underground.	The Project site is being disked annually and is surrounded by development. As such, the site does not provide suitable habitat.
valley elderberry longhorn beetle	Riparian scrub	Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	The Project site is being disked annually and is surrounded by development. As such, the site does not provide suitable habitat.
California tiger salamander	Cismontane woodland Meadow & seep Riparian woodland Valley & foothill grassland Vernal pool Wetland	Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	There are no surface water features on the Project site. As such, the site does not provide suitable habitat.

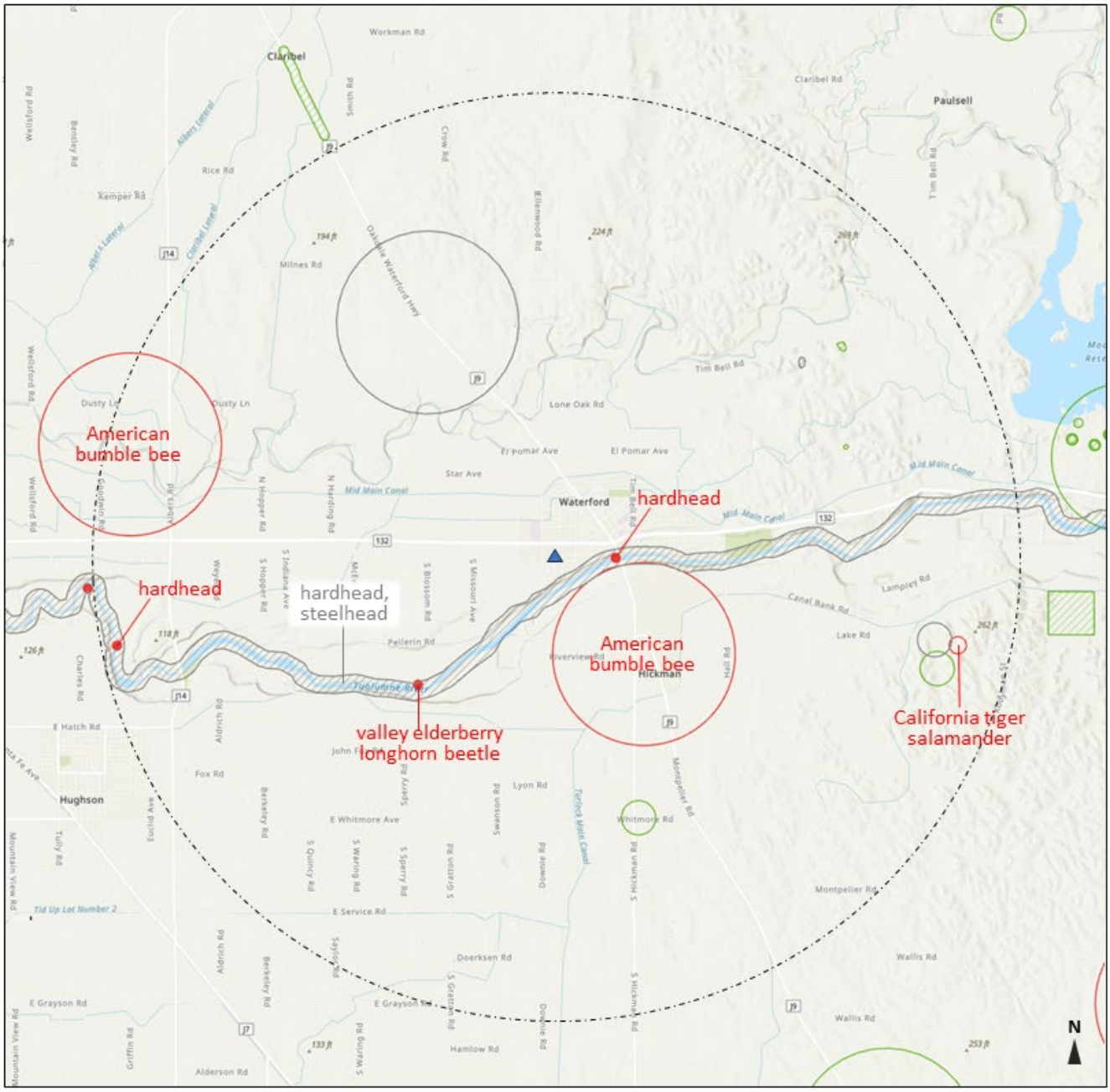


Figure 4-2 CNDDB Occurrences within 5-miles of the Project site

California Fish and Game Code

Sections 3503, *3503.5*, and *3513* of the California Fish and Game Code specifically protect native birds and raptors. Mitigation for avoidance of impacts to nesting birds is typically necessary to comply with these Sections of the Fish and Game Code in CEQA. [13]

Section 3503: *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 made pursuant thereto.*

Section 3503.5: *It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*

Section 3513: *It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.*

City of Waterford General Plan

The City of Waterford General Plan Update established policies and actions related to air quality in the *Chapter 8 – Open Space & Conservation*, as listed below: [14]

Policy OS-A-1 *Identify and Preserve Wildlife Habitats Which Support Rare, Endangered, or Threatened Species.*

> ***Implementing Action OS-A-1a*** *Identify, and recognize as significant, wetland habitats which meet the appropriate legal definition of federal and state law.*
>
> ***Implementing Action OS-A-1b*** *Urban development should occur away from identified sensitive species habitats unless specific provisions to ensure adequate protection and monitoring exist.*

Policy OS-A-2 *Preserve and Enhance Tuolumne River and Dry Creek in Their Natural State Throughout the Planning Area.*

> ***Implementing Action OS-A-2b*** *Continue to acquire a minimum 100-foot dedication from the centerline (or 50 feet from the normal high water mark, whichever is greater) of Tuolumne River and Dry Creek within the City's urban growth area in order to maintain these open space areas as natural riparian preserves and recreation areas.*
>
> ***Implementing Action OS-A-2d*** *Recognize Tuolumne River and Dry Creek as important open space resources and promote their protection and enhancement through the use of natural plant materials.*

Policy OS-A-4 *Improve Implementing Actions:*

> ***Implementing Action OS-A-4b*** *Continue to require new development to plant trees along City streets.*

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[13] The California Biologist's Handbook. California Fish and Game Code. Accessed on September 4, 2024, https://biologistshandbook.com/regulations/state-regulations/state-fish-and-game-code/#:~:text=Section%203503,any%20regulation%20made%20pursuant%20thereto.%E2%80%9D

[14] City of Waterford. (2007). City of Waterford General Plan Update Vision 2025. Accessed September 4, 2024, https://www.cityofwaterford.org/v5/wp-content/uploads/2018/07/General-Plan-Final.pdf

4.4.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. The Project site is currently vacant and undeveloped, with no existing structures or improvements. The existing biotic site conditions and resources of the Project site can be defined primarily as ruderal and herbaceous vegetation with heavy alternation due to annual disking. There are no trees, shrubs, or water features on the site.

As described in Table 4-6, Project site conditions provide low suitability for habitat for special-status candidate, sensitive, or special-status species that may occur on the Project site or vicinity (i.e., within 5-mile radius). Given the existing conditions of the Project site and surrounding properties including heavy alteration, lack of or limited cover, vegetation, or water features, it is unlikely that these species will occur on the site. As a result, the Project would not 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 CDFW or USFWS.

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

No Impact. According to the General Plan, California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service, there are no known riparian habitats or other sensitive natural communities identified on the Project site or within the immediate vicinity (i.e., within a 0.5 radius) of the Project. In addition, the site does not contain any water features that would provide habitat for riparian species. For these reasons, it can be determined that the Project site does not provide any riparian habitat or sensitive natural community habitat and thus, no impact would occur because of the Project.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The Project site is not within or adjacent to a riparian area nor does the site contain water features. A search of the NWI shows no federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) on the Project site. The closest water feature is an irrigation canal located along the north boundary of the Project site. However, according to existing conditions, this canal has been undergrounded. The Project provides a 10-feet irrigation canal easement to the Modesto Irrigation District along the north boundary of the Project site. Additionally, according to the WATERS GeoViewer, there are no water features within the Project site. As such, the Project site does not contain any state or federally protected wetlands or water features that could become a wetland. As a result, it can be determined that the Project would not result in any impact on State or federally protected wetlands and no impact would occur because of the Project.

d) Would the Project 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. Wildlife movement corridors are linear habitats that function to connect two (2) or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats (e.g., deer movement corridors). Wildlife corridors typically include vegetation and topography that facilitate the movements of wild animals from one area of suitable habitat to another, in order to fulfill foraging, breeding, and territorial needs. These corridors often provide cover and protection from predators that may be lacking in surrounding habitats. Wildlife corridors generally include riparian zones and similar linear expanses of contiguous habitat.

The habitat value of the Project site for wildlife is limited, and the site does not contain suitable habitat that could support wildlife species in nesting, breeding, foraging, or escaping from predators. There is no evidence that the plant communities (non-native herbaceous land cover) present in the area support wildlife movement corridors or wildlife nursery sites. The Project site and its surroundings are heavily impacted by human activity (disking, residential and commercial uses, agricultural operations, vehicular traffic, etc.) so overall use by wildlife is likely low. Due to these conditions, it can be determined that the Project would not interfere with wildlife movement and a less than significant impact would result from the Project.

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

No Impact. The Waterford General Plan Open Space and Conservation Chapter outlines policies and actions related to conservation of biological resources as listed in the Environmental Setting. Due to the lack of any identified special-status species or habitat for special-status species on the Project site or within the Project vicinity, the Project would not conflict with any local policies or ordinances protecting biological resources. Therefore, the Project would have 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. The Project site is within the PG&E San Joaquin Valley Operation and Maintenance Habitat Conservation Plan (HCP). The HCP covers PG&E's routine operations and maintenance activities and minor new construction, on any PG&E gas and electrical transmission and distribution facilities, easements, private access routes, or lands owned by PG&E. The Project would not conflict or interfere with HCP. The City, County, and Regional Planning Agency do not have any other adopted or approved plans for habitat or natural community conservation. For these reasons, the Project would have no impact.

4.4.3 Mitigation Measures

None required.

4.5 CULTURAL RESOURCES

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in *Section 15064.5*?		X		
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to *Section 15064.5*?		X		
c)	Disturb any human remains, including those interred outside of formal cemeteries?			X	

4.5.1 Environmental Setting

Generally, the term 'cultural resources' describes property types such as prehistoric and historical archaeological sites, buildings, bridges, roadways, and tribal cultural resources. As defined by CEQA, cultural resources are considered "historical resources" that meet criteria in *Section 15064.5(a)* of the CEQA Guidelines. If a Lead Agency determines that a Project may have a significant effect on a historical resource, then the Project is determined to have a significant impact on the environment. No further environmental review is required if a cultural resource is not found to be a historical resource.

California Historical Resource Information System Record Search

The Central California Information Center (CCIC) was requested to conduct a California Historical Resources Information System (CHRIS) Record Search for the Project site and surrounding "Cultural Resource Project Area" (0.5-mile radius from perimeter of Project site). Results of the CHRIS Record Search were provided on September 3, 2024 (Record Search File Number: 13028N). Full results are provided in Appendix C.

The CHRIS Record Searches generally review file information based on results of Class III pedestrian reconnaissance surveys of Project sites conducted by qualified individuals or consultant firms which are required to be submitted, along with official state forms properly completed for each identified resource, to the Regional Archaeological Information Center. Guidelines for the format and content of all types of archaeological reports have been developed by the California Office of Historic Preservation, and reports will be reviewed by the regional information centers to determine whether they meet those requirements.

The results of the CCIC CHRIS Record Search indicate:

(1) There are no formally reported prehistoric or historic archaeological resources or historic buildings or structures within the project area.
(2) There are no formally reported prehistoric or historic resources within the immediate vicinity of the project area.
(3) There are no formally reported resources that are known to have value to local cultural groups.

(4) There have been no formally reported previous investigations within the project area.

Further, the CCIC provided the following comments and recommendations:

(1) Prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present.
(2) Contact the Native American Heritage Commission (NAHC) for a list of Native American individuals/organizations that can assist with information regarding traditional, cultural, and religious heritage values that may not be included in the CHRIS Inventory. Consult NAHC's "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this Project site and the way in which these resources might be managed.

California Native American Heritage Commission (NAHC)

A consultation list of tribes with traditional lands or cultural places located within Stanislaus County was requested and received from the California Native American Heritage Commission (NAHC) on September 10, 2024. The listed tribes include Amah Mutsun Tribal Band, Northern Valley Yokut/Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Wuksachi Indian Tribe/Eshom Valley Band. The NAHC also conducted a Sacred Lands File (SFL) search which was negative. Correspondence is provided in Appendix D.

AB 52 Tribal Consultation

The City of Waterford conducted formal tribal consultation for the proposed Project pursuant to AB 52 (Chapter 532, Statutes 2014) on September 6, 2024 with the following tribes: Wuksachi Indian Tribe/Eshom Valley Band, Chicken Ranch Rancheria of Me-Wuk Indians, Northern Valley Yokut Tribe, Calaveras Band of Mi-Wuk Indians, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Nashville Enterprise Miwok-Maidu-Nishinam Tribe. Consultation for AB 52 ended on October 6, 2024. No responses have been received.

City of Waterford General Plan

The General Plan Sustainable Development Element identifies the following policies related to historic and cultural resources.

Goal Area 2: *Cultural Resources.*

> ***Policy SD-2.1 Identify and Preserve the City's Archaeological Resources.*** *It is thought that the San Joaquin Valley was inhabited in the late Pleistocene and early Holocene period, dating from perhaps as early as 12,000 years before the present (B.P.). Prior to Euro-American arrival, the San Joaquin Valley was occupied by Yokut Indian populations. The Yokuts settlement system was characterized by principal villages on terraced areas adjacent to watercourses. Knowledge of these early inhabitants is limited. It is likely that the streams and the Tuolumne River corridor traversing the Waterford Planning Area served as settlements for Yokuts and it is a state policy to preserve and protect the archaeological resources of the region.*
>
> ***Policy SD-2.2 Identify and Preserve the City's Historic and Cultural Resources.*** *The City of Waterford contains some fine examples of its early settlement. Historic buildings, tree plantings, and other improvements serve to give the City a special character which is unique in the San Joaquin Valley. The City of Waterford is dedicated to preserving, protecting, and enhancing its historic and cultural resources.*

4.5.2 Impact Assessment

Would the Project:

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

Less than Significant with Mitigation Incorporated. Based on the CHRIS Records Search conducted on September 3, 2024, there are no known local, state, or federal designated historical resources pursuant to *Section 15064* on in the Project site. While there is no evidence that historical resources exist on the Project site, there is some possibility that hidden and buried resources may exist with no surface evidence that may be impacted by future physical development. In the event of the accidental discovery and recognition of previously unknown historical resources before or during construction activities, the Project shall also incorporate ***Mitigation Measure (MM) CUL-1*** to assure construction activities do not result in significant impacts to any potential historical resources discovered below ground surface. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project would have a less than significant impact with mitigation incorporated.

> ***Mitigation Measure CUL-1:*** *In order to avoid the potential for impacts to historic and prehistoric archaeological resources, the following measures shall be implemented, as necessary, in conjunction with the construction of each phase of the Project:*
>
> *a. Cultural Resources Alert on Project Plans. The Project proponent shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources.*
>
> *b. Stop Work Near any Discovered Cultural Resources. Should previously unidentified cultural resources be discovered during construction of the Project, the Project proponent shall cease work within 50 feet of the resources, and City of Waterford shall be notified immediately. The Project archaeologist meeting the Secretary of the Interior Professional Qualifications Standards for archeology shall immediately to evaluate the find pursuant to Public Resources Code Section 21083.2.*
>
> *c. Mitigation for Discovered Cultural Resources. If the professional archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource, he/she shall notify the Project proponent and other appropriate parties of the evaluation and recommended mitigation measures to mitigate the impact to a less-than-significant level. If the archaeologist and, if applicable, a Native American monitor or other interested tribal representative determine it is appropriate, cultural materials collected from the site shall be processed and analyzed in a laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the site(s) shall be evaluated according to the criteria of the California Register of Historical Resources (CRHR) and if applicable, National Register of Historic Places (NRHP). The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication "Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)." Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery, among other options. Treatment of any significant cultural resources shall be undertaken with the approval of the City of Waterford. The*

archaeologist shall document the resources using DPR 523 forms and file said forms with the California Historical Resources Information System, Central California Information Center (CCIC). The resources shall be photo documented and collected by the archaeologist for submittal to the City of Waterford. The archaeologist shall be required to submit to the City of Waterford for review and approval a report of the findings and method of curation or protection of the resources. This report shall be submitted to the CCIC after completion. Recommendations contained therein shall be implemented throughout the remainder of ground disturbance activities. Further grading or site work within the area of discovery shall not be allowed until the preceding steps have been taken.

d. Data Recovery. Should the results of item c. yield resources that meet CRHR significance standards and if the resource cannot be avoided by Project construction, the Project applicant shall ensure that all feasible recommendations for mitigation of archaeological impacts are incorporated into the final design and approved by the City prior to construction. Any necessary data recovery excavation, conducted to exhaust the data potential of significant archaeological sites, shall be carried out by a qualified archaeologist meeting the SOI's PQS for archeology. Data recovery shall be conducted in accordance with a research design reviewed and approved by the City, prepared in advance of fieldwork, and using the appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5, Guidelines for Archaeological Research Design, or the latest edition thereof. If the archaeological resource(s) of concern are Native American in origin, the qualified archaeologist shall confer with the City and local California Native American tribe(s). As applicable, the final Data Recovery reports shall be submitted to the City prior to issuance of any grading or construction permit. Recommendations contained therein shall be implemented throughout all ground disturbance activities. Recommendations may include, but would not be limited to, Cultural Resources Monitoring, and/or measures for unanticipated discoveries. The final report shall be submitted to the CCIC upon completion.

e. Disposition of Cultural Resources. Upon coordination with the City of Waterford, any pre-historic archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded applicable cultural resources laws and guidelines.

f. Cultural Resources Monitoring. If mitigation measures are recommended by reports written under item c. or d., the Project applicant shall retain a qualified archaeologist to monitor Project-related, ground-disturbing activities which may include the following but not limited to: grubbing, vegetation removal, trenching, grading, and/or excavations. The archaeological monitor shall coordinate with any Native American monitor as required. Monitoring logs must be completed by the archaeologist daily. Cultural resources monitoring may be reduced for the Project if the qualified archaeologist finds it appropriate to reduce the monitoring efforts. Upon completion of ground disturbance for the Project, a final report must be submitted to the City for review and approval documenting the monitoring efforts, cultural resources find, and resource disposition. The final report shall be submitted to the CCIC.

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

Less than Significant Impact with Mitigation Incorporated. Based on the CHRIS Records Search conducted September 3, 2024, there are no known archeological resources pursuant to *Section 15064.5* on the Project site. While there is no evidence that archeological resources exist, there is some possibility that existing structures

qualify as historical resources or hidden and buried resources may exist with no surface evidence that may be impacted by future physical development. In the event of the accidental discovery and recognition of previously unknown historical resources before or during construction activities, the Project shall incorporate ***MM CUL-1*** as described under criterion a) to assure construction activities do not result in significant impacts to any potential archeological resources discovered above or below ground surface. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project would have a less than significant impact with mitigation incorporated.

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

Less Than Significant Impact. There is no evidence that human remains exist on the Project site. Nevertheless, there is some possibility that a non-visible buried site may exist and may be uncovered during ground disturbing construction activities which would constitute a significant impact. If any human remains are discovered during construction, then the Project would be subject to CCR *Section 15064.5(e)*, PRC *Section 5097.98*, and California Health and Safety Code *Section 7050.5*. Regulations contained in these sections address and protect human burial remains. Compliance with these regulations would ensure impacts to human remains, including those interred outside of formal cemeteries, are less than significant.

4.5.3 Mitigation Measures

The Project shall implement and incorporate, as applicable, the Cultural Resources related mitigation measures as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

4.6 ENERGY

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?			X	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

4.6.1 Environmental Setting

Appendix F – Energy Conservation of the CEQA Guidelines requires consideration of energy implications in Project decisions, including a discussion of the potential energy impacts with emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy resources (Public Resources Code *Section 21100(b)(3)*). Per Appendix F, a Project would be considered inefficient, wasteful, and unnecessary if it violated existing energy standards, had a negative effect on local and regional energy supplies and requirements for additional capacity, had a negative effect on peak and base period demands for electricity and other energy forms, and effected energy resources. Appendix F includes the following criteria to determine whether a threshold of significance is met:

1. The Project energy requirements and its energy use efficiencies by amount and fuel type for each stage of the Project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
2. The effects of the Project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the Project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the Project complies with existing energy standards.
5. The effects of the Project on energy resources.
6. The Project's Projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Building Energy Efficiency Standards – Title 24

The California Energy Commission updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years as part of the California Code of Regulations. The standards were established in 1978 in an effort to reduce the state's energy consumption. They apply for new construction of, and additions and alterations to, residential and nonresidential buildings and relate to various energy efficiencies including but not limited to ventilation, air conditioning, and lighting. The California Green Building Standards Code (CALGreen), Part 11, Title 24, California Code of Regulations, was developed in 2007 to meet the state goals for reducing Greenhouse Gas emissions pursuant to AB32. CALGreen covers five (5) categories: planning and design, energy efficiency, water

efficiency and conservation, material and resource efficiency, and indoor environmental quality. [15] The 2022 Building Energy Efficiency Standards went into effect on January 1, 2023. Additionally, the California Air Resources Board (CARB) oversees air pollution control efforts, regulations, and programs that contribute to reduction of energy consumption. Compliance with these energy efficiency regulations and programs ensures that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources.

California Energy Action Plan

The Energy Action Plan (EAP) for California was approved in 2003 and updated in 2008. The California Public Utilities Commission (PUC) approved the Energy Action Plan (EAP) for California in 2003, with an update in 2008. The 2008 EAP established goals and next steps to integrate and coordinate energy efficiency demand and response programs and actions. [16]

Methodology

CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions from land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model also identifies mitigation measures to reduce criteria pollutant and GHG emissions.

4.6.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. The Project would consist of the development of 53 residential dwelling units on a 3.61-acre parcel. Energy would be consumed through Project construction and operations. Energy outputs for short-term construction and long-term operations were estimated using CalEEMod (Appendix B). Traffic impacts related to vehicle trips were considered through a Vehicle Miles Traveled (VMT) analysis contained in Section 4.17. Results are summarized in Table 4-7. Based on the data, the energy demand associated with the proposed Project would be less than one (1) percent of Stanislaus County's total demand (*Criterion 1*).

Table 4-7 Project Energy Consumption

Energy Type[1]	Project Annual Energy Consumption	Stanislaus County Annual Energy Consumption	Project Percentage of County Consumption
Electricity[2]	0.465043 GWh	5,245.207692 GWh	0.0089%
Natural Gas[2]	895.754 MMBTu	20,319,871.200 MMBTu	0.0044%

Notes:

[15] California Department of General Services. (2020). 2019 California Green Building Standards Code. Accessed on September 5, 2024, https://codes.iccsafe.org/content/CGBC2019P3
[16] State of California. (2008). Energy Action Plan 2008 Update. Accessed on September 5, 2024, https://docs.cpuc.ca.gov/word_pdf/REPORT/28715.pdf

1. Pacific Gas and Electric Company (PG&E) would serve the site for both electricity and natural gas.

2. Energy consumption data for Stanislaus County is provided by the California Energy Commission, "Electricity Consumption by County" accessed on September 5, 2024, http://ecdms.energy.ca.gov/elecbycounty.aspx and "Gas Consumption by County" accessed on September 5, 2024, https://ecdms.energy.ca.gov/gasbycounty.aspx

Construction

Construction would be short-term and temporary. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities. Construction activities would include typical site preparation, grading, paving, architectural coating, and trenching – all of which would require the transportation of building materials and equipment. Demolition would not be required because there are no existing structures. Therefore, the primary source of energy for construction activities would be diesel and gasoline (i.e., petroleum fuels). All construction equipment shall conform to current emissions standards and related fuel efficiencies including applicable CARB regulations (Airborne Toxic Control Measure), California Code of Regulations (Title 13, Motor Vehicles), and Title 24 standards. Compliance with existing regulations would ensure that the short-term, temporary construction activities would not result in wasteful, inefficient, or unnecessary consumption of energy resources consistent with *Criterion 4*.

Operations

Operations would involve heating, cooling, equipment, and vehicle trips. Energy consumption related to operations would be associated with natural gas, electricity, and fuel. Some energy-efficient designs of the Project include lighting, solar panels, low-E windows, class C type roof, and NEEA-rated heat pump water heater. As new construction, the Project would also be required to meet all mandatory requirements for non-residential buildings as outlined in the 2022 Energy Code. Mandatory requirements apply to building envelopes, ventilation and indoor air quality, space conditioning systems, water heating systems, outdoor and indoor lighting, electric power distribution, covered process for pools, solar ready buildings, and electric ready buildings. Compliance would be verified through the building permit process. Therefore, the Project would meet mandatory state building energy codes, which are designed to reduce wasteful, inefficient, or unnecessary consumption of energy sources, consistent with *Criterion 4*.

Energy consumption and peak demand for the state are forecasted in *Volume IV – California Energy Demand Forecast* of the CEC's Integrated Energy Policy Report. As shown in Figure 10 and Figure 4 of the Volume IV Report, the CEC forecasts a 1.3 to 2.3 percent annual average growth rate for electricity and a 0.1 to 0.9 percent annual average growth rate for natural gas between 2021 and 2030. The Project's anticipated operational energy consumption for electricity and natural gas are shown in Table 4-7. The anticipated consumption of electricity and natural gas would represent 0.0089 percent and 0.0044 percent based on Countywide usage, which would be significantly below CEC's forecast. Therefore, the Project would not require additional energy capacity or supplies in accordance with *Criterion 2*. In addition, as a residential development, energy consumption can be expected to peak in the day similar to other residential developments. Through compliance with energy conservation requirements under the 2022 Energy Code, the Project would not result in unique or more intensive peak or base period electricity demand in accordance with *Criterion 3*.

Furthermore, PG&E is subject to the state's Renewable Portfolio Standard (RPS) which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible

renewable resources to 33 percent of total procurement by 2020 to 60 percent of total procurement by 2030. The increase in reliance of renewable resources further ensures that the Project would not result in wasteful, inefficient, or unnecessary consumption of energy sources, consistent with *Criterion 5*.

Development of the Project site would also result in fuel consumption through vehicle trips. The Project would generate an estimated 1,041,144 annual vehicle miles traveled (VMT) per CalEEMod, which would consume approximately 45,465 gallons of fuel per year (1,630,507 trips divided by 22.9 miles per gallon). This is expected to account for less than one (1) percent of diesel and gasoline consumed from vehicle trips in Stanislaus County. Therefore, energy usage associated with vehicle trips for the proposed Project would be minimal in comparison to the gasoline and diesel fuel consumption for the County. In addition, the Project does not propose any unusual features that would result in excessive long-term operational fuel consumption (*Criterion 2*). Further, annual energy use related to vehicles is expected to decrease over time as a result of vehicle fuel efficiency standards.

Therefore, the Project would not cause wasteful, inefficient, and unnecessary consumption of building energy during Project operation, or preempt future energy development or future energy conservation. A less than significant impact would occur.

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

Less than Significant Impact. As discussed under criterion a), the construction and operations of the Project would be subject to compliance with applicable energy efficiency regulations including CALGreen, Title 24, and CARB. Further, Table 4-8 shows the Project's compliance with General Plan energy conservation policies. Thus, applicable state and local regulations and programs would be implemented to reduce energy waste from construction and operations. In addition, state law ensures construction vehicle idling will be limited. Therefore, through compliance, the Project would not conflict with or obstruct any state or local plan for energy efficiency and a less than significant impact would occur as a result of the Project.

Table 4-8 Consistency with General Plan Energy Conservation Policies

General Plan Energy Conservation Policy	Consistency/Applicability Determination
Policy SD-3.1 *Promote the Use of Solar Energy Technology.*	**Consistent.** The Project would be subject to the California Solar Mandate, which requires that most new residential projects have solar systems installed. The Project proposes the installation of solar panels on rooftops.
Policy SD-3.2 *To Encourage the Use of Energy Conservation Features and Low-Emission Equipment for All New Residential and Commercial Development.*	**Consistent.** The Project would be subject to energy efficiency regulations and conditioned for compliance during the entitlement review and approval process.
Policy SD-5.3 *Use of Sustainable or "Green" Building Principals to promote Energy Conservation.*	**Consistent.** The Project would be subject to energy efficiency regulations and conditioned for compliance during the entitlement review and approval process.

4.6.3 Mitigation Measures

None required.

4.7 GEOLOGY AND SOILS

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
	ii. Strong seismic ground shaking?			X	
	iii. Seismic-related ground failure, including liquefaction?			X	
	iv. Landslides?				X
b)	Result in substantial soil erosion or the loss of topsoil?			X	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e)	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 waste water?				X
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

4.7.1 Environmental Setting

The City of Waterford is in the San Joaquin Valley which is one of the two large valleys comprising the Great Valley Geomorphic Province. The San Joaquin Valley is surrounded by Sierra Nevada (east), Coast Ranges (west), Tehachapi (south), and the Sacramento Valley (north). A brief discussion of the likelihood of seismic activities to occur in or affect Waterford is provided below. The following discussion is based on the Stanislaus County 2022 Multi-Jurisdictional Hazard Mitigation Plan (HMP) [17] as well as the Waterford General Plan *Chapter 12 – Safety*.

Faulting

There are no known active faults in the city, inclusive of the Project site. No Alquist-Priolo Earthquake Fault zoning has been established for the city. The nearest active fault and Alquist-Priolo Fault zoning to the city is the Greenville Fault, which is located approximately 42.6 miles west of the Project site. [18] Due to the distance from an active fault, there is low potential for ground rupture in the city.

Ground Shaking

According to the HMP, the possibility of earthquake occurrence is occasional in Waterford, with a limited severity. This is due to the city's long distance to faults. The HMP categorizes earthquakes in Waterford to have a medium significance and does not identify it as a priority hazard.

Liquefaction

Liquefaction primarily occurs in areas of recently deposited sands and silts and in areas of high groundwater levels. Susceptible areas include sloughs and marshes that have been filled in and developed over. In addition to necessary soil conditions, liquefaction is induced by intense and prolonged ground shaking, usually above a ground acceleration of 0.3g before liquefaction occurs within sandy soil with relative densities typical of the San Joaquin alluvial deposits. No liquefaction hazard areas have been identified within the city's planning area according to the General Plan. Based on historic aerial imagery and search of the National Wetlands Inventory (Section 4.10), the Project site does not include former or current waters (streams, drainages, wetlands) that have been drained, filled, and developed.

Erosion

Wind and flowing water are the primary agents of erosion in the San Joaquin Valley. According to the General Plan, the city is situated on some of the finest soil resources, such as a silty-loam texture, found in the Central San Joaquin Valley, making them highly vulnerable to erosion from wind and water.

Ground Subsidence

Ground subsidence is the settling or sinking of surface soil deposits with little or no horizontal motion. Soils with high silt or clay content are subject to subsidence. While the County of Stanislaus identifies land subsidence hazards

[17] County of Stanislaus. (2022). Stanislaus County 2022 Multi-Jurisdictional Hazard Mitigation Plan. Accessed on September 5, 2024, https://www.stanoes.com/divisions/office-of-emergency-services/multi-jurisdictional-hazard-mitigation-plan
[18] California Department of Conservation. "CGS Seismic Hazard Program: Alquist-Priolo Fault Hazard Zones." Accessed on September 6, 2024, https://gis.data.ca.gov/maps/ee92a5f9f4ee4ec5aa731d3245ed9f53/explore?location=37.213952%2C-117.946341%2C7.19

due to increased groundwater withdrawal, no known subsidence has occurred in the city's planning area according to the General Plan.

Subsurface Soils

A search of the Web Soil Survey by the USDA Natural Resources Conservation Service indicates that the following soils comprise the annexation boundary and Project site. Figure 4-3 shows the location of these soils. [19]

> ***GvA:*** *Greenfield sandy loam, deep over hardpan, 0 to 3 percent slopes, well drained, very low runoff, with no potential of flooding and ponding. The depth to water table is more than 80 inches. The GvA soils account for 55.8% of the Project Area.*
>
> ***HdA:*** *Hanford sandy loam, 0 to 3 percent slopes, well drained, low runoff, with no potential of flooding and ponding. The depth to water table is more than 80 inches. The HdA soils account for 44.2% of the Project Area.*

California Building Code

The California Code of Regulations (CCR) Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The California Building Code incorporates by reference the International Building Code with necessary California amendments. About one-third of the text within the California Building Standards Code has been tailored for California earthquake conditions. These standards are applicable to all new buildings and are required to provide the necessary safety from earthquake related effected emanating from fault activity.

City of Waterford General Plan

The City of Waterford General Plan Update established policies and actions related to disaster, earthquakes, and flooding, in *Chapter 12 – Safety*, as listed below. *Chapter 8 – Open Space & Conservation* also established policies and actions related to soil protection. [20]

Policy S-1.1 *Develop and maintain emergency preparedness procedures for the City.*

Policy S-2.1 *Reduce the potential danger from earthquake and seismic-related activity from existing buildings where necessary.*

Policy S-2.2 *Encourage the improvement of all public facilities and infrastructure such as natural gas, fuel, sewer, water, and electrical lines and equipment with up-to-date seismic safety features.*

Policy S-2.3 *Restrict urban development in all areas with potential ground failure characteristics.*

Policy S-3.1 *Endeavor to maintain the existing City and the Urban Growth Area out of the 100- year floodplain.*

Policy S-3.2 *Maintain essential City services in the event of flooding or dam failure.*

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[19] United States Department of Agriculture Natural Resources Conservation Service. "Web Soil Survey." Accessed on September 5, 2024, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

[20] City of Waterford. (2007). City of Waterford General Plan Update Vision 2025. Accessed September 4, 2024, https://www.cityofwaterford.org/v5/wp-content/uploads/2018/07/General-Plan-Final.pdf

Policy OS-E-2 *Protect soil resources from the erosive forces of wind and water.*

Implementing Action OS-E-2a *Reduce soil erosion potential of new development.*

Implementing Action OS-E-2b *Encourage the planting of trees as windbreaks in agricultural areas of the community.*

Implementing Action OS-E-2c *Maintain adequate vegetation along the banks of urban streams and storm water drainage channels.*

Figure 4-3 Soils Map

4.7.2 Impact Assessment

Would the Project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. There are no known active earthquake faults in Waterford, inclusive of the Project site, nor is Waterford within an Alquist-Priolo earthquake fault zone as established by the Alquist-Priolo Fault Zoning Act. Thus, the Project would not cause rupture of a known earthquake fault and therefore, would have no impact.

ii. Strong seismic ground shaking?

Less than Significant Impact. The Project site is in a zone with an occasional probability and a limited severity for seismic activity. The Project would be required to comply with current seismic protection standards in the CBC which would significantly limit potential damage to structures and thereby reduce potential impacts including the risk of loss, injury, or death. Compliance with the CBC would ensure a less than significant impact.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. There are no known active earthquake faults in Waterford and Waterford has a limited severity for ground shaking. Due to the distance from an active fault, there is low potential for ground rupture. No liquefaction hazard areas have been identified within the city's planning area according to the General Plan. Further, the Project site is primarily made up of sandy loam soils that are well drained, which are less susceptible to liquefaction than silt or sands. As such, the Project site is in an area with low susceptibility to liquefaction with no known geologic hazards or unstable soil conditions. In addition, development would be required to comply with CBC, the city's grading and drainage standards, and specific requirements that address liquefaction. For these reasons, the Project does not have any aspect that could result in seismic-related ground failure including liquefaction and a less than significant impact would occur because of the Project.

iv. Landslides?

No Impact. The topography of the Project site is relatively flat with stable, native soils, and the site is not in the immediate vicinity of rivers or creeks that would be more susceptible to landslides. Therefore, no impact would occur because of the Project.

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

Less than Significant Impact. Soil erosion and loss of topsoil can be caused by natural factors, such as wind and flowing water, and human activity. Development of the Project site would require typical site preparation activities such as grading and trenching which may result in the potential for short-term soil disturbance or erosion impacts. Construction would also involve the use of water which may cause further soil disturbance. Such impacts would be addressed through compliance with regulations set by the State Water Resources Control Board (SWRCB). Namely, the SWRCB requires sites larger than one (1) acre to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity. The General Permit requires the development of a Storm Water Pollution

Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to control erosion. BMPs specific to erosion control cover erosion, sediment, tracking, and waste management controls. Implementation of the SWPPP minimizes the potential for the Project to result in substantial soil erosion or loss of topsoil. With these provisions in place, the impact to soil and topsoil by the Project would be considered less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact. Ground subsidence is the settling or sinking of surface soil deposits with little or no horizontal motion. Soils with high silt or clay content are subject to subsidence. Subsidence typically occurs in areas with groundwater withdrawal or oil or natural gas extraction. The topography of the site is relatively flat with stable, native soils and no apparent unique or significant landforms. Furthermore, the Project site is in an area of medium significance for seismic activity due to its distance from faults. Such factors minimize the potential for other geologic hazards such as landslides, lateral spreading, subsidence, liquefaction, or collapse. Therefore, any development on the native, stable soils is unlikely to become unstable and result in geologic hazards. In addition, the Project would be required to comply with current seismic protection standards in the CBC which would significantly limit potential seismic-related hazards such as landslides, lateral spreading, subsidence, liquefaction, or collapse. Compliance with the CBC would ensure a less than significant impact.

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

No Impact. The Project site is relatively flat with native soils of sandy loam, which is not expansive. Sandy loam soils are not classified as expansive soil, as defined in Table 18-1-B of the Uniform Building Code and would not create substantial direct or indirect risks to life or property. Thus, no impact would occur because of the Project.

e) 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 Project would connect to the City's wastewater services. Thus, no permanent septic tanks or alternative wastewater disposal systems would be installed, and no impact would occur.

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

Less than Significant Impact with Mitigation Incorporated. There are no known paleontological resources or unique geological features known to the City in the Project site. Nevertheless, there is some possibility that a non-visible, buried site may exist and may be uncovered during ground disturbing construction activities which would constitute a significant impact. However, ***Mitigation Measure (MM) GEO-1*** requires that if unknown paleontological resources are discovered during construction activities, work within a 25-foot buffer would cease until a qualified paleontologist determined the appropriate course of action. With implementation of ***MM GEO-1***, the Project would have a less-than-significant impact.

> ***Mitigation Measure GEO-1:*** *If any paleontological resources are encountered during ground-disturbance activities, all work within 25 feet of the find shall halt until a qualified paleontologist as defined by the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010), can evaluate the find and make recommendations regarding treatment.*

Paleontological resource materials may include resources such as fossils, plant impressions, or animal tracks preserved in rock. The qualified paleontologist shall contact the Natural History Museum of Los Angeles County or another appropriate facility regarding any discoveries of paleontological resources.

If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations, and fossil recovery may be required to mitigate adverse impacts from Project implementation. If avoidance is not feasible, the paleontological resources shall be evaluated for their significance. If the resources are not significant, avoidance is not necessary. If the resources are significant, they shall be avoided to ensure no adverse effects or such effects must be mitigated. Construction in that area shall not resume until the resource-appropriate measures are recommended or the materials are determined to be less than significant. If the resource is significant and fossil recovery is the identified form of treatment, then the fossil shall be deposited in an accredited and permanent scientific institution. Copies of all correspondence and reports shall be submitted to the City of Waterford, Planning Division.

4.7.3 Mitigation Measures

The Project shall implement and incorporate, as applicable, the Geology and Soils related mitigation measures as identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

4.8 GREENHOUSE GAS EMISSIONS

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

4.8.1 Environmental Setting

In assessing the significance of impacts from GHG emissions, *Section 15064.4(b)* of the CEQA Guidelines states that a lead agency may consider the following:

- The extent to which the project may increase or reduce GHG emissions as compared to the environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The California Air Resources Board (CARB) 2022 Climate Change Scoping Plan, guidance from the SJVAPCD, and City of Waterford General Plan are discussed below and are utilized as thresholds of significance.

2022 Climate Change Scoping Plan

The CARB 2022 Climate Change Scoping Plan is the adopted statewide plan for reduction and mitigation of GHGs to implement Assembly Bill (AB) 1279. AB 1279 was issued on August 12, 2022, to require California to achieve "net zero greenhouse gas emissions" as soon as possible and to further reduce anthropogenic GHG emissions thereafter. It sets a statewide goal to reduce emissions 85% below 1990 levels no later than 2045.

Consequently, the Scoping Plan involves several measures for cost-effective reduction of GHG emissions, including continuing existing programs such as Renewable Portfolio Standard, Advanced Clean Cars, Low Carbon Fuel Standard, etc., and achieving new mandates to decarbonize several sectors. Along with reducing emissions, environmental justice policies are included to address the ongoing air quality disparities.

Appendix D of the 2022 Scoping Plan include recommendations to build momentum for local government actions to align with State goals, including through CEQA review. The Appendix outlines the priority GHG reduction

strategies for local governments, including transportation electrification, VMT reduction, and building decarbonization. [21]

SJVAPCD CEQA Air Quality Guidelines

The SJVAPCD's Guidance for Valley Land Use Agencies in Addressing GHG Impacts for New Projects Under CEQA (2009) provides screening criteria for climate change analyses, as well as draft guidance for the determination of significance. [22,23] These criteria are used to evaluate whether a project would result in a significant climate change impact (see below). Projects that meet one of these criteria would have less than significant impact on the global climate.

- Does the project comply with an adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions? If no, then:
- Does the project achieve 29% GHG reductions by using approved Best Performance Standards (BPS)? If no, then
- Does the project achieve AB 32 targeted 29% GHG emission reductions compared with Business As Usual (BAU)?

Assembly Bill (AB) 32 was enacted by the California State legislature in 2006 with the aim to reduce GHG emissions to levels of 1990 by 2020. Recommended actions to achieve these aims were adopted by the California Air Resources Board (CARB) in 2008 (i.e., the Climate Change Scoping Plan). However, the 29% GHG emission reductions compared to BAU threshold is outdated since it is aimed to meet AB 32's 2020 goals, thus this threshold would not be used for analysis.

San Joaquin Valley Air Pollution Control District

SJVAPCD adopted *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* and the policy *District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* in 2009. It recognized that project-specific emissions are cumulative and could be considered cumulatively considerable without mitigation. SJVAPCD suggested that the requirement to reduce GHG emissions for all projects is the best method to address this cumulative impact.

The SJVAPCD requires quantification of GHG emissions for all projects which the lead agency has determined that an EIR is required. Although an EIR is not required for the Project, the GHG emissions are quantified below. Short-term construction and long-term operational GHG emissions for project buildout were estimated using CalEEMod™ (version 2022.1.1.26). (See Appendix B). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use),

[21] California Air Resources Board. (2022). 2022 Scoping Plan Appendix D. Accessed on September 5, 2024, https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf
[22] San Joaquin Valley Air Pollution Control District. (2009). Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. Accessed September 5, 2024, http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf.
[23] San Joaquin Valley Air Pollution Control District. (2000). Environmental Review Guidelines: Procedures for Implementing the California Environmental Quality Act. Accessed September 5, 2024, http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf

as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e$), based on the global warming potential of the individual pollutants.

4.8.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. The 2024 CEQA Guidelines do not establish a quantitative threshold of significance for GHG impacts, leaving lead agencies the discretion to establish such thresholds for their respective jurisdictions. The City of Waterford does not have an adopted climate action plan (CAP) that establishes thresholds for GHG emissions. As a result, since the SJVAPCD and the City of Waterford do not have established GHG significance emissions thresholds, the following utilizes qualitative analysis for GHG impacts. Short-term construction and long-term operational GHG emissions for project buildout were estimated using CalEEMod™ (version 2022.1.1.28). See Appendix B for output files.

Construction Emissions

In regard to construction, the SJVAPCD does not recommend assessing pollution associated with construction, as pollution-related construction will be temporary. These construction GHG emissions are a one-time release. As such, it can be anticipated that these construction emissions would not generate a significant contribution to global climate change over the lifetime of the Project.

Operational Emissions

Regarding the long-term operational related GHG emissions, the estimated operational emissions for buildout of the Project incorporates the potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation. The South Coast Air Quality Management District (SCAQMD) adopted the staff proposal for an interim GHG significance threshold of 10,000 MT CO2e per year for GHG for construction and operational emissions. The BAAQMD also adopted the 10,000 MT CO2e per year threshold. Utilizing this as the threshold, annual operational emissions below 10,000 MT CO2e would have a less than significant cumulative impact on GHGs. The annual operational GHG emissions associated with buildout of the Project is 587 MT CO2e based on the CalEEMod run. This is less than the 10,000 MT CO2e threshold of the SCAQMD and BAAQMD.

Further, the Project would not exceed the thresholds of significance for construction or operational emissions as discussed in Section 4.3. Additionally, as discussed in more detail below, the Project would be generally consistent with the applicable goals and policies related to GHG reduction measures, including CARB's 2022 Scoping Plan and SJVAPCD guidelines, and the City of Waterford General Plan goals and policies that aim to reduce air emissions and improve air quality, which reduces GHG emissions as a result. Cumulatively, these emissions would not generate a significant contribution to global climate change over the lifetime of the proposed Project. As such, it can be determined that the Project would not occur at a scale or scope with potential to contribute substantially or cumulatively to the generation of GHG emissions and therefore the impact would be less than significant.

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

Less than Significant Impact. The compatibility of the Project with the 2022 Scoping Plan, Stanislaus Council of Governments (StanCOG) Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), and the City of Waterford General Plan.

Consistency with the 2022 Climate Change Scoping Plan

Based on the evaluation shown in Table 4-9, the Project is consistent with the reduction measures identified in the 2022 Scoping Plan. The reduction measures are derived from the 2022 Scoping Plan *Table 1 – Priority GHG Reduction Strategies*, which provides three (3) priority areas to assist jurisdictions with developing local climate action plans.

Table 4-9 Scoping Plan Priority GHG Reduction Strategies Consistency Analysis

Priority Areas	Priority GHG Reduction Strategies	Consistency/Applicability Determination
Transportation Electrification	Convert local government fleets to ZEVs and provide EV charging at public sites.	**Not Applicable.** The Project is a private development that proposes residential units and is thus not intended to provide public services through the local government.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
VMT Reduction	Reduce or eliminate minimum parking standards.	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.	**Not Applicable.** Road frontages and internal roads proposed within the subdivision are designed to include curb, gutter, and sidewalks.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.	**Consistent.** The Project site proposes a 14.7 du/ac residential development that is approximately 660 feet to the nearest bus stop (Yosemite Blvd & Reinway Ave, Stop ID: 1240).
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking.	**Consistent.** The Project proposes pedestrian facilities (i.e., sidewalks) within the site and connecting to adjacent properties. In addition, as described above, the Project is near an existing bus stop. As such, it increases public access to clean mobility options.
	Implement parking pricing or transportation demand management pricing strategies.	**Not Applicable.** The Project proposes residential development; thus, parking spaces and garages are provided at no additional cost for residents.

	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood)	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)	**Consistent.** The Project site is partially located on Prime Farmland. However, the site is within an infill area (i.e., surrounded by urban and built-up land) and is planned and zoned for urbanized uses. Additionally, the site has not been used for agricultural purposes for more than two (2) decades and is highly disturbed due to annual disking.
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project. In addition, the Project does not include retrofits for existing buildings.
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project. In addition, the Project does not include retrofits for existing buildings.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	**Not Applicable.** This is a city-wide strategy thus is not applicable to the Project.
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings)	**Consistent.** The Project would install solar photovoltaic systems on rooftops pursuant California's 2022 Energy Code.

Consistency with the StanCOG RTP/SCS

The StanCOG 2018 RTP/SCS includes a series of goals for the region that would reduce GHG emissions based on the land use consistency and the reduction of vehicle trips through promoting intermodal transportation systems. Most goals and policies are implemented at the regional or city level. Since the proposed Project is an infill development (i.e., within city limits and generally surrounded by existing development), encourages active transportation

through the installation of sidewalks, and would be subject to local regulations, the Project would be generally consistent with goals and policies identified in the RTP/SCS.

Consistency with the City of Waterford General Plan

The City of Waterford General Plan established several policies to reduce air emissions, as listed below. These policies are mostly implemented at the city level. The Project would be subject to energy efficient regulations including CalGreen, Title 24, and CARB, as discussed in Section 4.6. As such, the Project would be generally consistent with the policies identified in the General Plan.

Policy SD-1.6 *Reduce emissions of PM_{10} and other particulates with local control potential*

Policy SD-3.2 *Encourage the use of energy conservation features and low-emission equipment for all new residential and commercial development.*

In conclusion, the Project contains features that would reduce GHG emissions in compliance with CARB 2022 Climate Change Scoping Plan, StanCOG RTP/SCS, and the City of Waterford General Plan. As such, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and therefore the impact would be less than significant.

4.8.3 Mitigation Measures

None required.

4.9 HAZARDS AND HAZARDOUS MATERIAL

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?			X	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e)	For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project Area?				X
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

4.9.1 Environmental Setting

For the purposes of this section, the term “hazardous materials” refers to "injurious substances," which include flammable liquids and gases, poisons, corrosives, explosives, oxidizers, radioactive materials, and medical supplies and waste. These materials are either generated or used by various commercial and industrial activities. Hazardous

wastes are injurious substances that have been or will be disposed. Potential hazards arise from the transport of hazardous materials, including leakage and accidents involving transporting vehicles. There also are hazards associated with the use and storage of these materials and wastes. Hazardous materials are grouped into the following four categories based on their properties:

- Toxic: causes human health effect
- Ignitable: has the ability to burn
- Corrosive: causes severe burns or damage to materials
- Reactive: causes explosions or generates toxic gases

"Hazardous wastes" are defined in California Health and Safety Code *Section 25141(b)* as wastes that: "…because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause or significantly contribute to an increase in mortality or an increase in serious illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed." A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, *Sections 66261.20-24* contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous waste generators may include industries, businesses, public and private institutions, and households. Federal, state, and local agencies maintain comprehensive databases that identify the location of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require risk management plans to protect surrounding land uses. The release of hazardous materials would be subject to existing federal, State, and local regulations and is similar to the transport, use, and disposal of hazard materials.

Regulatory Setting

The California Environmental Protection Agency (CalEPA) was established in 1991 to protect the environment. CalEPA oversees the Unified Program through Certified Unified Program Agencies (CUPAs), which consolidates six (6) environmental programs to ensure the handling of hazardous waste and materials in California. The local CUPA in Stanislaus County, Hazardous Materials Division, oversees the following six (6) CUPA programs: [24]

- Hazardous Materials Business Plan (HMBP)
- California Accidental Release Program (CalARP)
- Underground Storage Tank Program (UST)
- Aboveground Petroleum Storage Act Program (APSA)
- Hazardous Waste Generator Program
- Hazardous Materials Management Plan (HMMP) / Hazardous Materials Inventory System (HMIS)

[24]County of Stanislaus. Hazardous Materials. Accessed on September 6, 2024, https://www.stancounty.com/er/hazmat/

The Department of Toxic Substances Control (DTSC) is another agency in California that regulates hazardous waste, conducts inspections, provide emergency response for hazardous materials-related emergencies, protect water resources from contamination, removing wastes, etc. DTSC acts under the authority of Resource Conservation and Recovery Act (RCRA) and California Health and Safety Code. The DTSC implements California Code of Regulations (CCR) Title 22 Division 4.5 to manage hazardous waste. Government Code *Section 65962.5* requires that DTSC shall compile and update at least annually a list of:

> *(1) All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code ("HSC").*
>
> *(2) All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.*
>
> *(3) All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.*
>
> *(4) All sites listed pursuant to Section 25356 of the Health and Safety Code.*
>
> *(5) All sites included in the Abandoned Site Assessment Program.*

This list of hazardous waste sites in California, referred to as the Cortese List, is then distributed to each city and county. According to the CCR Title 22, soils excavated from a site containing hazardous materials is considered hazardous waste, and remediation actions should be performed accordingly. Cleanup requirements are determined case-by-case by the jurisdiction.

Record Search

The United States Environmental Protection Agency (EPA) Superfund National Priorities List (NPL)[25], California Department of Toxic Substance Control's EnviroStor database [26], and the State Water Resources Control Board's GeoTracker database [27] include hazardous release and contamination sites. A search of each database was conducted on September 6, 2024. The searches revealed no hazardous material release sites on the Project site. The closest hazardous site is the Sports Stop commercial building located approximately 400 feet north of the Project site. The potential contaminants of concern are from a Leaking Underground Storage Tank (LUST); however, the cleanup was completed, and the case was closed as of June 4, 1997, for the Sports Stop site.

City of Waterford General Plan

The General Plan include policies relevant to hazards and hazardous materials in its Safety Element, as listed below.

> ***Policy S-6.1*** *Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials.*

[25] United States Environmental Protection Agency. Superfund National Priorities List. Accessed September 6, 2024, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1
[26]California Department of Toxic Substances Control. Envirostor. Accessed September 6, 2024, https://www.envirostor.dtsc.ca.gov/public/
[27] California State Water Resources Control Board. GeoTracker. Accessed September 6, 2024, https://geotracker.waterboards.ca.gov/

Policy S-6.2 Ensure that hazardous materials are cleaned up before a property is developed or redeveloped.

4.9.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. The Project proposes a residential development. The type of hazardous materials that would be associated with Project operations are those typical of residential uses such as cleaning supplies and HVAC equipment. Because of the proposed residential 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 of quantity that would pose a significant hazard to the public.

Some appliances and electronics used or stored by residents may contain hazardous components (e.g., refrigerants, oils, etc.); however, these hazardous components are regulated by the EPA under the Toxic Substances Control Act and Clean Air Act and transport of such components are regulated by the U.S. Department of Transportation, Office of Hazardous Materials Safety as implemented in California by Title 13 of the California Code of Regulations (CCR), California Building Code, and Uniform Fire Code, as adopted by the City. Through compliance with regulations, appliances and electronics associated with the Project are not expected to create a significant hazard to the public or the environment.

Potential impacts during construction of the Project could result from the use of fuels and lubricants for construction equipment. However, these impacts would be short-term and temporary, and would be reduced to less than significant levels through compliance with local, state, and federal regulations including but not limited to compliance with EPA's oil spills prevention and preparedness regulations, California Office of Emergency Services implementation of hazardous materials accident prevention, and California Department of Toxic Substance Control permitting, and regulations as administered by Stanislaus County, in addition to standard equipment operating practices as indicated in operator manuals. Therefore, the Project would have a less than significant impact.

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

Less than Significant Impact. As described under criterion a), it is not anticipated that the Project itself would involve any operations that would require routine transport, use, or disposal of hazardous materials and therefore is not anticipated to create a significant hazard to the public or the environment through release of hazardous materials, including any reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. While potential impacts would occur through construction-related transport and disposal of hazardous materials, such impacts would be short-term and temporary and would be reduced to less than significant levels through compliance with local, state, and federal regulations in addition to standard equipment operating practices as described under criterion a). Therefore, the Project would have a less than significant impact.

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

Less than Significant Impact. Waterford High School is located approximately 0.15 miles west of the Project site. Additionally, Lucille Whitehead Intermediate School and Richard M. Moon Primary School are located just within

one-quarter mile of the Project site. As described under criteria a) and b) above, the Project is not anticipated to emit hazard emissions or handle hazardous materials, substances, or water that would pose a risk or threat to the schools or surrounding area. Therefore, a less than significant impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. According to the NPL, EnviroStor, and GeoTracker, the Project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the Project would not create a significant hazard to the public of the environment and 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 for people residing or working in the Project area?

No Impact. The nearest public airport or public use airport is Oakdale Airport located approximately 8.5 miles northwest of the Project site. The Project site is not located within any land use plan or within two (2) miles of a public airport or public use airport. As such, the Project would not result in a safety hazard for people residing or working in the Project area and no impact would occur.

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

Less than Significant Impact. The Project would not involve any new or altered infrastructure associated with evacuation, emergency response, and emergency access routes within the City of Waterford or Stanislaus County. Construction may require lane closure; however, these activities would be short-term and access through Washington Road and/or South Pasadena Avenue would be maintained through standard traffic control. Following construction, these roadways would continue to provide access to the site. Furthermore, the Project would be subject to compliance with applicable standards for on-site emergency access including turn radii and fire access. Therefore, through the compliance, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

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

Less than Significant Impact. According to the Stanislaus County 2022 Multi-Jurisdictional Hazard Mitigation Plan, Waterford is within an area with low threat of wildfire. Wildfire threatens less than 10% of the city's planning area with negligible severity and low overall significance. In addition, the site is not identified by Cal Fire to be in a Moderate, High, or Very High Fire Hazard Severity Zone (FHSZ). Development of the Project would also increase paved areas, decreasing the probability of wildfires. Future development of the site would result in the construction of structures and installation of infrastructure that would be reviewed and conditioned by the city for compliance with all applicable standards, specifications, and codes. In addition, any structure occupied by humans would be required to be constructed in adherence to the Wildland Urban Interface Codes and Standards of the CBC Chapter 7A. Compliance with such regulations would ensure that the Project meets standards to help prevent loss, injury, or death involving wildland fires. For these reasons, the Project would have a less than significant impact.

4.9.3 Mitigation Measures

None required.

4.10 HYDROLOGY AND WATER QUALITY

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?			X	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				
	i. Result in a substantial erosion or siltation on- or off-site;			X	
	ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:			X	
	iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
	iv. Impede or redirect flood flows?			X	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?			X	
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

4.10.1 Environmental Setting

The Project is within city limits and would connect to the city's water and stormwater services. The city's water and stormwater services are described as follows.

Water

The City of Waterford Public Works Department Water Department is responsible for operating and maintaining wells, distribution lines, and water meters to provide water to three (3) separate service areas: River Pointe, Waterford, and Hickman. The Waterford and Hickman water systems were acquired by Modesto in the mid 1990's and then acquired by the City of Waterford in 2015. The two (2) service areas are hydraulically independent, with no connections between each other. They are also separated geographically. On the other hand, the Waterford and River Pointe water systems are considering consolidation (i.e., physically connected) since they are geographically contiguous and within city limits. Once they are consolidated, the total effective water production capacity will increase by approximately 1,500 gpm. The Project site is within the Waterford water service area. The Waterford water system includes six (6) wells and approximately 91,000 feet of distribution lines with 2,260 service connections. However, one of the wells, Well 244, is offline due to elevated levels of manganese. There are no water storage systems in the city. [28]

The City solely relies on groundwater. The General Plan includes the following policies and implementing actions in its Open Space and Conservation Element to promote water conservation, as listed below.

Policy OS-E-1 *Promote water conservation throughout the planning area.*

> ***Implementing Actions OS-E-1a*** *Develop and enforce water conservation policies and standards. The City should consider adoption of a water conservation ordinance.*
>
> ***Implementing Actions OS-E-1b*** *Develop a Water Efficient Landscaping and Irrigation Ordinance. Promote the conservation of water and the preservation of water quality by requiring drought tolerant plant material in landscaping and the retention of existing natural vegetation on new development projects.*
>
> ***Implementing Actions OS-E-1c*** *Provide leadership in conserving urban water resources. City buildings and facilities should be equipped with water saving devices whenever practical. Municipal parks and playgrounds should employ water conservation techniques such as mulching, drip irrigation and other appropriate technologies.*
>
> ***Implementing Actions OS-E-1d*** *Encourage public water conservation efforts. Through established public information systems in the community, the City should promote water conservation by providing information on water savings from low-flow fixtures and the value of insulating hot water lines in water re-circulating systems. Other conservation techniques can be addressed, such as the use of non-potable water for landscape irrigation purposes (water re-use, MID water, etc.).*

[28] City of Waterford. (2016). 2016 Water Master Plan. Accessed September 20, 2024, https://cityofwaterford.org/v2/wp-content/uploads/2018/04/City-of-Waterford-WMP-Final-Draft-31Mar16.pdf

Stormwater

The City's Public Works Department manages Waterford's storm drain system and monitors storm water quality. The City maintains stormwater facilities within existing rights-of-way. The City's stormwater system consists of a system of drains and detention basins located throughout the City. Average annual precipitation in Stanislaus County is 12.7 inches. [29]

4.10.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. The Project site is undeveloped and therefore would require grading, excavation, and loading activities associated with construction which could temporarily increase runoff, erosion, and sedimentation. Typical sources of potential construction-related stormwater pollution would be the handling, storage, and disposal of construction materials that contain pollutants, the maintenance and operation of construction equipment, and earth moving activities. The potential for construction-related stormwater pollution would be significantly minimized through preparation of the required SWPPP (Section 4.7) in compliance with the General Permit for Discharges of Storm Water Associated with Construction Activity. The SWPPP estimates the sediment risk associated with construction activities and includes best management practices (BMP) to control erosion. BMPs specific to erosion control cover erosion, sediment, tracking, and waste management controls. Implementation of the SWPPP minimizes the potential for the Project to result in substantial soil erosion or loss of topsoil. These provisions minimize the potential for the Project to violate any waste discharge requirements or otherwise substantially degrade surface or ground water quality. Further, runoff resulting from the Project would be managed by the Public Works Department in compliance with the Storm Drainage System Master Plan in addition to approved grading and drainage plans. Thus, compliance with existing regulations including the General Construction Permit, BMPs, and Storm Drainage System Master Plan would ensure potential impacts related to water quality and waste discharge are less than significant.

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

Less than Significant Impact. The City's long-term water resource planning for existing and future demand is addressed in the City's 2016 Water Master Plan (WMP). The City's sole source of water supply is the underlying groundwater basin, Modesto Subbasin. The City currently has six (6) wells in the Waterford service area, where the Project is located in, with an existing well capacity range from 305 to 730 gallons per minute (gpm). The total combined capacity of the Waterford service area is 2,875 gpm, per efficiency testing conducted in 2015.

As population and development within the city increases, the WMP indicates that old wells will need to be replaced, and the Waterford and River Pointe service area will need to be consolidated to meet the growing demand. These increases are accounted for in the WMP projections, which are based on the General Plan. In the General Plan, the

[29] City of Waterford. (2006). Drainage System Master Plan. Accessed September 20, 2024, https://cityofwaterford.org/v2/wp-content/uploads/2010/09/Storm-Drain-Master-Plan.pdf

Project site is planned for Multi-Family Residential, which has a planned density of 12.0 to 36.0 du/ac. The Project proposes the development of a 53-lot residential subdivision with a density of 14.7 du/ac. As such, the development of the Project would be consistent with the permitted density of the Multi-Family Residential land use and would not result in a higher density that would not have been previously accounted for.

Existing and future water demands for the City of Waterford are shown in Table 4-10. As shown, the City anticipates an average day demand of 964 gpm with a maximum day demand of 1,831 gpm and a peak hour demand of 2,656 gpm at city buildout. This is within the current capacity of the Waterford service area, 2,875 gpm, per efficiency testing conducted in 2015. Since the Project would be developed within the density allowed in the underlying planned land use designation, it can be assumed that the Project would be accommodated by existing groundwater supplies and impacts would be less than significant.

Table 4-10 City of Waterford Existing and Future Water Demands

Use Type	Existing (2015)	City Buildout	Future SOI Buildout
Average Day Demand	830 gpm	964 gpm	2,877 gpm
Maximum Day Demand	1,577 gpm	1,831 gpm	5,466 gpm
Peak Hour Demand	2,656 gpm	2,656 gpm	9,206 gpm

Source: *City of Waterford, 2016 Water Master Plan, Table 6.1 Estimated Water Demands*

Furthermore, adherence to connection requirements and recommendations pursuant to the City's water conservation efforts (e.g., compliance with California Plumbing Code, efficient appliances, efficient landscaping, etc.) should not negatively impact water supply or impede water management. In particular, the Project would be built accordance with all mandatory outdoor water use requirements as outlined in the applicable California Green Building Standards Code, Title 24, Part 11, Section 4.304 – Outdoor Water Use and verified through the building permit process. As a residential development that would contain landscaping pursuant to WMC regulations, the Project shall comply with the updated Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Chapter 2.7, Division 2), as implemented and enforced through the building permit process. Therefore, through compliance, the potential for the Project to substantially decrease groundwater supplies is limited and impacts would be less than significant.

In addition, development of the Project site would increase impervious surfaces which could increase stormwater runoff and reduce groundwater recharge. The City of Waterford maintains stormwater drainage pipelines within existing rights-of-way. The City's stormwater system consists of a system of drains located throughout the city. The Project proposes a filtration basin for onsite stormwater before draining the water into the City's system. The basin was sized to adequately accommodate stormwater runoff from the site. Based on the proposed site grading, stormwater runoff will generally drain toward the basin through storm drains. Further, runoff resulting from the Project would be managed by the Public Works Department in compliance with the Drainage System Master Plan in addition to approved grading and drainage plans. Thus, compliance would ensure potential impacts related to groundwater recharge are less than significant.

Overall, based on the information collected from the WMP and the City of Waterford, the proposed Project would not generate greater water demand than would otherwise occur with a higher intensity land use. As a result, it can be presumed that the existing and planned water distribution system and supplies should be adequate to serve the Project, and the Project would thereby not interfere substantially with groundwater recharge or impede sustainable groundwater management of the basin. In addition, adherence to connection requirements and recommendations pursuant to the City's water supply planning efforts (i.e., compliance with California Plumbing Code, efficient

appliances, efficient landscaping, etc.) should not negatively impact the City's water provision. Lastly, compliance with approved grading and drainage plans would ensure impacts to groundwater recharge are less than significant. For these reasons, a less than significant impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. Erosion is a natural process in which soil is moved from place to place by wind or from flowing water. The effects of erosion within the Project site can be accelerated by ground-disturbing activities associated with development. Siltation is the settling of sediment to the bed of a stream or lake which increases the turbidity of water. Turbid water can have harmful effects to aquatic life by clogging fish gills, reducing spawning habitat, and suppressing aquatic vegetation growth.

Implementation of the proposed Project would result in the development of ruderal land that has undergone significant disturbance (i.e., annual disking). Bare soils are more susceptible to erosion than an already developed urban land, thus it is expected erosion could occur on-site. During construction activities, and in compliance with the Project's SWPPP, construction-related erosion controls and BMPs would be implemented to reduce potential impacts related to erosion and siltation. These BMPs would include, but are not limited to, covering and/or binding soil surfaces to prevent soil from being detached and transported by water or wind, and the use of barriers such as straw bales and sandbags to control sediment. Together, the controls and BMPs are intended to limit soil transportation and erosion and construction impacts related to on- and off-site improvements.

Development of the site would also result in an increase in the amount of impervious surface, which could increase the volume of runoff. However, the impervious surface area would significantly reduce the amount of exposed soil which would minimize the potential for erosion and siltation. In addition, the Project would be required to maintain the overall site drainage pattern in accordance with an approved grading and drainage plan. According to the Project's preliminary utility plan, the site will drain north into the proposed filtration basin through storm drains, then pumped from the filtration basin into the City's storm drainage pipelines located on Pasadena Avenue. The basin was sized to adequately accommodate stormwater runoff from the site. Therefore, compliance with requirements would reduce or eliminate the Project's potential to substantially alter the existing drainage pattern of the site as to cause substantial erosion or siltation and impacts would be less than significant.

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

Less than Significant Impact. During construction, the site's vegetation and soil would be disturbed, thereby temporarily altering the natural hydrology of the site. In turn, this could increase the volume and velocity of stormwater runoff which could increase the potential for flooding on- or off-site. As previously discussed, development of the site would require compliance with the SWPPP, approved grading and drainage plan, and implementation of BMPs that would control and direct runoff. Compliance would ensure that construction impacts related to the alteration of the site's natural hydrology and the potential increase in runoff that would result in flooding on- or off-site would be less than significant.

iii. Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. Development of the site would disturb the site's vegetation and soil and temporarily alter the natural hydrology of the site. However, compliance with the SWPPP, approved grading and drainage plan, and implementation of BMPs that would control, and direct runoff would reduce construction impacts related to alteration of the site's natural hydrology and the potential increase in runoff or polluted runoff in excess of existing or planned stormwater drainage systems. Therefore, construction would not result in the creation or contribution of additional sources of runoff or polluted runoff in exceedance of the existing or planned stormwater drainage systems and impacts would be less than significant.

Regarding operational impacts, development of the site would result in an increase in the impervious surface area which would increase runoff from the site. However, compliance with the approved grading and drainage plans would reduce the potential for the Project to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. A less than significant impact would occur.

iv. Impede or redirect flood flows?

Less than Significant Impact. Although the construction of the proposed Project would increase impervious surfaces, the Project would be required to maintain the site's drainage pattern through Project-specific grading and drainage plans that would be reviewed and approved by the City prior to the issuance of building permits. Through compliance, the potential for the Project to impede or redirect flood flows would be minimized or eliminated and a less than significant impact would occur.

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

Less than Significant Impact. The Project site is designated as Zone X on the most recent Flood Insurance Rate Map (FIRM) No. 06099C0369E dated September 26, 2008.[30] Zone X is a flood hazard area with a 0.2 percent annual chance of flood hazard and one (1) precent annual chance flood with average depth less than one foot or with drainage areas of less than one (1) square mile. In addition, the Project site is not in a tsunami or seiche zone (i.e., standing waves on rivers, reservoirs, ponds, and lakes), therefore the risk of inundation is unlikely. For these reasons, the Project would have a less than significant impact.

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

Less than Significant Impact. A groundwater sustainability plan (GSP) was adopted for the Modesto Subbasin on January 31, 2022, by the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA), of which the City of Waterford is a member. [31] The goal of the GSA is to ensure that the subbasin maintains a reliable water supply for current and future beneficial uses without experiencing undesirable results. As a member agency of the STRGBA GSA, the City of Waterford's land-use decisions must comply with the GSP by decreasing water demand and managing groundwater resources. Consequently, the Project

[30] FEMA. FEMA Flood Map Service Center. Accessed September 23, 2024, https://msc.fema.gov/portal/home
[31] Modesto Subbasin Groundwater Sustainability Agency (2022). Groundwater Sustainability Plan. Accessed September 23, 2024, https://www.strgba.org/Home/GSP

is subject to compliance with city-identified regulations, such as installation of water meter and MWELO landscape standards, to maintain groundwater resources. Compliance with such regulations would ensure that the Project would not conflict with or obstruct the implementation of the GSP. For these reasons, a less than significant impact would occur as a result of the Project.

4.10.3 Mitigation Measures

None required.

4.11 LAND USE PLANNING

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Physically divide an established community?			X	
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

4.11.1 Environmental Setting

The Project site has a City of Waterford General Plan land use designation of MF – Multi-Family (Figure 2-3). According to the General Plan, the purpose of the MF land use designation is *"to provide duplexes, triplexes, four-plexes, condominiums, zero-lot-line as well as single-family detached units on appropriate sized lots."* The MF land use designation is compatible with the R-2, R-3, PS, and PC zoning districts. Typical uses of this land use designation include single-family detached dwellings, small-lot multifamily dwellings including duplexes, triplexes, fourplexes, accessory dwelling units, and compatible public and quasi-public uses (e.g., churches, day-care centers, community centers, parks, and schools).

The Project site is located within the PC-RH – Planned Community-Residential High zoning district (Figure 2-4). REZONE No. 2024-0002 would rezone the Project site from Planned Community, Residential High (P-C) (RH) to Planned Community (P-C) (Figure 2-5). The rezone allows the Project to deviate from RH development standards. The permitted density remains the same (i.e., 12 du/ac to 36 du/ac).

4.11.2 Impact Assessment

Would the Project:

a) Physically divide an established community?

Less than Significant Impact. Typically, physical division of an established community would occur if a Project introduced new incompatible uses inconsistent with the planned or existing land uses or created a physical barrier that impeded access within the community. Typical examples of physical barriers include the introduction of new, intersecting roadways, roadway closures, and construction of new major utility infrastructure (e.g., transmission lines, storm channels, etc.).

Surrounding Land Uses

The Project site is surrounded by vacant and commercial uses to the north, single-family residences to the south and east, and agricultural uses to the west. As referenced in Table 2-2, properties to the north are zoned for commercial uses, and the properties to the east, south, and west are planned for residential uses. Proposed site improvements would be regulated by development standards and zoning regulations, including height, landscaping, setbacks, improvements, right-of-way dedications, open space, and parking, etc. As such, the Project would be consistent and therefore compatible with the existing residential use surrounding the Project site. Therefore,

implementation of the Project would be generally consistent with the existing and planned land uses within the Project site.

Circulation System

Access to the Project site would be provided by one (1) gated point of ingress/egress from Washington Road and one (1) gated point of ingress/egress from South Pasadena Avenue.

All proposed roadways are internal private streets that are not identified in the Waterford General Plan Circulation Diagram. All roadways within the proposed subdivision, including the Washington Road and South Pasadena Avenue entrances, would be designed in accordance with City Standards and would have curb, gutter, and sidewalk. With connections to Washington Road and South Pasadena Avenue, the Project would be able to be served by the existing circulation system and related infrastructure. Therefore, implementation of the Project would not include the introduction of new, intersecting roadways. Therefore, a less than significant impact would occur.

Utility Infrastructure

The Project site is within the city limits and thus, would be required to connect to water, wastewater, and stormwater services. Natural gas, electricity, telecommunications, and solid waste services are provided by private companies. Utility systems are described and analyzed in Section 4.10 and Section 4.15. Based on the analysis, implementation of the Project would not result in the construction of new, major utility infrastructure.

As such, the Project does not represent a significant change in the surrounding area as it would develop a vacant and undeveloped site with residential uses that are consistent and compatible with existing uses surrounding the Project site. In addition, the Project provides connections to existing roadways designated in the General Plan and does not include major utility infrastructure. For these reasons, the Project would not result in the physical division of an established community and would thereby have a less than significant impact.

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?

Less than Significant Impact. The Project proposes to construct a 53-unit residential development with the approval of the associated rezone (REZONE), tentative subdivision map (TMAP), and design review (ASPR). The Project site has a General Plan land use designation of MF – Multi Family. The proposed Rezone would rezone the Project site from Planned Community, Residential High (P-C) (RH) to Planned Community (P-C). This allows the Project to deviate from RH development standards. Proposed deviations to development standards in the RH zone district are listed in Table 2-1. The proposed Rezone is consistent with the underlying land use designation. The permitted density remains the same (i.e., 12 du/ac to 36 du/ac).

Table 4-11 Deviations from RH Development Standards

Development Standard	RH Zone District Standards	Proposed Project
Minimum site area (sq. ft.)	7,500	1,500
Minimum site width (ft.)	65	25
Minimum yards: Front (ft.)	15	5
Minimum yards: Side (ft.)	6/10	5/5
Minimum yards: Rear (ft.)	15	5
Maximum coverage	60%	Approximately 63%

Generally, policy conflicts are environmental impacts when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this document under specific topical sections, such as Biological Resources, Cultural Resources, and Tribal Cultural Resources. The Project includes a rezone to allow flexibility in development standards on the proposed development. A discussion of land use policies that are applicable to the Project are included in Table 4-12. As discussed below, the Project is generally consistent with the General Plan residential land use designation.

Table 4-12 Discussion on Land Use Policies in the General Plan for Residential Development

General Plan Policy	Project Consistency
Policy L-1.2 E*ncourage a diversity of building types, ownership, prices, designs, and site plans for residential areas throughout the city.*	**Consistent.** The Project proposes 7 single-family detached units and 46 duplex units (i.e.,single-family attached units) with varying floor plans and elevations which increases the number of housing types and options available to residents.
Policy L-1.6 *Continue to pursue quality single-family and higher density residential development.*	**Consistent.** The Project provides 7 single-family units and 46 duplex units, providing a residential density of 14.7 dwelling units per acre (du/ac), which is greater than the residential density of typical development (i.e., 9.1 du/ac [32]).
Policy L-1.7 *Encourage the location of multi-family developments on sites with good access to transportation, shopping, and services.*	**Consistent.** The Project site is located within a quarter mile of two (2) existing commercial developments located on Yosemite Boulevard, providing various opportunities for shopping and services.

Further, through the entitlement process, the Project would be reviewed for compliance with applicable regulations inclusive of those adopted for the purpose of avoiding or mitigating environmental effects. Overall, the entitlement process would ensure that the Project complies with the General Plan, WMC, and any other applicable policies and regulations. As such, a less than significant impact would occur.

4.11.3 Mitigation Measures

None required.

[32] California Air Pollution Control Officers Association. (2021). Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity Accessed September 25, 2024, https://www.airquality.org/ClimateChange/Documents/Final%20Handbook_AB434.pdf

4.12 MINERAL RESOURCES

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?				X
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

4.12.1 Environmental Setting

For the purposes of CEQA, mineral resources are land areas or deposits deemed significant by the California Department of Conservation (DOC). Mineral resources include oil, natural gas, and metallic and nonmetallic deposits, including aggregate resources. 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 General Plan, the Waterford Planning Area, inclusive of the Project site, is not located in an area with mineral deposit significance and there are no active mine operations. In addition, the City of Waterford, inclusive of the Project site, is not within a CalGEM-recognized oilfield and there are no oil and gas wells on-site. [33]

4.12.2 Impact Assessment

Would the Project:

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

No Impact. There are no identified mineral deposits of significance or active mine operations on the Project site. Therefore, the Project would not 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. Therefore, no impact would occur.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Impact. There are no identified mineral deposits of significance or active mine operations on the Project site. As a result, the Project would not 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. Further, the site is not delineated in the General Plan, a Specific Plan,

[33] California Department of Conservation. Well Finder. Accessed on September 11, 2024, https://maps.conservation.ca.gov/doggr/wellfinder/

or other land use plan as a locally important mineral resource recovery site, thus it would not result in the loss of availability of a locally important mineral resource. Therefore, no impact would occur.

4.12.3 Mitigation Measures

None required.

4.13 NOISE

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?			X	
b)	Generation of excessive groundborne vibration or groundborne noise levels?			X	
c)	For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?				X

4.13.1 Environmental Setting

In general, there are two (2) types of noise sources: 1) mobile sources and 2) stationary sources. Mobile source noises are typically associated with transportation including automobiles, trucks, trains, and aircraft. Stationary sounds are sources that do not move such as machinery or construction sites. Stationary sources can also include events, recreational uses, amplified systems, automotive repair facilities, building mechanical systems, and landscape maintenance. These sources can vary based on factors such as site conditions, equipment operated, and specific activities conducted. Noises generated are also directional but can vary based on site and operational characteristics.

Nosie-related impacts typically affect sensitive receptors and land uses such as residential, schools, churches, nursing homes, hospitals, and open space/recreation areas. Commercial, farmland, and industrial areas are not considered noise sensitive and generally have higher tolerances for exterior and interior noise levels. Noise levels for noise-sensitive receptors will vary depending on location, distance from the source, shielding by terrain and structures, and ground attenuation rates.

City of Waterford General Plan

The City of Waterford General Plan *Chapter 11 – Noise* established noise standards and policies to mitigate health effects of noise in the community and prevent exposures to excessive noise levels. Table 4-13 shows the maximum allowable noise for exterior and interior noise levels (Ldn dBA) for various land use types.

Table 4-13 Allowable Noise Standards Measured in Ldn (dBA)

Land Use Category	Maximum Exterior		Maximum Interior
	Acceptable	Conditionally Acceptable	
Residential	60	70	45
Live/Work	65	75	50
Hotel/Motel	65	75	50
Office	67	77	55
Other Commercial	70	80	60
Industrial/Agriculture	70	80	60
Schools, Libraries, Theaters, Churches, Nursing Homes	60	70	45
Parks and Playfields	65	70	NA
Golf Courses, Riding Stables, Cemeteries	70	75	NA

Table 4-14 shows the maximum allowable noise for stationary noise sources.

Table 4-14 Noise Standards for Stationary Noise Sources

Duration	Maximum Allowable Noise	
	Day (7:00 a.m. to 10:00 p.m.)	Night (10:00 p.m. to 7:00 a.m.)
Hourly Leq in dB	50	45
Maximum Level in dB	70	65
Maximum Impulsive Noise in dB	65	60

State Highway Noise Contour: 2007 noise levels of State Route 132 range from 70 Ldn at 43 feet and 55 Ldn at 346 feet from the center of State Route 132. The distance of the contours is projected to increase to approximately 180 feet for 70 Ldn and 585 feet for 55 Ldn in the year 2025. The Project is approximately 490 feet from the center of State Route 132. Figure 4-4 maps the projected noise contours for all major traffic noise in the City of Waterford by 2025.

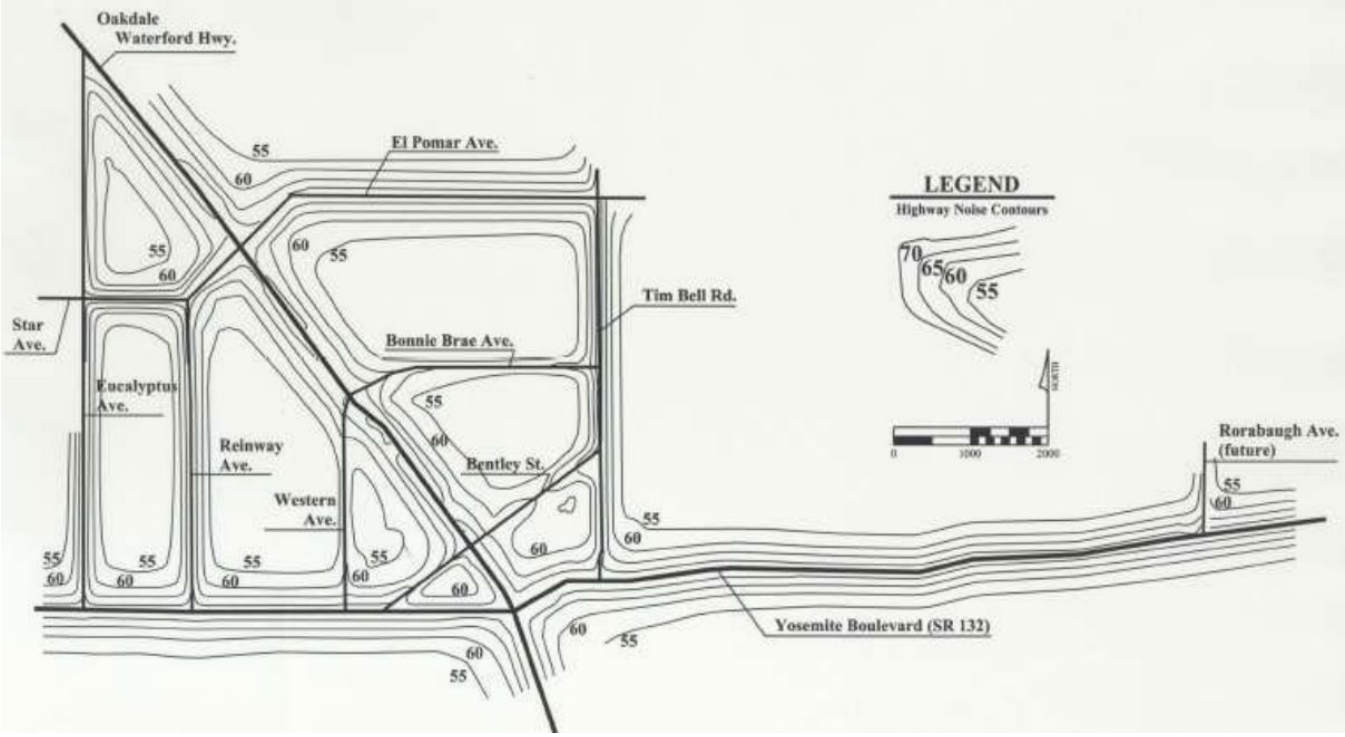

Figure 4-4 2025 Noise Contours

The following policies and implementing actions are applicable to the Project.

Policy N-1.1 *Reduce surface vehicle noise.*

> ***Implementing Action 1.1.a*** *Continue to discourage truck traffic and through traffic in residential areas in Waterford.*
>
> ***Implementing Action 1.1.e*** *Special project specific noise studies shall be conducted for development projects that are likely to contribute to existing noise sources or create a new noise source as determined by the City.*

Policy N-1.2 *Reduce equipment noise levels.*

> ***Implementing Action 1.2.a*** *Limit operating hours for noisy construction equipment used in the City of Waterford. As a condition of approval on a construction permit, the City can establish the operating hours of construction equipment.*

Policy N-1.3 *Reduce noise levels at the receiver where noise reduction at the source is not possible.*

> ***Implementing Action 1.3.a*** *Require new residential projects to meet acceptable noise level standards as follows:*
>
> - *A maximum of 45 dB for interior noise level for residential projects.*
> - *A maximum of 60 dB for exterior noise level, especially when outdoor activities are important components of a project.*
> - *A maximum of 65 dB when all the best available noise-reduction techniques have been exhausted without achieving 60 dB, and the strict application of such a maximum becomes a hindrance to development needed or that is typical for an area.*

- *A maximum of 70 dB for rail noise when 45 dB is maintained in bedrooms and the accumulation of the total number of noisy events does not exceed 45 dB for more than 30 minutes during night time hours (11:00 p.m. to 7:00 a.m.) and does not exceed an accumulated 60 minutes during any 24-hour period.*

Implementing Action 1.3.b *Use the "normally acceptable" noise levels as established in the "Noise and Land Use Compatibility Guidelines" (Table 4-14) for the review of nonresidential land uses.*

Policy N-1.4 *Coordinate planning efforts so that noise-sensitive land uses are not located near major noise sources.*

Implementing Action 1.4.a *Use the general plan master noise contours map in the review and approval process for development proposals, as well as for evaluating circulation, land use, and open space plans to minimize noise impacts on noise-sensitive areas.*

Implementing Action 1.4.c *Require noise barriers and/or increased setbacks between heavy circulation corridors and noise-sensitive land uses.*

Implementing Action 1.5.d *Require field noise measurements when new development may be impacted by high noise levels.*

Policy N-1.5 *Mitigate all significant noise impacts as a condition of project approval for sensitive land uses.*

Implementing Action 1.5.a *Consider site design techniques as the primary means to minimize noise impacts, such as building placement, increased landscaped setbacks, orientation of noise-tolerant components (i.e. parking, utility areas, maintenance facilities) between the noise source and the receptor, and the use of a combination of noise barriers and landscaped berms, etc.*

Implementing Action 1.5.b *Encourage developers to consider alternative architectural designs as a means of meeting noise reduction requirements, such as use of noise tolerant rooms (kitchen, garages, bathrooms) to shield other noise sensitive rooms or areas (living rooms, bedrooms).*

- *Locate bedrooms away from major roadways.*
- *For building facades, use architectural design techniques and materials that will help shield noise.*
- *Avoid balconies or operable windows facing major travel routes.*

City of Waterford Municipal Code

Waterford Municipal Code *Chapter 8.22 - Noise Control* sets forth the City's noise control regulations. Specific noise prohibitions applicable to the Project are as follows.

Section 8.22.040 Prohibited acts.

The following acts are hereby prohibited:

G. Construction and Demolition

1. *Hours of Operation. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of seven p.m. and seven a.m. (or eight p.m. and nine a.m. on weekends or holidays) such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work or public service utilities or by variance issued by the noise control officer; and*

2. *Noise Restrictions at Affected Properties. Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum sound levels at affected properties will not exceed those listed in the following schedule:*
    i. *Mobile Equipment. Maximum sound levels for nonscheduled, intermittent, short-term operation (less than ten days per month) of mobile equipment:*

	R-1 and R-2 Residential	*R-3 and above Multifamily Residential*	*Commercial and Industrial*
Daily 7:00 a.m. to 7:00 p.m.	*75 dBA*	*80 dBA*	*85 dBA*
Weekends 9:00 a.m. to 8:00 p.m. and legal holidays	*60 dBA*	*65 dBA*	*70 dBA*

    ii. *Stationary Equipment. Maximum sound levels for repetitively scheduled and relatively long-term operation (periods of ten days or more per month) of stationary equipment:*

	R-1 and R-2 Residential	*R-3 and above Multifamily Residential*	*Commercial and Industrial*
Daily 7:00 a.m. to 7:00 p.m.	*60 dBA*	*65 dBA*	*70 dBA*
Weekends 9:00 a.m. to 8:00 p.m. and legal holidays	*50 dBA*	*55 dBA*	*60 dBA*

H. Vibration. Operating or permitting the operation of any device which creates a vibration which annoys or disturbs at least two or more reasonable persons of normal sensitivity who reside in separate residences (including apartments and condominiums) at or beyond the property boundary of the source if on private property or at least one hundred fifty feet (forty-six meters) from the source if on a public space or public right-of-way;

Existing Ambient Noise Environment

The Project site's existing noise environment is impacted by various noise sources. As previously discussed, the Project site is bounded by single-family residences to the east and south. Associated noise from residential uses includes vehicles and typical neighborhood noise (i.e. talking, car doors shutting, dogs barking, etc.), which are usually minimized by trees and landscaping. The Project site is not located within the Airport Influence Area (AIA) of the Modesto City-County Airport, nor is it within the Airport's community noise equivalent level (CNEL) noise contour. Other sources of noise include the vehicular traffic on South Pasadena Avenue and Washington Road, which are both street frontages of the Project site.

4.13.2 Impact Assessment

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than Significant Impact. Noise generating activities of the Project would include traffic noise and stationery-source noise, such as operations and construction as described below. It is not anticipated that Project would generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards, given the type of development proposed (i.e., residential).

Traffic Noise Exposure

Mobile source noises are typically associated with transportation including automobiles, trains, and aircraft. Sensitive land uses include residential, schools, churches, nursing homes, hospitals, and open space-recreation areas. Commercial, farmland, and industrial areas are not considered noise sensitive and generally have higher tolerances for exterior and interior noise levels. The nearest sensitive land uses are single-family residences to the west of the Project site.

According to the General Plan Noise Element, the Project site is within the 55 Ldn dBA contour under noise levels of the year 2025 from vehicles traveling on State Route 132. Traffic noise depends primarily on traffic volume, traffic speed, and truck traffic percentage.

The primary source of exterior, on-going noise from full buildout of the Project would be from vehicles traveling to and from the site. Future build-out of the Project site would generate an increase in traffic on roadways in the Project vicinity. However, the relatively low number of new trips (i.e., 382 ADTs) associated with build-out of the Project site is not likely to increase the ambient noise levels by a significant amount as the area is active with vehicles. Additionally, increased traffic noise levels on State Route 132 due to build-out of the Project is expected to be minimal since the trips generated does not include trucks. Increased traffic noise levels due to Project operations has also been anticipated in the General Plan. As such, it is expected that the traffic noise levels will increase minimally and will not cause a significant impact.

Operational Noise Exposure

The proposed residential use is expected to generate typical neighborhood noise (i.e. talking, car doors shutting, dogs barking, etc.). These noises are expected to be minimal due to the relatively low number of units proposed (i.e., 53 units), and will not introduce a new significant source of noise that isn't already occurring in the area. In addition, household machinery sounds (e.g., HVAC systems, refrigerators, etc.) will be confined within the interior of the buildings. As such, it is expected that the operational noise generated by the Project will be minimal and most likely not cause significant impact to existing uses.

Construction Noise Exposure

Construction noise will result from construction activities through the use of construction equipment for grading the site and building the proposed structures. Construction phases would include demolition, site preparation, grading, building construction, architectural coating, and paving. Of all construction phases, it is anticipated that grading would produce the loudest noise.

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) Version 1.0. For the purpose of this noise assessment, general construction equipment, including air compressors, mixers, cranes, forklifts, generator sets, graders, pavers, paving equipment, rollers, dozers, tractors, and welders, are included in the construction noise modeling. According to existing and anticipated land use within and around the Project site, the baseline and receptors that are analyzed in the RCNM are shown in Table 4-15.

Table 4-15 Receptors and Baseline Analyzed in the RCNM

Location	Land Use	Total dB Lmax *	Total dB Leq **
25 feet to the east	Residential	99.7	96.3

** Total Lmax is the value for the loudest piece of equipment.*

*** This number estimates noise when all equipment is used at the same time.*

Short-term construction noises include traffic noise generated from transporting construction equipment and materials and construction worker commuting. These activities would raise noise levels near the site. According to modeling of the FHWA RCNM Version 1.0, construction noise generated from the offroad equipment is estimated to be 96.3 dB Leq if all equipment was used at the same time. Ambient noise from construction activities would cease upon completion of construction.

Although the nearby residential uses would experience elevated noise levels from construction, these activities would be temporary and would generally take place in accordance with WMC *Section 8.22.040* which regulates permissible hours of construction between the hours of 7:00 am and 7:00 pm on weekdays and 8:00 am and 9:00 pm on weekends and legal holidays. According to WMC *Section 8.22.040*, the maximum sound levels for stationary construction equipment (i.e., periods of 10 days or more per month) for R-3 and above multi-family residential construction is 65 dBA daily between 7:00 am to 7:00 pm and 55 dBA during weekends and legal holidays between 9:00 am to 8:00 pm, where technically and economically feasible. According to the FHWA Highway Construction Noise Handbook, noise thresholds of 90 Lmax in the daytime (7 am to 6 pm) and 85 Lmax in the evening (6 pm to 10 pm) is considered significant. It is not expected that the construction of the Project is expected to exceed the construction noise thresholds of the FHWA since 1) not all construction equipment is expected to be used at the same time and 2) trees between the site and nearby residences, as well as windows and walls of the residences would provide noise reduction.

Overall, Project construction is not expected to result in a significant impact because the noise would be regulated by the WMC. Noise would thereby be generated during daylight hours and not during evening or more noise-sensitive time periods; and the increase in noise would cease upon completion of the Project. For these reasons, a less than significant impact would occur.

Although the Project would result in increased ambient noise level at the Project site, compliance with the General Plan policies and WMC requirements would result in the Project's compliance with applicable standards. Overall, the Project would result in a less than significant impact in regard to noise.

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

Less than Significant Impact. Ground borne vibration may result from operations and/or construction, depending on the use of equipment (e.g., pile drivers, bulldozers, jackhammers, etc.), distance to affected structures, and soil type. Depending on the method, equipment-generated vibrations could spread through the ground and affect nearby buildings. The dominant sources of man-made vibration are sonic booms, blasting, pile driving, pavement breaking, demolition, diesel locomotives, and rail-car coupling. None of these activities are anticipated to occur with construction or operation of the proposed Project.

One of the most recent references suggesting vibration guidelines is the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual (Guidance Manual). [34] The Manual provides guidance for determining annoyance potential criteria and damage potential threshold criteria, as shown in Table

[34] California Department of Transportation. (2020). Transportation and Construction Vibration Guidance Manual. Accessed September 23, 2024, https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf

4-16 and Table 4-17. The thresholds are presented in terms of peak particle velocity (PPV) in inches per second (in/sec).

Table 4-16 Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.1
Severe	2.0	0.4

Source: California Department of Transportation

Table 4-17 Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile, historic buildings, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation

Typical vibration levels at distances of 25 feet are summarized by Table 4-18. Most of these levels are barely perceptible to distinctly perceptible according to the vibration annoyance potential thresholds shown in Table 4-16. Most of these vibration levels are also not expected to cause damage to the nearest sensitive use, older residential structures located approximately 25 feet east of the site, according to the damage potential thresholds shown in Table 4-17. The only vibration levels that could be distinctly perceptible is the vibratory roller, which could cause damage to fragile buildings. The existing single-family residences located 25 feet east of the site were built in 1949, categorized as "older residential structures". According to Table 4-17 the damage potential for older residential structures is 0.3 in/sec when the source is continuous. The predicted vibration amplitude of 0.210 in/sec of the vibratory roller does not exceed this value, indicating low potential for structural damage to the residences.

Table 4-18 Typical Vibration Levels During Construction

Equipment	PPV (in/sec)			
	At 25 feet	At 90 feet	At 100 feet	At 300 feet
Bulldozer (Large)	0.089	0.022	0.011	0.006
Bulldozer (Small)	0.003	0.0007	0.0004	0.00019
Loaded Truck	0.076	0.019	0.01	0.005
Jackhammer	0.035	0.009	0.005	0.002
Vibratory Roller	0.210	0.051	0.03	0.013
Caisson Drilling	0.089	0.022	0.01	0.006

Source: California Department of Transportation

As a result, it is not expected that construction activities would exceed any significant threshold levels for annoyance or damage. Additionally, operational activities related to residential uses are non-perceptible (i.e., vibration from HVAC, refrigerators, etc.) thus would not create any vibration impacts. As such, the Project would have a less than significant impact.

c) *For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?*

No Impact. The nearest public airport or public use airport is the Modesto City-County Airport located approximately 9.5 miles west of the Project site. The Project site is not located within any land use plan or within two (2) miles of a public airport or public use airport. As such, the Project would not result in exposing people residing or working in the Project area to excessive noise levels. Therefore, there would be no impact.

4.13.3 Mitigation Measures

None required.

4.14 POPULATION AND HOUSING

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

4.14.1 Environmental Setting

CEQA Guidelines *Section 15126.2(d)* requires that a CEQA document discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQA Guidelines provide an example of a major expansion of a wastewater treatment plant that may allow for more construction within the service area. The CEQA Guidelines also note that the evaluation of growth inducement should consider the characteristics of a Project that may encourage or facilitate other activities that could significantly affect the environment. Direct and Indirect Growth Inducement consists of activities that directly facilitate population growth, such as construction of new dwelling units. A key consideration in evaluating growth inducement is whether the activity in question constitutes "planned growth."

City of Waterford General Plan

The City of Waterford General Plan assumes a hypothetical future service population of 30,000 to assure adequate infrastructure is in place to serve the future growth needs of the City.

U.S. Census Bureau

According to the U.S. Census Bureau, the population of Waterford is 9,323, with an average household size of 3.78 in 2023. [35]

[35] U.S. Census Bureau. 2023. QuickFacts: Waterford city, California. Accessed on September 12, 2024, https://www.census.gov/quickfacts/fact/table/waterfordcitycalifornia,US

4.14.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. The Project includes a Rezone that requests a change from the PC-RH zoning to PC zoning. The proposed Rezone would be consistent with the underlying MF – Multi Family land use designation. The Rezone allows the Project to deviate from RH development standards, but does not affect the density, or number of units, that can be built on the Project site. As such, the number of housing units and population anticipated under Project buildout would be consistent with the General Plan population projection. As a result, the Project would not induce unplanned growth and would have a less than significant impact.

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

No Impact. The Project site is currently vacant with no structures. The site does not contain any existing housing or residential uses. Since the site does not currently provide housing, future development of the Project site would not result in the physical displacement of people or housing. No impact would occur because of the Project.

4.14.3 Mitigation Measures

None required.

4.15 PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?			X	
iv. Parks?			X	
v. Other public facilities?			X	

4.15.1 Environmental Setting

The Project site is within Waterford city limits and thus, would be subject to fees for the construction, acquisition, and improvements for public services and facilities. Public services and facilities are further described below.

Fire Protection Services

Fire protection services in the city are provided by the Stanislaus Consolidated Fire Protection District ("District"). The District, formed on March 3, 1995, currently operates a total of six (6) fire stations, serving over 195 square miles and a population of over 50,000, including unincorporated areas within Stanislaus County, which include Empire, La Grange, Hickman, Eastern Stanislaus County, Airport District, Gallo Winery, and the Beard Industrial Tract. Fire Station 24, located at 129 E Street, Waterford, CA 95386, serves the City of Waterford and its surrounding unincorporated areas. The station is equipped with one (1) Type 1 Engine, one (1) Type 3 Brush, one (1) water rescue boat, and one (1) OES Type 1 Engine. [36] The District reviews all building permits and subdivision maps to ensure the adequate location of access and fire suppression equipment, as well as conducts fire protection system inspections of new construction and routine fire and life safety inspections of existing buildings. The General Plan Public Health and Safety Element includes the following policies to reduce the potential for fire hazards demand:

[36] Stanislaus Consolidated Fire Protection District. Station 24. Accessed on September 12, 2024, https://www.scfpd.us/operations/district-facilities/station-24/

Policy S-4.1. *In cooperation with the consolidated fire protection district, promote the concept of fire protection master planning with fire safety goals, missions, and supporting objectives for the community.*

Policy S-4.2. *Maintain a reasonable level of accessibility and infrastructure support for fire suppression, disaster, and other emergency services.*

Police Protection Services

Police protection services in the city are provided by the Waterford Police Services (WPS), which are contracted to the Stanislaus County Sheriff's Office. The Waterford Police Department is located at 115 E Street, Waterford, CA 95386, which is approximately one (1) mile northeast of the Project site. The WPS is staffed with 11 full-time positions, one (1) Lieutenant/Police Chief, one (1) sergeant, seven (7) Deputy Sheriffs, and two (2) administrative positions. The General Plan identifies the following policies to provide effective and responsive police protection.

Policy S-5.1. *Provide superior community-based police services.*

Policy S-5.2. *Provide services and personnel necessary to maintain community order and public safety.*

Schools

Educational services within the city are primarily served by the Waterford Unified School District (WUSD). WUSD's service area includes the City of Waterford. WUSD consists of approximately 1,840 students with five (5) campuses: Richard M. Moon Primary, Lucille Whitehead Intermediate, Waterford Junior High, Waterford High School, and Sentinel High School. [37] All five (5) campuses are within a one (1)-mile radius of the Project site. Funding for schools and school facilities impacts is outlined in Education Code *Section 17620* and Government Code *Section 65995 et. seq.* (State statutes) which govern the amount of fees that can be levied against new development. These fees are used to construct new or expanded school facilities. Payment of fees authorized by the statute is deemed "full and complete mitigation." A School Facilities Fee would be assessed for future development based on the rates in place at the time payment is due.

Parks and Recreation

Park and recreation facilities are overseen by the City of Waterford Parks and Recreation Department. Currently, there are five (5) city parks: Basin Park, Beard Park, River Park, S. Reinway Park & Trailhead, and Brethren Park. [38] The General Plan includes the following policies related to park and recreational facilities and services:

Policy PF-2-1. *Provide high-quality park and open space facilities to serve the needs of a growing population.*

Policy PF-2-2. *Maintain the City's existing high-quality open space facilities.*

Policy PF-2-3. *Develop a diverse and integrated system of park facilities throughout Waterford.*

[37] Waterford Unified School District. District Information. Accessed on September 12, 2024, https://www.waterford.k12.ca.us/page/district-information2

[38] City of Waterford. Parks. Accessed on September 12, 2024, https://www.cityofwaterford.org/parks/

4.15.2 Impact Assessment

Would the Project:

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

i. Fire protection?

Less than Significant Impact. The Project site is currently served by the Stanislaus Consolidated Fire Protection District ("District"). Fire Station No. 24 is approximately one (1) mile northeast of the Project site. According to the District, a new fire station would be required when the population reaches 11,000-12,000. Waterford's current population is 9,323 and the Project would result in approximately 200 residents (53 units multiply by 3.78 household size). In addition, the District confirmed that there are enough fire fighters on duty to serve residents within a five (5) mile radius of the Fire Station while still meeting the District's performance objectives. Therefore, the Project's proximity to the existing Fire Station would support adequate service ratios, response times, and other performance objectives for fire protection services.

Through the entitlement and building permit process, the Project would be required to comply with the CBC and Uniform Fire Code to ensure fire safety elements are incorporated into the Project design. Proposed interior streets would be required to provide appropriate widths and turning radii to safely accommodate emergency response and the transport of emergency/public safety vehicles. The Project would also be designed to meet District requirements regarding water flow, water storage requirements, hydrant spacing, infrastructure sizing, and emergency access. Through compliance, impacts would be less than significant.

ii. Police protection?

Less than Significant Impact. The Project site would be served by the Waterford Police Services (WPS). The Waterford Police Department is located at 115 E Street, Waterford, CA 95386, which is approximately one (1) mile northeast of the Project site. The Project's proximity to the existing station would support adequate service ratios, response times, and other performance objectives for police protection services. For these reasons, it can be determined that the Project would not result in the need for new or altered facilities that could have an environmental impact and a less than significant impact would occur.

iii. Schools?

Less than Significant Impact. The Project site is within the Waterford Unified School District (WUSD) with five (5) schools within a one-mile radius including Richard M. Moon Primary, Lucille Whitehead Intermediate, Waterford Junior High, Waterford High School, and Sentinel High School. Since residential development is proposed, the Project would introduce residents to the area and generate new students that would increase enrollment in the WUSD. To offset impacts of the development, a school impact fee would be assessed for the Project based on the rates in place at the time payment is due. As stated in Government Code *Section 65995 et. seq.*, payment of a school impact fee is deemed full and complete mitigation for potential impacts to schools caused by development. Therefore, payment of the assessed School Impact Fee would reduce impacts related to new school facilities resulting from implementation of the Project and impacts would be less than significant.

iv. Parks?

Less than Significant Impact. Park and recreational facilities are typically impacted by an increase in use from residential development. The Project proposes residential development that would introduce residents to the area and therefore could increase the demand for and use of existing public parks or other recreational facilities. The City aims to maintain a standard of 5 acres of combined park and open space land per 1,000 residents. The Project would be required to pay in-lieu fees to mitigate any potential impacts to the City's park and recreation facilities generated by the incremental population increase. The payment of in-lieu fees would reduce any impacts resulting from increased residential demand for park and recreational facilities so as to not cause substantial physical deterioration of the public facilities. For these reasons, the Project would have a less than significant impact.

v. Other public facilities?

Less than Significant Impact. The Project would introduce residents to the area and thus increase the demand for other public services, such as courts, libraries, hospitals, etc. Increased demand as a result of the Project could result in development or expansion of public facilities. Typical environmental impacts associated with the development of these facilities include air quality, greenhouse gas emissions, noise, traffic, etc. The expansion of these facilities would be subject to CEQA as they are proposed. In addition, future development would be subject to the payment of impact fees in order to mitigate any potential impacts to these public facilities. As a result, the Project would have a less than significant impact.

4.15.3 Mitigation Measures

None required.

4.16 RECREATION

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b)	Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

4.16.1 Environmental Setting

See Section 4.15.

4.16.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. Park and recreational facilities are typically impacted by an increase in use from residential development. The Project proposes residential development that would introduce residents to the area and therefore could increase the demand for and use of existing public parks or other recreational facilities. The City's parkland standard is five (5) acres of combined park and open space per 1,000 residents. The City also requires developers to dedicate parkland or pay in-lieu fees to mitigate any potential impacts to the City's parks and other recreational facilities. Per the City of Waterford Planning Division, the Project would be required to pay in-lieu fees. Compliance with these requirements would reduce any impacts resulting from increased residential demand for park and recreational facilities to not cause substantial physical deterioration of the facilities. As a result, the Project would have a less than significant impact.

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

Less than Significant Impact. The Project includes the construction of a small pocket park as part of the subdivision. Landscaping is also proposed on the northeast and northwest corners and along the center right-of-way within the subdivision. The construction of these facilities is proportional to the residential development and are analyzed as part of the Project in the Initial Study. As such, the facilities would not be in an area or be built to a scale that would cause an adverse physical effect on the environment. As a result, a less than significant impact would occur.

4.16.3 Mitigation Measures

None required.

4.17 TRANSPORTATION

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?			X	
b)	Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d)	Result in inadequate emergency access?			X	

4.17.1 Environmental Setting

The Project site is currently vacant and undeveloped, with no existing structures or improvements. Street frontage includes Washington Road, a two (2)-lane local road that bounds the Project site to the south and South Pasadena Avenue, a two (2)-lane local road that bounds the Project site to the east.

Stanislaus Non-Motorized Transportation Plan (ATP)

Stanislaus Council of Governments (StanCOG) adopted the 2021 Non-Motorized Transportation Plan on February 22, 2021. [39] The ATP's goal is to identify opportunities to improve biking, walking, and other non-motorized travel options and increase access to public transportation in the County. According to the Non-Motorized Transportation Plan, there are no existing or planned walking or bicycle facilities along the site's street frontage (Washington Road and South Pasadena Avenue). However, the City's Bicycle Plan identified a Class 3 bike route along Washington Road. [40]

City of Waterford General Plan

The General Plan *Chapter 5 – Transportation and Circulation* established policies to maintain the operations of existing roadway systems as new development occurs. These policies aim to prevent negative impacts caused by new developments and ensure that adequate transportation system is provided. The following goals and policies are generally applicable to the proposed Project.

Policy T-1.1 *Design streets consistent with circulation function and affected land uses.*

[39] Stanislaus Council of Governments. (2021). 2021 Non-Motorized Transportation Plan. Accessed September 23, 2024, https://www.stancog.org/DocumentCenter/View/437/Final-Nonmotorized-Transportation-Plan-PDF?bidId=
[40] City of Waterford. Bike Trails. Accessed September 23, 2024, https://www.cityofwaterford.org/bike-trails/

Implementing Action 1.1.a *Implement the general plan circulation plan as development occurs.*

Implementing Action 1.1.d *Design and build residential collector streets that balance as effectively as possible competing needs to be safe and efficient.*

Policy T-1.3 *Design major roads to maximize efficiency.*

Implementing Action 1.3.c *Improve traffic flow of arterials and other major roadways, whenever possible, by avoiding or eliminating on-street parking.*

Implementing Action 1.3.d *Work to insure that land uses fronting major streets have shared access across adjacent properties and provide sufficient on-site parking to avoid depending upon on-street parking.*

Implementing Action 1.3.e *Promote the provision of on-site visitor parking in multi-family projects.*

Implementing Action 1.3.f *Whenever feasible, avoid, or eliminate, unnecessary or poorly placed median openings.*

Implementing Action 1.3.k *Approve driveway access locations only if consistent with approved minimum acceptable distances from major intersections, except in unusual circumstances.*

Policy T-1.4 *Promote traffic safety.*

Implementing Action 1.4.c *Promote increased traffic safety with special attention to hazards which could cause personal injury.*

Implementing Action 1.4.d *Reserve adequate road and intersection right-of-way to provide for the needs of traffic safety.*

Policy T-1.5 *Minimize unnecessary travel demand on major streets.*

Implementing Action 1.5.a *Encourage design of local and collector streets within neighborhoods to provide multiple, reasonably direct routes to local neighborhood destinations.*

Implementing Action 1.5.b *Avoid, whenever feasible, neighborhood street system designs that make it more convenient for a local resident to use an arterial street to reach an in-neighborhood destination than to remain on the local street system.*

Policy T-1.6 *Minimize adverse impacts on the environment from existing and proposed road systems.*

Implementing Action 1.6.d *Avoid neighborhood street system designs, whenever possible, that require a local resident to travel away from a local destination in order to reach it.*

Implementing Action 1.6.e *Install traffic control devices only where warranted except in unusual circumstances.*

Policy T-1.7 *Minimize street system impacts on residential neighborhoods and other sensitive land uses.*

Implementing Action 1.7.a *To the greatest extent feasible, maintain a distinct hierarchy of streets that will provide for major roadways between neighborhoods rather than through neighborhood areas.*

Implementing Action 1.8.b *Whenever feasible, approve street circulation patterns that discourage exterior traffic from driving through neighborhoods.*

SB 743 Technical Advisory

In April 2018, the Governor's Office of Planning and Research (OPR) issued the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) (revised December 2018) to provide technical recommendations regarding VMT, thresholds of significance, and mitigation measures for a variety of land use Project types. [41] The Technical Advisory includes screening thresholds for agencies to use in order to identify when a Project should be expected to cause a less-than-significant impact without conducting a detailed study.

- *Screening Thresholds for Small Project.* Absent substantial evidence indicating that a Project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact. This threshold is based on a CEQA categorical exemption for existing facilities, including additions to existing structures of up to 10,00 square feet, so long as the Project is in an area where public infrastructure is available to allow for maximum planned development and the Project is not in an environmentally sensitive area.
- *Map-Based Screening Threshold for Residential and Office Projects.* 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. 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.
- *Presumption of Less Than Significant Impact Near Transit Thresholds.* Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain Projects (including residential, retail, and office Projects, as well as Projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor will have a less-than-significant impact on VMT. This presumption would not apply, however, if Project-specific or location-specific information indicates that the Project will still generate significant levels of VMT.
- *Presumption of Less Than Significant Impact for Affordable Residential Development.* Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Therefore, a Project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT.

The Technical Advisory also recommends numeric thresholds for residential, office, and retail projects.

- *Recommended threshold for residential projects*: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita.
- *Recommended threshold for office projects*: A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.

[41] Office of Planning and Research. (2018). Technical Advisory on Evaluating Transportation Impacts in CEQA. Accessed September 24, 2024, https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf

- *Recommended threshold for retail projects*: A net increase in total VMT may indicate a significant transportation impact.

According to the Technical Advisory, lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types.

4.17.2 Impact Assessment

Would the Project:

a) 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 would be required to comply with all Project-level requirements implemented by a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Compliance is further discussed below. Overall, the Project would not conflict with a program plan, ordinance, or policy addressing the circulation system and a less than significant impact would occur.

Roadway Facilities

Access to the site would be provided by one (1) point of ingress/egress from Washington Road and one (1) point of ingress/egress from Pasadena Avenue. Internal circulation within the site would be provided by private streets, including a north-south 53-foot-wide main right-of-way and 20-foot driveways. All roadways within the proposed subdivision would be designed in accordance with City Standards and would have curbs, gutter, and sidewalk. A 10-feet wide public utility easement (PUE) along Washington Road and along Pasadena Avenue frontages are proposed to be dedicated to the City of Waterford for rights-of-way purposes. The rights-of-way would be improved in accordance with City Standards. Turning radii are also proposed within the subdivision per Stanislaus Consolidated Fire Protection District and City Standards for emergency access and solid waste vehicle access.

The Project would be required to submit public improvement plans for off-site improvements through the building permit process, for review and approval by the City to ensure improvements would be consistent with adopted standards, specifications, and approved street plans. Through compliance, the Project would result in improvements to the roadway network consistent with the goals, objectives, and policies of the General Plan as shown on the Circulation Diagram and described in the Circulation Element.

Pedestrian and Bicycle Facilities

There are existing pedestrian facilities (i.e., sidewalks) adjacent to the Project site along Pasadena Avenue. According to the Non-Motorized Transportation Plan, no bicycle facilities are planned on the site frontage. The Project would extend and connect to the existing sidewalks along Pasadena Avenue. The Project would also install sidewalks along its frontage on Washington Road, even though there are no sidewalks adjacent. The Project would also result in public street improvements along Pasadena Avenue and Washington Road, including concrete curb, gutter, and paving per City Standards. Off-site improvements would be verified and ensured through the Building Permit process. Provision of the pedestrian facilities would be ensured through the Building Permit process. Therefore, the Project would be consistent with the General Plan and Non-Motorized Transportation Plan and thereby would not conflict with a program, plan, ordinance, or policy addressing bicycle and pedestrian facilities.

b) Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant Impact. Under Senate Bill 743 (SB743), traffic impacts are related to Vehicle Miles Traveled (VMT). The VMT metric became mandatory on July 1, 2020. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual automobile travel (additional miles driven) a proposed Project would create on California roads. If the Project adds excessive automobile travel onto roads, then the Project may cause a significant transportation impact. Therefore, LOS measures of impacts on traffic facilities are no longer a relevant CEQA criteria for transportation impacts.

To implement SB 743, the CEQA Guidelines were amended by adding *Section 15064.3.* According to *Section 15064.3*, VMT measures the automobile travel generated from a proposed Project (i.e., the additional miles driven). Here, 'automobile' refers to on-road passenger vehicles such as cars and light-duty trucks. If a proposed Project adds excessive automobile travel on California roads thereby exceeding an applicable threshold of significance, then the Project may cause a significant transportation impact. In the case that quantitative models or methods are not available to the lead agency to estimate the VMT for the Project being considered, provisions of CEQA Guidelines *Section 15064.3(b)(3)* permits the lead agency to conduct a qualitative analysis. The qualitative analysis may evaluate factors including but not limited to the availability of transit, proximity to other destinations, and construction traffic.

Lastly, *Section 15064.3(b)(4)* of the CEQA Guidelines states that *"[a] lead agency has discretion 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 revision to model outputs should be documented and explained in the environmental document prepared for the Project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."* Below is a discussion of the threshold and analysis used to analyze VMT impacts from the proposed Project.

According to page 19 of the Technical Advisory on Evaluating Transportation Impacts in CEQA published by the Governor's Office of Planning and Research (OPR), *"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. Lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types."* Neither the City of Waterford nor the Stanislaus Council of Governments (StanCOG) have established VMT thresholds or guidelines. Since the City and StanCOG do not have established thresholds or guidelines, the state guidelines, including the Technical Advisory document mentioned above, have been utilized as the default methodology used to analyze VMT impacts.

In April 2018, the Governor's Office of Planning and Research (OPR) issued the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) (revised December 2018) to provide technical recommendations regarding VMT, thresholds of significance, and mitigation measures for a variety of land use project types. According to OPR's Technical Advisory, the recommended threshold for residential projects is 15 percent below existing VMT per capita. If a proposed project exceeds a level of 15 percent below existing VMT per capita, the project will have a significant impact.

Fehr & Peers' VMT+ tool was used to determine existing VMT per capita. [42] The VMT+ tool provides data by block group. According to the VMT+ tool, the Project site is located in an area (block group 060990028021) that has a 11.8 home-based VMT per capita. This is more than 15% below the city home-based VMT per capita of 17.2 and the county home-based VMT per capita of 14.5. Additionally, according to the Fehr & Peers TDM+ (Beta) tool, the proposed Project would reduce 13.5% project-generated VMT due to the Project's higher density compared to the average residential density nationwide. The Fehr & Peers TDM+ (Beta) tool calculates VMT reductions from the strategies established in the *2021 CAPCOA Report Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. [43]

Given that the Project is below the identified threshold of significance of 15 percent and the Project would reduce 13.5% project-generated trips due to its density, it can be determined that a less than significant impact would occur, and the Project would not conflict or be inconsistent with CEQA Guidelines *Section 15064 (b)*.

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

Less than Significant Impact. The Project design does not contain any geometric design features that would create hazards. Implementation of the Project would not require the improvement and expansion of the roadway network serving the Project site. The site would be accessible via one (1) point of ingress/egress from Washington Road and one (1) point of ingress/egress from Pasadena Avenue. Turning radii are proposed within the subdivision per Stanislaus Consolidated Fire Protection District and City Standards for emergency access and solid waste vehicle access. In addition, the Project would be required to submit public improvement plans through the Building Permit process for review and approval by the City to ensure offsite improvements (i.e., sidewalks, curb, gutter) would be consistent with adopted City Standards and the approved street plans. Compliance with such standards, specifications, and plans would ensure that any traffic hazards are minimized. Lastly, the Project proposes a residential development of a site that is planned and zoned for residential use within an area comprising existing and planned residential uses. Therefore, the Project does not propose an incompatible use because it is consistent with the existing development in the area and is similar in nature to the surrounding uses. As a result, implementation of the Project would result in a less than significant impact related to hazards due to roadway design features or incompatible uses.

d) Result in inadequate emergency access?

Less than Significant Impact. The Project does not involve a change to any emergency response plan. In addition, the Project site is subject to review by the City to ensure adequate site access including emergency access. In the case that Project construction requires lane closures, access through existing roadways would be maintained through standard traffic control and therefore, potential lane closures would not affect emergency evacuation plans. Thus, a less than significant impact would occur because of the Project.

[42] Fehr & Peers. Find Your VMT With VMT+. Accessed September 24, 2024, https://www.fehrandpeers.com/project/find-my-vmt/

[43] California Air Pollution Control Officers Association. (2021). Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Accessed September 24, 2024, https://www.airquality.org/ClimateChange/Documents/Final%20Handbook_AB434.pdf

4.17.3 Mitigation Measures

None required.

4.18 TRIBAL CULTURAL RESOURCES

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

4.18.1 Environmental Setting

See Section 4.5.

4.18.2 Impact Assessment

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Less than Significant Impact with Mitigation Incorporated. As discussed in Section 4.5, the Project site does not contain any property or site features that are eligible for listing in the California Register of Historical Sources, or in a local register of historical resources as defined in PRC *Section 5020.1(k)*. Nevertheless, there is some possibility that a non-visible, buried site may exist and may be uncovered during ground disturbing construction activities which would constitute a significant impact. As such, implementation of ***Mitigation Measure CUL-1*** as described in Section 4.5 would reduce any impacts to less than significant.

b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) 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 Incorporated. The Project site and its resources have not been determined by the City to be significant pursuant to *Section 5024.1*. However, as discussed in Section 4.5, there is some possibility that a non-visible, buried site may exist and may be uncovered during ground disturbing construction activities which could constitute a significant impact. Therefore, the Project shall incorporate ***Mitigation Measure CUL-1*** to assure construction activities do not result in significant impacts to any potential resources of significance to a California Native American tribe discovered above or below ground surface. Thus, if such resources were discovered, implementation of the required mitigation measures would reduce the impact to less than significant. As a result, the Project would have a less than significant impact with mitigation incorporated.

4.18.3 Mitigation Measures

The Project shall implement and incorporate, as applicable, the Tribal Cultural Resources related mitigation measures identified above and in the MITIGATION MONITORING AND REPORTING PROGRAM contained in SECTION 5.

4.19 UTILITIES AND SERVICE SYSTEMS

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effect?			X	
b)	Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c)	Result in a determination by the 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?			X	
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

4.19.1 Environmental Setting

The Project site is within Waterford city limits and thus, would be required to water, wastewater, and stormwater services. Natural gas, electricity, and telecommunications are provided by private companies. Each utility system is described below.

Water

Water supply, usage, and services are described in Section 4.10.

Wastewater

The City of Waterford provides sewer service to the community. The sewage collection system consists of a network of 6-inch and 8-inch diameter collection lines that connect to larger mains. Sewage from most of the western half of Waterford flows into a 12- inch trunk line in Western Avenue to the Wastewater Treatment Plan (WWTP). The

remainder of the city (east of Tim Bell Road) flows into 12-inch trunk lines in Tim Bell Road and Rivercrest Drive to a pump station which sends sewage through an 8-inch force main along the Tuolumne River to the WWTP.

Waterford's collection system operates one other permanent lift station that is located south of Riverside Road. This facility currently receives flows from a small development generally located north of that location and discharges into the Riverside Road line which feeds into the Western Avenue trunk line.

The City's WWTP is located south of Riverside Road along the north bank of the Tuolumne River and provides a "one pass" biological treatment system. The system does not meet typical secondary treatment standards. The current WWTP is rated to accommodate flows up to 1.0 MGD. The WWTP consists of an influent pump station, headworks, five aeration basins, and four percolation ponds across the Tuolumne River.

The flows at the treatment plant exhibit very little seasonal variation. This condition occurs because the flows are predominantly from residential uses since there are not significant industrial, agriculture-related or seasonally operated industries within the city. [44]

Solid Waste

Waterford contracts with Gilton Solid Waste Management, Inc. for solid waste and composting services. Collection is provided four (4) days a week to residential, commercial, and industrial customers. Gilton hauls collected waste to the Gilton Resource Recovery/Transfer Facility located in Modesto.

Stormwater

Stormwater services are described in Section 4.10.

Natural Gas and Electricity

Pacific Gas & Electric (PG&E) would provide electricity supply, electricity transmission, and natural gas to new development at the Project site.

Telecommunications

Accordingly, telecommunications providers in the area incrementally expand and update their service systems in response to usage and demand. Upon request, the site would be connected to existing broadband infrastructure and subject to applicable connection and service fees.

4.19.2 Impact Assessment

Would the Project:

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

Less than Significant Impact. The Project site would be required to connect to water, stormwater, and wastewater services, and utilize solid waste collection services. Natural gas, electricity, and telecommunications would be

[44] City of Waterford. (2006). Wastewater Treatment Plant Master Plan. Accessed on September 23, 2024. https://cityofwaterford.org/v2/wp-content/uploads/2010/09/Waterford-WWTP-Report_Mar20061.pdf

provided by private companies. The City has reviewed the Project to determine adequate capacity in these systems and ensure compliance with applicable connection requirements. In addition to connections to water, stormwater, solid waste, and wastewater services, the Project would be served by PG&E for natural gas and electricity and by the appropriate telecommunications provider for the Project site. Therefore, all wet and dry public utilities, facilities, and infrastructure are in place and available to serve the Project site without the need for relocated, new, or expanded facilities. While new utility and service connections would need to be extended into the Project site (e.g., sewer, stormwater runoff, electrical), these new connections would not result in a need to modify the larger off-site infrastructure. Therefore, the Project would not require or result in the relocation or construction of new or expanded facilities and as such, impact would be less than significant.

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

Less than Significant Impact. Water supply reliability is assessed based on the characteristics of the City's water supplies during various water year types. The City's 2016 Water Master Plan (WMP) discussed the challenges that the city is currently facing that could affect water supply, including reduced groundwater quantity and old wells needing to be replaced. The WMP also discussed the potential connection of Waterford service area's and the River Pointe service area's water system, to increase water supply and access to water supply.

Existing and future water demands for the City of Waterford are shown in Table 4-10. As shown, the City anticipates an average day demand of 964 gpm with a maximum day demand of 1,831 gpm and a peak hour demand of 2,656 gpm at city buildout. This is within the current capacity of the Waterford service area, 2,875 gpm, per efficiency testing conducted in 2015. Since the Project would be developed within the density allowed in the underlying planned land use designation, it can be assumed that the Project would be accommodated by existing groundwater supplies and impacts would be less than significant.

Table 4-19 City of Waterford Existing and Future Water Demands

Use Type	Existing (2015)	City Buildout	Future SOI Buildout
Average Day Demand	830 gpm	964 gpm	2,877 gpm
Maximum Day Demand	1,577 gpm	1,831 gpm	5,466 gpm
Peak Hour Demand	2,656 gpm	2,656 gpm	9,206 gpm

***Source**: City of Waterford, 2016 Water Master Plan, Table 6.1 Estimated Water Demands*

Furthermore, as discussed under Section 4.10, adherence to connection requirements and recommendations pursuant to the City's conservation efforts (e.g., compliance with California Plumbing Code, efficient appliances, efficient landscaping, etc.) should not negatively impact water supply or impede water management. In particular, the proposed Project would be required to be built accordance with all mandatory outdoor water use requirements as outlined in the applicable California Green Building Standards Code, Title 24, Part 11, Section 4.304 – Outdoor Water Use and verified through the building permit process. As a residential development that would contain landscaping pursuant to SMC regulations, future development shall comply with the updated Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Chapter 2.7, Division 2), as implemented and enforced through the building permit process. Therefore, through compliance, the potential for the Project to substantially decrease groundwater supplies is limited and impacts would be less than significant.

Overall, the Project would not generate significantly greater water demand as to substantially decrease groundwater supplies since water demand from the Project has been planned for based on the WMP. Additionally,

adherence to connection requirements and recommendations pursuant to water conservation efforts as well as compliance with applicable California Green Building Standards Code and MWELO would reduce water demand and reduce the potential for the Project to substantially decrease water supply available to serve the Project. For these reasons, the Project would have a less than significant impact.

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

Less than Significant Impact. According to the 2006 Wastewater Treatment Plant Master Plan, the City owns and operates a citywide wastewater collection and treatment system. The sewage collection system consists of a network of 6-inch and 8-inch diameter collection lines that connect to larger mains. Sewage from most of the western half of Waterford flows into a 12- inch trunk line in Western Avenue to the Wastewater Treatment Plan (WWTP). The remainder of the city (east of Tim Bell Road) flows into 12-inch trunk lines in Tim Bell Road and Rivercrest Drive to a pump station which sends sewage through an 8-inch force main along the Tuolumne River to the WWTP. Waterford's collection system operates one other permanent lift station that is located south of Riverside Road. This facility currently receives flows from a small development generally located north of that location and discharges into the Riverside Road line which feeds into the Western Avenue trunk line.

The City owns and operates the existing WWTP under the current Waste Discharge Requirements (WDRs) Order No. 94-273. The WWTP is located south of Riverside Road along the north and south sides of the Tuolumne River. The WWTP was originally designed with a hydraulic capacity of approximately 1.0 million gallons per day (MGD), and consisted of an influent pump station, a headworks, a flow splitter, two primary aeration pond (Complete Mixed Lagoon No. 1 and 2), three secondary aeration ponds (Partially Mixed Lagoons Nos. 1, 2, and 3), and four percolation ponds (Percolation Ponds Nos. 1, 2, 3, and 4). Treated wastewater from the WWTP is currently discharged to disposal ponds where it is allowed to evaporate and percolate into the soil and recharge the groundwater table.

Sanitary sewer service would be provided to the site through a proposed connection to the existing 8-inch pipeline in Washington Road. Using the City's estimated generation rates, the Project is expected to generate approximately 15,900 gpd of wastewater. This would account for approximately 1.5 percent of the WWTP capacity. Therefore, the wastewater treatment plant would have the capacity to meet the wastewater generated from maximum buildout of the site and the Project's impact on wastewater facilities would be less than significant.

d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Less than Significant Impact. Solid waste services are subject to the California Integrated Waste Management Act of 1989 (AB 939), which requires each jurisdiction in California to divert at least 50% of its waste stream away from landfills either through waste reduction, recycling, or other means.

The City of Waterford contracts with Gilton Solid Waste Management, Inc. for solid waste and composting services. Gilton processes solid waste at the Gilton Resource Recovery/Transfer Facility (SWIS Number 50-AA-0012). It currently has a maximum permitted throughput of 1,200 tons per day.[45]

Construction

CALGreen mandates locally permitted new residential building construction and demolition to recycle and/or salvage for reuse a minimum 65% of the nonhazardous construction and demolition debris generated during the Project. Further, the recycling of construction and demolition materials is required for any City-issued building or demolition permit that generates at least eight cubic yards of material by volume. Therefore, the Project would be required to implement techniques to reduce and recycle waste during construction activities in accordance with mandatory requirements under CALGreen as implemented through the building permit process. Compliance would be ensured through the building permit process. Therefore, through compliance, solid waste generated through construction activities is not anticipated to generate solid waste in excess of state or local standards, in excess of the capacity of the local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the Project would have a less than significant impact.

Operations

The Project is anticipated to generate approximately 46 tons of solid waste per year as estimated by CalEEMod (Appendix B). The estimation accounts for compliance with AB 939. Solid waste generated through Project operations would account for less than 0.1 percent of the daily permitted throughout capacity of the transfer facility. As such, Project operations are not anticipated to generate solid waste in excess of state or local standards, in excess of the capacity of the local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the Project would have a less than significant impact.

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

Less than Significant Impact. As described under criterion d), Project construction and operational activities that generate solid waste would be handled, transported, and disposed of in accordance with AB 939 and CALGreen regulations related to solid waste. Therefore, through compliance, the Project would comply with laws and regulations that would ensure impacts related to solid waste are reduced to less than significant levels.

4.19.3 Mitigation Measures

None required.

[45] California Department of Resources Recycling and Recovery (2023). "SWIS Facility/Site Search." Accessed on September 24, 2024, https://www2.calrecycle.ca.gov/SolidWaste/Site/Search

4.20 WILDFIRE

If located in or near state responsibility or lands classified as very high fire hazard severity zones, **Would the Project:**	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

4.20.1 Environmental Setting

The City of Waterford is an urbanized community that is surrounded by agricultural lands. According to the Stanislaus County HMP, Waterford is under low threat of wildfire. Wildfire threatens less than 10% of the city's planning area with negligible severity and low overall significance. The City, inclusive of the Project site, is not located in or near state responsibility or lands classified as moderate, high, or very high fire hazard severity zones as identified by CAL FIRE. [46] Rather, the Project site is within an "area of local responsibility" and in an area of low fire risk. As an area of local responsibility, the Stanislaus Consolidated Fire Protection District is responsible for providing fire protection services in Waterford (See Section 4.15).

4.20.2 Impact Assessment

If located in or near state responsibility or lands classified as very high fire hazard severity zones, Would the Project:

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

[46] California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Viewer. Accessed on September 11, 2024, https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/

Less than Significant Impact. The Project would not impair access to the existing roadway network. Construction may require lane closure; however, these activities would be short-term and access would be maintained through standard traffic control. Following construction, this roadway would continue to provide access to the site. Safe and convenient vehicular and pedestrian circulation would be provided in addition to adequate access for emergency vehicles. To determine and ensure adequate vehicular and pedestrian circulation and emergency vehicle access, the Project has been reviewed and conditioned by the City for compliance with applicable code and regulations including applicable emergency response and evacuation plans. Therefore, the Project would not substantially impair any emergency response plan or emergency evacuation plan, and a less than significant impact would occur.

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?

No Impact. The Project site is located on a relatively flat property with minimal slope and is not in an area that is subject to strong prevailing winds or other factors that would exacerbate wildfire risks. The site is highly disturbed and is not located within a wildland (i.e., wild, uncultivated, and uninhabited land), which precludes the risk of wildfire. Further, the Project site is within an "area of local responsibility" and is not identified by Cal Fire to be in a fire hazard severity zone (FHSZ). For these reasons, no impact would occur as a result of this Project.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The Project site is located within City limits, therefore, all existing and proposed infrastructure such as roads and utilities would be required to be maintained accordingly. As previously discussed, all proposed Project components (including utilities, roadway, buildings, walls, and landscaping) would be located within the boundaries of the Project site and have been reviewed and/or conditioned by the City for compliance with applicable codes and regulations. Through compliance, such infrastructure would not exacerbate fire risk or result in temporary or ongoing impacts to the environment and no impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The City, inclusive of the Project site, is not located in or near state responsibility or lands classified as fire hazard severity zones. The topography of the Project site is relatively flat with stable, native soils, and the site is not in the immediate vicinity of rivers or creeks that would be more susceptible to landslides. Therefore, no impact would occur.

4.20.3 Mitigation Measures

None required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b)	Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?		X		
c)	Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

4.21.1 Impact Assessment

a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact with Mitigation Incorporated. The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Standard requirements that will be implemented through the entitlement process and the attached mitigation monitoring and reporting program have been incorporated in the project to

reduce all potentially significant impacts to less than significant, including *Mitigation Measures CUL-1 and GEO-1*. Therefore, the Project would have a less than significant impact with mitigation incorporated.

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 with Mitigation Incorporated. CEQA Guidelines *Section 15064(i)* 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. Standard requirements that will be implemented through the entitlement process and the attached mitigation monitoring and reporting program have been incorporated in the project to reduce all potentially significant impacts to less than significant, including *Mitigation Measures CUL-1 and GEO-1*. The 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.). As such, Project impacts are not considered to be cumulatively considerable given the insignificance of project induced impacts. The impact is therefore less than significant with mitigation incorporated.

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

Less than Significant Impact with Mitigation Incorporated. 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. Standard requirements that will be implemented through the entitlement process and the attached mitigation monitoring and reporting program have been incorporated in the project to reduce all potentially significant impacts to less than significant, including *Mitigation Measures CUL-1 and GEO-1*. Therefore, the Project would have a less than significant impact with mitigation incorporated.

5 MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM FOR WATERFORD 53-UNIT RESIDENTIAL DEVELOPMENT
December 2024

This mitigation measure monitoring and reporting checklist was prepared pursuant to California Environmental Quality Act (CEQA) Guidelines *Section 15097* and *Section 21081.6* of the Public Resources Code (PRC). The timing of implementing each mitigation measure is identified in the checklist, as well as identifies the entity responsible for verifying that the mitigation measures applied to a Project are performed. Project applicants are responsible for providing evidence that mitigation measures are implemented. As lead agency, the City of Waterford is responsible for verifying that mitigation is performed/completed.

Mitigation Measures	Timing of Verification	Responsible for Verification	Verification of Completion	
			Date	Initials
Cultural Resources				
CUL-1: In order to avoid the potential for impacts to historic and prehistoric archaeological resources, the following measures shall be implemented, as necessary, in conjunction with the construction of each phase of the Project: a. Cultural Resources Alert on Project Plans. The Project proponent shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources. b. Stop Work Near any Discovered Cultural Resources. Should previously unidentified cultural resources be discovered during construction of the Project, the Project proponent shall cease work within 50 feet of the resources, and City of Waterford shall be notified immediately. The Project archaeologist meeting the Secretary of the Interior Professional Qualifications Standards for archeology shall immediately to evaluate the find pursuant to Public Resources Code Section 21083.2. c. Mitigation for Discovered Cultural Resources. If the professional archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological	Prior to issuance of a construction permit	City of Waterford Building Division		

resource, he/she shall notify the Project proponent and other appropriate parties of the evaluation and recommended mitigation measures to mitigate the impact to a less-than-significant level. If the archaeologist and, if applicable, a Native American monitor or other interested tribal representative determine it is appropriate, cultural materials collected from the site shall be processed and analyzed in a laboratory according to standard archaeological procedures. The age of the materials shall be determined using radiocarbon dating and/or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the site(s) shall be evaluated according to the criteria of the California Register of Historical Resources (CRHR) and if applicable, National Register of Historic Places (NRHP). The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication "Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)." Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery, among other options. Treatment of any significant cultural resources shall be undertaken with the approval of the City of Waterford. The archaeologist shall document the resources using DPR 523 forms and file said forms with the California Historical Resources Information System, Central California Information Center (CCIC). The resources shall be photo documented and collected by the archaeologist for submittal to the City of Waterford. The archaeologist shall be required to submit to the City of Waterford for review and approval a report of the findings and method of curation or protection of the resources. This report shall be submitted to the CCIC after completion. Recommendations contained therein shall be implemented throughout the remainder of ground disturbance activities. Further grading or site work				

within the area of discovery shall not be allowed until the preceding steps have been taken. d. Data Recovery. Should the results of item c. yield resources that meet CRHR significance standards and if the resource cannot be avoided by Project construction, the Project applicant shall ensure that all feasible recommendations for mitigation of archaeological impacts are incorporated into the final design and approved by the City prior to construction. Any necessary data recovery excavation, conducted to exhaust the data potential of significant archaeological sites, shall be carried out by a qualified archaeologist meeting the SOI's PQS for archeology. Data recovery shall be conducted in accordance with a research design reviewed and approved by the City, prepared in advance of fieldwork, and using the appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5, Guidelines for Archaeological Research Design, or the latest edition thereof. If the archaeological resource(s) of concern are Native American in origin, the qualified archaeologist shall confer with the City and local California Native American tribe(s). As applicable, the final Data Recovery reports shall be submitted to the City prior to issuance of any grading or construction permit. Recommendations contained therein shall be implemented throughout all ground disturbance activities. Recommendations may include, but would not be limited to, Cultural Resources Monitoring, and/or measures for unanticipated discoveries. The final report shall be submitted to the CCIC upon completion. e. Disposition of Cultural Resources. Upon coordination with the City of Waterford, any pre-historic archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded applicable cultural resources laws and guidelines.				

f. Cultural Resources Monitoring. If mitigation measures are recommended by reports written under item c. or d., the Project applicant shall retain a qualified archaeologist to monitor Project-related, ground-disturbing activities which may include the following but not limited to: grubbing, vegetation removal, trenching, grading, and/or excavations. The archaeological monitor shall coordinate with any Native American monitor as required. Monitoring logs must be completed by the archaeologist daily. Cultural resources monitoring may be reduced for the Project if the qualified archaeologist finds it appropriate to reduce the monitoring efforts. Upon completion of ground disturbance for the Project, a final report must be submitted to the City for review and approval documenting the monitoring efforts, cultural resources find, and resource disposition. The final report shall be submitted to the CCIC.				
Geology and Soils				
GEO-1: If any paleontological resources are encountered during ground-disturbance activities, all work within 25 feet of the find shall halt until a qualified paleontologist as defined by the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010), can evaluate the find and make recommendations regarding treatment. Paleontological resource materials may include resources such as fossils, plant impressions, or animal tracks preserved in rock. The qualified paleontologist shall contact the Natural History Museum of Los Angeles County or another appropriate facility regarding any discoveries of paleontological resources. If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations, and fossil recovery may be required to mitigate adverse impacts from Project implementation. If avoidance is not feasible, the paleontological resources shall be evaluated for their significance. If the resources are not significant,	During ground disturbance activities	City of Waterford Planning Division		

avoidance is not necessary. If the resources are significant, they shall be avoided to ensure no adverse effects or such effects must be mitigated. Construction in that area shall not resume until the resource-appropriate measures are recommended or the materials are determined to be less than significant. If the resource is significant and fossil recovery is the identified form of treatment, then the fossil shall be deposited in an accredited and permanent scientific institution. Copies of all correspondence and reports shall be submitted to the City of Waterford, Planning Division.				
Tribal Cultural Resources				
See Cultural Resources				

6 REPORT PREPARATION

Names of Persons Who Prepared or Participated in the Initial Study:

Lead Agency		
Lead Agency	City of Waterford, Planning Division 101 E Street Waterford, CA 95386 (209) 599-8377	Mark Niskanen, Planning Manager
Initial Study Consultant		
Initial Study	Precision Civil Engineering 1234 O Street Fresno, CA 93721 (559) 449-4500	Bonique Emerson, AICP, VP of Planning Jenna Chilingerian, AICP, Senior Planner Shin Tu, AICP, Senior Associate Planner Isaiah Medina, Assistant Planner

7 APPENDICES

7.1 Appendix A: IPaC List and CNDDB Occurrence Report

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Stanislaus County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Joaquin Kit Fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Reptiles

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot Spea hammondii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus — Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/7850

Crustaceans

NAME	STATUS

Conservancy Fairy Shrimp Branchinecta conservatio — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/8246

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/498

Vernal Pool Tadpole Shrimp Lepidurus packardi — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/2246

Flowering Plants

NAME	STATUS

Colusa Grass Neostapfia colusana — Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/5690

Greene's Tuctoria Tuctoria greenei — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/1573

San Joaquin Valley Orcutt Grass Orcuttia inaequalis Threatened
Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/5506

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week

12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

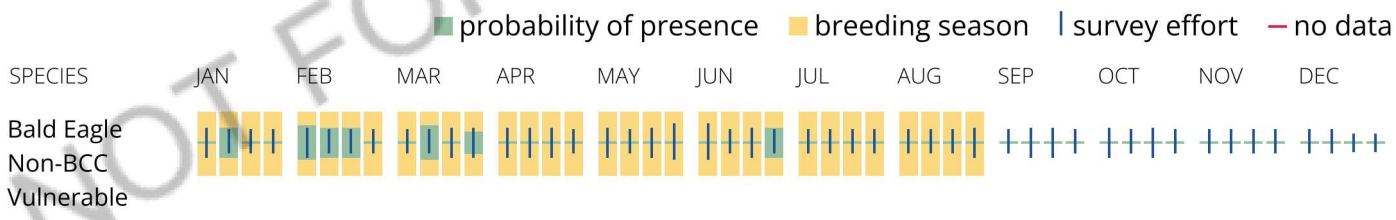
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5513

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Western Screech-owl Megascops kennicottii cardonensis — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events

for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

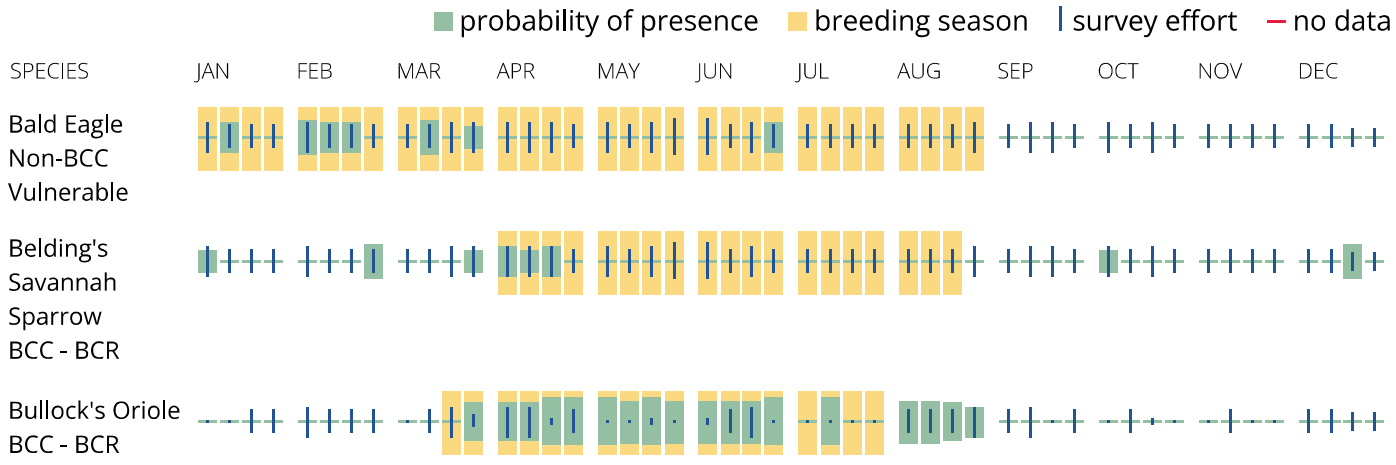
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

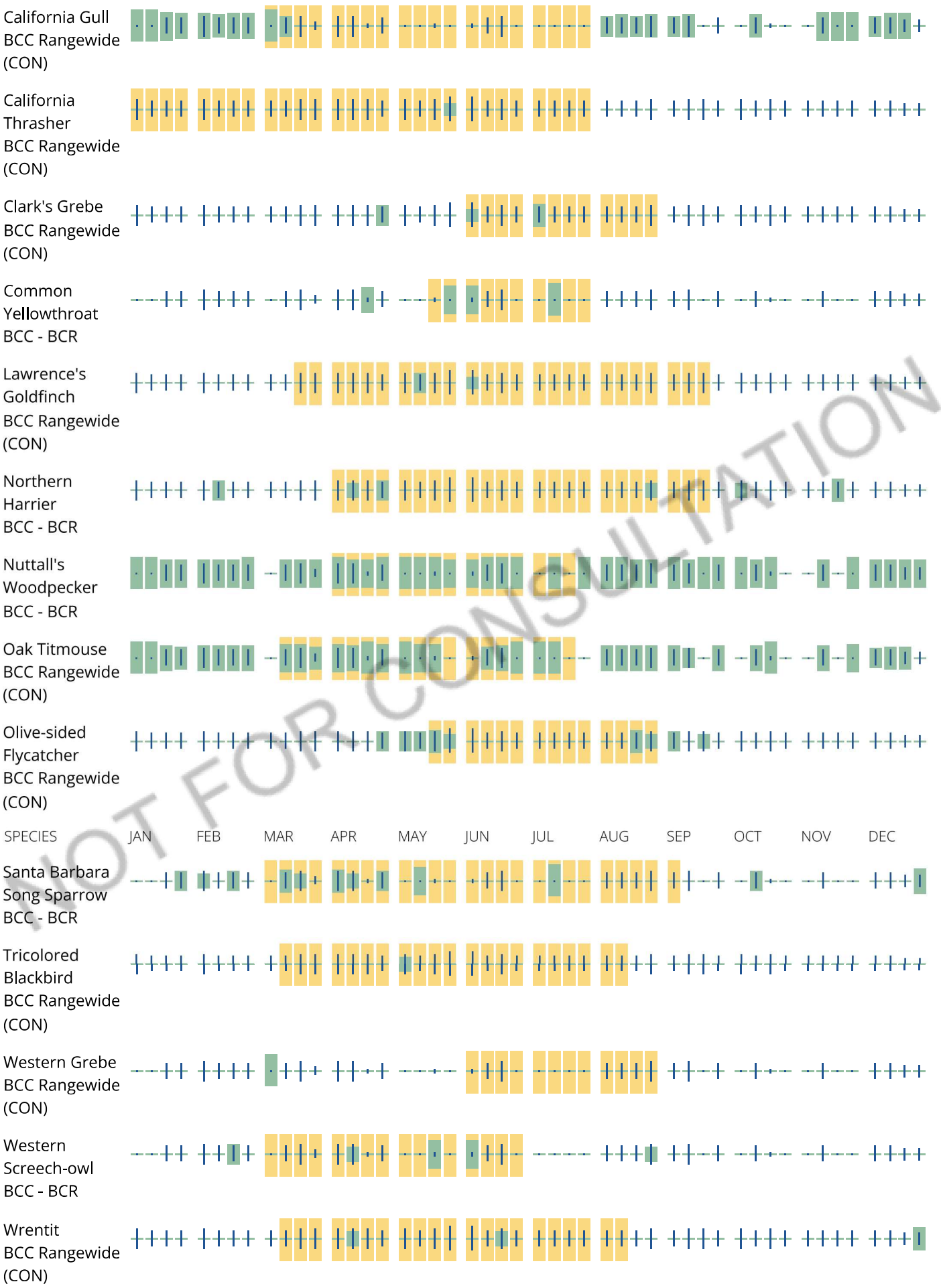
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Yellow-billed Magpie BCC Rangewide (CON)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird

on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key

component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

Wildlife refuges and fish hatcheries

Refuge and fish hatchery information is not available at this time

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Multiple Occurrences per Page

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Waterford (3712067))

Buteo swainsoni

Element Code: ABNKC19070

Swainson's hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	Threatened		**State:**	S4
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern			
Habitat:	**General:**	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, AND AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.			
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.			

Occurrence No.	1720	**Map Index:** 79447	**EO Index:** 80428	**Element Last Seen:**	2010-05-27
Occ. Rank:	None		**Presence:** Possibly Extirpated	**Site Last Seen:**	2011-04-29
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2011-06-22

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.74393 / -120.75520	**Accuracy:**	80 meters
UTM:	Zone-10 N4179776 E697783	**Elevation (ft):**	260
PLSS:	T02S, R11E, Sec. 22, SW (M)	**Acres:**	0.0

Location: JUST SOUTH OF THE WATER TANK (TOPO), ABOUT 1/4 MILE NNE OF WARNERVILLE RD AT EMERY RD, ABOUT 5 MILES ESE OF OAKDALE.

Detailed Location: MAPPED TO AERIAL IMAGE PROVIDED. PROBABLY LOCALLY EXTIRPATED SINCE THE NEST TREE WAS FELLED (2011) AND THERE DOES NOT APPEAR TO BE ANY OTHER NEST TREES WITHIN 1.8 MI RADIUS.

Ecological: 2010 NEST IN EUCALYPTUS TREE. AREA SURROUNDED BY AGRICULTURE & CATTLE GRAZING. IN 2010 SITE WAS DEEMED "EXCELLENT." NEST TREE FELLED BY 29 APR 2011 BY PROPERTY OWNER. NO OTHER TREES SUITABLE FOR NESTING W/IN 1.8 MI FROM 2010 AIR PHOTOS.

General: PAIR OBS 13-27 MAY 2010 CONDUCTING MATING BEHAVIOR, COPULATING, & NEST BUILDING, BUT UNSUCCESSFUL. STILL OBSERVED IN VICINITY IN EARLY JUN 2010. THE PAIR RETURNED IN 2011, BUT AFTER THEIR RETURN & BEFORE NESTING, THE TREE WAS FELLED.

Owner/Manager: PVT

Agelaius tricolor

Element Code: ABPBXB0020

tricolored blackbird

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G1G2
	State:	Threatened		**State:**	S2
	Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY AND VICINITY. LARGELY ENDEMIC TO CALIFORNIA.			
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, AND FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.			

Occurrence No.	84	**Map Index:** 12592	**EO Index:**	24740	**Element Last Seen:** 1980-07-09
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:** 1980-07-09
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2016-10-31

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.74604 / -120.81688	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4179882 E692343	**Elevation (ft):**	200
PLSS:	T02S, R10E, Sec. 24, SE (M)	**Acres:**	0.0

Location: 0.3 MI N OF WARNERVILLE RD ON STEARNS RD, APPROX 8 MI NNW OF WATERFORD.

Detailed Location: LOCATION DESCRIBED AS "NORTH OF WARNERVILLE ROAD (0.3 MILE) ON STEARNS ROAD, APPROXIMATELY 8 8 MILES NORTH-NORTHWEST OF WATERFORD."

Ecological: TULES.

General: A POSSIBLE NESTING COLONY OF UNKNOWN SIZE OBSERVED ON 9 JUL 1980; OBSERVED BY D.A. SMALL.

Owner/Manager: UNKNOWN

Oncorhynchus mykiss irideus pop. 11 **Element Code:** AFCHA0209K

steelhead - Central Valley DPS

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G5T2Q
	State:	None		**State:**	S2
	Other:	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern			
Habitat:	**General:**	POPULATIONS IN THE SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES.			
	Micro:				

Occurrence No.	22	**Map Index:** 91459	**EO Index:** 92517	**Element Last Seen:**	2014-01-19
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	2014-01-19
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2014-03-28

Quad Summary: Denair (3712057), Ceres (3712058), La Grange (3712064), Cooperstown (3712065), Paulsell (3712066), Waterford (3712067), Riverbank (3712068), Brush Lake (3712151), Westley (3712152)

County Summary: Stanislaus

Lat/Long:	37.66641 / -120.47058	**Accuracy:**	non-specific area
UTM:	Zone-10 N4171814 E723096	**Elevation (ft):**	
PLSS:	T03S, R14E, Sec. 19 (M)	**Acres:**	6353.0

Location: LOWER TUOLUMNE RIVER, FROM ITS MOUTH IN THE SAN JOAQUIN RIVER TO LA GRANGE DAM (RM52).

Detailed Location: MAPPED UP TO LA GRANGE DAM (BUILT 1893), LIMIT TO ANADROMY. RSTS AT SHILOH 1995-98 (RM3.4), GRAYSON SINCE '99 (RM5.2), WATERFORD SINCE 2006 (RM29.8). SNORKEL SURVEYS FROM DAM TO ~RM31.5. SEINES FROM MOUTH TO DAM. VIDEO WEIR AT RM24.5.

Ecological: SPAWNING IN 20 MI BELOW DAM. IN 2008 OTOLITH STUDY, 10 OF 147 TROUT (6.8%) WERE SH PROGENY; 1 WAS A SH. INCREASE IN SUMMER POPS AFTER BASE FLOW AUGMENTATION STARTING 1995. SPIKE IN 2011 #S MAY BE HATCHERY TROUT ESCAPED FROM U/S RESERVOIRS.

General: 0-51 SEINED, 1983-2012. SNORKEL INDEX: ONLY 1 OBS 1987-94; AVG 420, 2001-2012 (HIGH 1,327 IN 2011). POP ESTS SINCE '08: FROM 109 (MAR '10) TO 56,973 (SEP '11). SOME MIGRATION INDICATED: RST #S FROM 0-11, 2000-12; WEIR #S FROM 0-16, 2009-14.

Owner/Manager: UNKNOWN

Mylopharodon conocephalus **Element Code:** AFCJB25010

hardhead

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive			
Habitat:	**General:**	LOW TO MID-ELEVATION STREAMS IN THE SACRAMENTO-SAN JOAQUIN DRAINAGE. ALSO PRESENT IN THE RUSSIAN RIVER.			
	Micro:	CLEAR, DEEP POOLS WITH SAND-GRAVEL-BOULDER BOTTOMS AND SLOW WATER VELOCITY. NOT FOUND WHERE EXOTIC CENTRARCHIDS PREDOMINATE.			

Occurrence No.	14	**Map Index:**	91459	**EO Index:**	73886	**Element Last Seen:**	2008-03-27
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-04-02
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2016-11-23

Quad Summary: Denair (3712057), Ceres (3712058), La Grange (3712064), Cooperstown (3712065), Paulsell (3712066), Waterford (3712067), Riverbank (3712068), Brush Lake (3712151), Westley (3712152)

County Summary: Stanislaus

Lat/Long:	37.66641 / -120.47058	**Accuracy:**	non-specific area
UTM:	Zone-10 N4171814 E723096	**Elevation (ft):**	70
PLSS:	T03S, R14E, Sec. 19 (M)	**Acres:**	6353.0

Location: TUOLUMNE RIVER DOWNSTREAM OF THE LA GRANGE DAM.

Detailed Location: MAPPED TO INCLUDE SNORKEL SURVEY AREA (IN 2015, THE 20-MILE REACH OF RIVER BELOW LA GRANGE DAM) & SEINE STATIONS WHERE SPECIES WAS DETECTED (LEGION @ RM 17.2, TRR @ RM 42.3, R5 @ RM 48.0, R4B @ RM 48.4). EXACT EXTENT IN WATERSHED UNKNOWN.

Ecological: OTHER FISH TAKEN INCLUDED HITCH, SMALLMOUTH BASS, BLUEGILL, CHINOOK SALMON, RAINBOW TROUT, SACRAMENTO PIKEMINNOW, LAMPREY & MANY OTHERS (2008). MANY HABITAT TYPES OBSERVED INCLUDING RIFFLES, RUNS, AND POOLS.

General: SEINING: 14 OBSERVED IN 2005, 119 IN 2008, 57 IN 2009, 31 IN 2010, 12 IN 2011. AVERAGE 3.5 FISH/SAMPLE-DAY CAUGHT IN ROTARY SCREW TRAP, 2006-08. SNORKEL: 335 OBS IN 2004, 3 IN '05, 575 IN '07, 248 IN '09, 13 IN '10, 34 IN '12 & 146 IN '15.

Owner/Manager: UNKNOWN

Occurrence No.	28	**Map Index:**	73938	**EO Index:**	74951	**Element Last Seen:**	2007-05-23
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2007-05-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2009-03-16

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.63589 / -120.75917	**Accuracy:**	80 meters
UTM:	Zone-10 N4167780 E697720	**Elevation (ft):**	70
PLSS:	T03S, R11E, Sec. 33, NE (M)	**Acres:**	0.0

Location: TUOLUMNE RIVER AT OAKDALE WATERFORD HIGHWAY, WATERFORD.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological:

General: 12 INDIVIDUALS CAPTURED VIA SEINING (& RELEASED) ON 14 FEB, 10 ON 28 FEB, 3 ON 14 MAR, AND 75 ON 23 MAY 2007.

Owner/Manager: UNKNOWN

Desmocerus californicus dimorphus **Element Code:** IICOL48011

valley elderberry longhorn beetle

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G3T3
	State:	None		**State:**	S3
	Other:				
Habitat:	**General:**	OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).			
	Micro:	PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.			

Occurrence No.	72	**Map Index:** 33004	**EO Index:** 4067	**Element Last Seen:**	1991-07-17
Occ. Rank:	Good		**Presence:** Presumed Extant	**Site Last Seen:**	1991-07-17
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1998-08-11

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.63106 / -120.86419	**Accuracy:**	80 meters
UTM:	Zone-10 N4167027 E688465	**Elevation (ft):**	65
PLSS:	T03S, R10E, Sec. 34, SW (M)	**Acres:**	0.0

Location: TUOLUMNE RIVER (SOUTH BANK), 0.5 MILE NE OF HUGHSON SEWAGE DISPOSAL PLANT, 2 MILES NORTH OF HUGHSON.

Detailed Location: REPORT ON: TAXONOMY; DISTRIBUTION; LIFE HISTORY; HABITAT; FIELD TECHNIQUES & OBSERVATIONS; BEETLE RECOVERY.

Ecological: HABITAT CONSISTS OF SCATTERED SAMBUCUS MEXICANA; SURROUNDING AREA IS MADE UP OF ORCHARDS.

General: RECENT EXIT HOLE FOUND; VELB GALLERY, FROM A PROBABLY LIVE WOOD SAMPLE COLLECTED. OBSERVATIONS OF EXIT HOLES MADE 1984 (SITE DESCRIPTION VAGUE).

Owner/Manager: PVT

Bombus pensylvanicus **Element Code:** IIHYM24260

American bumble bee

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G3G4
	State:	None		**State:**	S2
	Other:	IUCN_VU-Vulnerable			
Habitat:	**General:**	□			
	Micro:	LONG-TONGUED; FORAGES ON A WIDE VARIETY OF FLOWERS INCLUDING VETCHES (VICIA), CLOVERS (TRIFOLIUM), THISTLES (CIRSIUM), SUNFLOWERS (HELIANTHUS), ETC. NESTS ABOVE GROUND UNDER LONG GRASS OR UNDERGROUND. QUEENS OVERWINTER IN ROTTEN WOOD OR UNDERGROUND.			

Occurrence No.	103	**Map Index:** B9049	**EO Index:**	124212	**Element Last Seen:** 1961-09-11
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:** 1961-09-11
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2023-06-21

Quad Summary: Montpelier (3712056), Denair (3712057), Paulsell (3712066), Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.62074 / -120.75358	**Accuracy:**	1 mile
UTM:	Zone-10 N4166109 E698254	**Elevation (ft):**	172
PLSS:	T04S, R11E, Sec. 3 (M)	**Acres:**	1987.0

Location: HICKMAN.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO TOWN OF HICKMAN.

Ecological:

General: 2 ADULT FEMALES AND 2 ADULT MALES COLLECTED ON 11 SEP 1961 (CSCA #462, #463, #464, & #465).

Owner/Manager: UNKNOWN

Occurrence No.	118	**Map Index:** B9075	**EO Index:**	124247	**Element Last Seen:** 1960-07-09
Occ. Rank:	Unknown		**Presence:**	Presumed Extant	**Site Last Seen:** 1960-07-09
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2023-06-28

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.65378 / -120.85578	**Accuracy:**	1 mile
UTM:	Zone-10 N4169565 E689149	**Elevation (ft):**	119
PLSS:	T03S, R10E, Sec. 22 (M)	**Acres:**	1987.0

Location: NEAR DRY CREEK, ABOUT 1.45 MI NE OF YOSEMITE BLVD AT WELLSFORD RD, 7 MI E OF MODESTO.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED NON-SPECIFICALLY TO LOCATION STATED AS "7 MI E OF MODESTO".

Ecological:

General: 1 ADULT COLLECTED BY S. FULLERTON ON 9 JUL 1960 (UCFC #0298513).

Owner/Manager: UNKNOWN

Clarkia rostrata **Element Code:** PDONA050Y0

beaked clarkia

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G2G3
	State:	None		**State:**	S2S3
	Other:	Rare Plant Rank - 1B.3, BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley			
Habitat:	**General:**	CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.			
	Micro:	NORTH-FACING SLOPES; SOMETIMES ON SANDSTONE. 60-915 M.			

Occurrence No.	7	**Map Index:** 50484	**EO Index:** 50484	**Element Last Seen:**	1937-05-04
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	1937-05-04
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2011-08-09

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.70885 / -120.82128	**Accuracy:**	non-specific area
UTM:	Zone-10 N4175746 E692050	**Elevation (ft):**	
PLSS:	T03S, R10E, Sec. 01 (M)	**Acres:**	70.0

Location: 4 MILES SOUTH OF OAKDALE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDB 3.5-4.5 ROAD MILES SOUTH OF OAKDALE ALONG OAKDALE WATERFORD HIGHWAY.

Ecological:

General: ONLY SOURCES OF INFORMATION FOR THIS SITE ARE 1936 AND 1937 COLLECTIONS BY HOOVER. ALLEN (1974) FEELS PLANT MAY HAVE BEEN COLLECTED 4 MILES EAST OF OAKDALE, WHERE MORE SUITABLE HABITAT IS FOUND. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Neostapfia colusana **Element Code:** PMPOA4C010

Colusa grass

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1			
Habitat:	**General:**	VERNAL POOLS.			
	Micro:	USUALLY IN THE BOTTOMS OF LARGE, OR DEEP VERNAL POOLS; ADOBE SOILS. 5-125 M.			

Occurrence No.	22	**Map Index:** 12626	**EO Index:** 6322	**Element Last Seen:**	1937-06-22
Occ. Rank:	None		**Presence:** Extirpated	**Site Last Seen:**	1987-09-04
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2008-01-09

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.67298 / -120.79660	**Accuracy:**	1 mile
UTM:	Zone-10 N4171816 E694320	**Elevation (ft):**	155
PLSS:	T03S, R11E, Sec. 18, NE (M)	**Acres:**	0.0

Location: 3 MILES NORTHWEST OF WATERFORD.

Detailed Location: MAPPED ALONG ROAD TO OAKDALE.

Ecological:

General: PERRY ALLEN VISITED SITE IN 1974 AND DISCOVERED IT TO BE AN IRRIGATED FIELD. R. STONE SEARCHED IN 1987 AND INDICATED THAT NO VERNAL POOL HABITAT REMAINS IN THIS AREA. SITE EXTIRPATED.

Owner/Manager: PVT

Orcuttia inaequalis **Element Code:** PMPOA4G060

San Joaquin Valley Orcutt grass

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Endangered		**State:**	S1
	Other:	Rare Plant Rank - 1B.1			
Habitat:	**General:**	VERNAL POOLS.			
	Micro:	10-755 M.			

Occurrence No.	18 **Map Index:** 12626	**EO Index:**	22390	**Element Last Seen:**	1937-06-22
Occ. Rank:	None	**Presence:**	Extirpated	**Site Last Seen:**	1987-09-04
Occ. Type:	Natural/Native occurrence	**Trend:**	Unknown	**Record Last Updated:**	2010-12-16

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.67298 / -120.79660	**Accuracy:**	1 mile
UTM:	Zone-10 N4171816 E694320	**Elevation (ft):**	155
PLSS:	T03S, R11E, Sec. 18 (M)	**Acres:**	0.0

Location: 3 MILES NW OF WATERFORD.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS ABOUT 3 MILES NW OF WATERFORD ALONG COUNTY HWY J9 (OAKDALE WATERFORD HWY).

Ecological:

General: OCCURRENCE IS BASED ON HOOVER COLLECTIONS FROM 1936 AND 1937. PLANTS EXTIRPATED ACCORDING TO TOM GRIGGS (1983).

Owner/Manager: PVT

Tuctoria greenei **Element Code:** PMPOA6N010

Greene's tuctoria

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	Rare		**State:**	S1
	Other:	Rare Plant Rank - 1B.1			
Habitat:	**General:**	VERNAL POOLS.			
	Micro:	VERNAL POOLS IN OPEN GRASSLANDS. 25-1325 M.			

Occurrence No.	6	**Map Index:** 12626	**EO Index:** 7501	**Element Last Seen:**	1937-06-22
Occ. Rank:	None		**Presence:** Extirpated	**Site Last Seen:**	1987-09-04
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	1996-01-11

Quad Summary: Waterford (3712067)

County Summary: Stanislaus

Lat/Long:	37.67298 / -120.79660	**Accuracy:**	1 mile
UTM:	Zone-10 N4171816 E694320	**Elevation (ft):**	155
PLSS:	T03S, R11E, Sec. 18, E (M)	**Acres:**	0.0

Location: 3 MILES NORTHWEST OF WATERFORD.

Detailed Location: ONLY SOURCES OF INFORMATION FOR THIS OCCURRENCE ARE SEVERAL COLLECTIONS BY HOOVER IN 1936 & 1937. EXACT LOCATION UNKNOWN.

Ecological:

General: PLANTS EXTIRPATED ACCORDING TO GRIGGS (1983) & STONE (1987). SITE IS NOW AN IRRIGATED PASTURE. THERE WAS SOME QUESTION AS TO THE DIRECTIONS FOR THIS SITE; P. ALLEN THOUGHT IT WAS SOUTHEAST OF TOWN, BUT LABEL SAYS NORTHWEST.

Owner/Manager: PVT

7.2 Appendix B: CalEEMod Results

Prepared by Precision Civil Engineering, dated September 5, 2024.

Waterford Subdivision Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Waterford Subdivision
Construction Start Date	1/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	29.2
Location	37.636419949951446, -120.77187589771582
County	Stanislaus
City	Waterford
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2223
EDFZ	15
Electric Utility	Modesto Irrigation District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	53.0	Dwelling Unit	3.61	103,350	620,781	—	168	—

2. Emissions Summary

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.45	1.22	10.7	14.1	0.02	0.43	0.18	0.61	0.40	0.04	0.44	—	2,682	2,682	0.11	0.04	0.97	2,699
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.02	3.38	31.7	30.9	0.05	1.37	19.8	21.2	1.26	10.1	11.4	—	5,423	5,423	0.22	0.05	0.03	5,443
2026	36.1	36.1	10.1	13.8	0.02	0.38	0.18	0.56	0.35	0.04	0.39	—	2,660	2,660	0.10	0.04	0.02	2,676
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.99	0.83	7.40	9.44	0.02	0.30	0.54	0.84	0.28	0.24	0.52	—	1,793	1,793	0.07	0.03	0.27	1,803
2026	1.84	1.83	0.49	0.73	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	118	118	< 0.005	< 0.005	0.02	119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.18	0.15	1.35	1.72	< 0.005	0.06	0.10	0.15	0.05	0.04	0.09	—	297	297	0.01	< 0.005	0.04	299
2026	0.34	0.33	0.09	0.13	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	19.6	19.6	< 0.005	< 0.005	< 0.005	19.7

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.99	1.87	1.47	12.8	0.03	0.02	2.40	2.43	0.02	0.61	0.63	—	2,841	2,841	0.12	0.14	9.67	2,895
Area	5.38	4.00	0.66	15.2	0.04	1.74	—	1.74	1.68	—	1.68	288	566	854	1.36	< 0.005	—	888

Energy	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	896	896	0.07	0.01	—	899
Water	—	—	—	—	—	—	—	—	—	—	—	4.05	32.9	37.0	0.42	0.01	—	50.4
Waste	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	7.40	5.88	2.36	28.1	0.07	1.79	2.40	4.19	1.72	0.61	2.33	317	4,336	4,653	4.44	0.16	10.4	4,820
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.80	1.67	1.69	11.3	0.03	0.02	2.40	2.43	0.02	0.61	0.63	—	2,621	2,621	0.14	0.15	0.25	2,669
Area	5.10	3.73	0.63	12.1	0.04	1.74	—	1.74	1.68	—	1.68	288	558	846	1.36	< 0.005	—	880
Energy	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	896	896	0.07	0.01	—	899
Water	—	—	—	—	—	—	—	—	—	—	—	4.05	32.9	37.0	0.42	0.01	—	50.4
Waste	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	6.93	5.42	2.55	23.5	0.07	1.79	2.40	4.19	1.72	0.61	2.33	317	4,108	4,424	4.46	0.17	0.99	4,586
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.53	1.43	1.35	9.49	0.02	0.02	2.00	2.02	0.02	0.51	0.53	—	2,267	2,267	0.11	0.12	3.53	2,309
Area	3.14	2.82	0.16	4.21	0.01	0.39	—	0.39	0.38	—	0.38	64.7	129	194	0.31	< 0.005	—	202
Energy	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	896	896	0.07	0.01	—	899
Water	—	—	—	—	—	—	—	—	—	—	—	4.05	32.9	37.0	0.42	0.01	—	50.4
Waste	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	4.70	4.27	1.73	13.8	0.03	0.43	2.00	2.43	0.42	0.51	0.92	93.5	3,325	3,418	3.38	0.14	4.27	3,548
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.28	0.26	0.25	1.73	< 0.005	< 0.005	0.36	0.37	< 0.005	0.09	0.10	—	375	375	0.02	0.02	0.59	382
Area	0.57	0.51	0.03	0.77	< 0.005	0.07	—	0.07	0.07	—	0.07	10.7	21.4	32.1	0.05	< 0.005	—	33.4
Energy	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	148	148	0.01	< 0.005	—	149
Water	—	—	—	—	—	—	—	—	—	—	—	0.67	5.45	6.12	0.07	< 0.005	—	8.35

Waste	—	—	—	—	—	—	—	—	—	—	—	4.10	0.00	4.10	0.41	0.00	—	14.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	0.86	0.78	0.32	2.52	0.01	0.08	0.36	0.44	0.08	0.09	0.17	15.5	550	566	0.56	0.02	0.71	587

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.99	1.87	1.47	12.8	0.03	0.02	2.40	2.43	0.02	0.61	0.63	—	2,841	2,841	0.12	0.14	9.67	2,895
Total	1.99	1.87	1.47	12.8	0.03	0.02	2.40	2.43	0.02	0.61	0.63	—	2,841	2,841	0.12	0.14	9.67	2,895
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.80	1.67	1.69	11.3	0.03	0.02	2.40	2.43	0.02	0.61	0.63	—	2,621	2,621	0.14	0.15	0.25	2,669
Total	1.80	1.67	1.69	11.3	0.03	0.02	2.40	2.43	0.02	0.61	0.63	—	2,621	2,621	0.14	0.15	0.25	2,669
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.28	0.26	0.25	1.73	< 0.005	< 0.005	0.36	0.37	< 0.005	0.09	0.10	—	375	375	0.02	0.02	0.59	382
Total	0.28	0.26	0.25	1.73	< 0.005	< 0.005	0.36	0.37	< 0.005	0.09	0.10	—	375	375	0.02	0.02	0.59	382

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	609	609	0.04	0.01	—	611
Total	—	—	—	—	—	—	—	—	—	—	—	—	609	609	0.04	0.01	—	611
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	609	609	0.04	0.01	—	611
Total	—	—	—	—	—	—	—	—	—	—	—	—	609	609	0.04	0.01	—	611
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.01	< 0.005	—	101
Total	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.01	< 0.005	—	101

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Single Family Housing	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	—	288
Total	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	—	288
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	—	288
Total	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	—	288
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Total	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.72	1.34	0.63	12.1	0.04	1.74	—	1.74	1.68	—	1.68	288	558	846	1.36	< 0.005	—	880
Consumer Products	2.21	2.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.28	0.26	0.03	3.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.04	8.04	< 0.005	< 0.005	—	8.07
Total	5.38	4.00	0.66	15.2	0.04	1.74	—	1.74	1.68	—	1.68	288	566	854	1.36	< 0.005	—	888
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.72	1.34	0.63	12.1	0.04	1.74	—	1.74	1.68	—	1.68	288	558	846	1.36	< 0.005	—	880
Consumer Products	2.21	2.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5.10	3.73	0.63	12.1	0.04	1.74	—	1.74	1.68	—	1.68	288	558	846	1.36	< 0.005	—	880
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.11	0.06	0.03	0.50	< 0.005	0.07	—	0.07	0.07	—	0.07	10.7	20.8	31.5	0.05	< 0.005	—	32.7
Consumer Products	0.40	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.02	< 0.005	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.66	0.66	< 0.005	< 0.005	—	0.66
Total	0.57	0.51	0.03	0.77	< 0.005	0.07	—	0.07	0.07	—	0.07	10.7	21.4	32.1	0.05	< 0.005	—	33.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	4.05	32.9	37.0	0.42	0.01	—	50.4
Total	—	—	—	—	—	—	—	—	—	—	—	4.05	32.9	37.0	0.42	0.01	—	50.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	4.05	32.9	37.0	0.42	0.01	—	50.4
Total	—	—	—	—	—	—	—	—	—	—	—	4.05	32.9	37.0	0.42	0.01	—	50.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.67	5.45	6.12	0.07	< 0.005	—	8.35
Total	—	—	—	—	—	—	—	—	—	—	—	0.67	5.45	6.12	0.07	< 0.005	—	8.35

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

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

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.7
Total	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.7
Total	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	4.10	0.00	4.10	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	4.10	0.00	4.10	0.41	0.00	—	14.4

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	382	464	380	143,512	2,768	3,368	2,757	1,041,144

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	465,043	478	0.0330	0.0040	895,754

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	2,115,666	10,479,158

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	46.0	—

7.3 Appendix C: CHRIS Search Results

Prepared by Central California Information Center dated September 3, 2024.

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 9/3/2024

Records Search File #: 13028N
Project: Waterford Subdivision, 3.61 Acres, NW Corner of Pasadena Avenue and Washington Road, Waterford, Stanislaus County

Isaiah Medina, Assistant Planner
Precision Civil Engineering, Inc.
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559-449-4500 ext. 128

We have conducted a non-confidential extended records search as per your request for the above-referenced project area located on the Waterford USGS 7.5-minute quadrangle map in Stanislaus County.

Search of our files includes review of our maps for the specific project area and the immediate vicinity of the project area, and review of the following:

National Register of Historic Places (NRHP)
California Register of Historical Resources (CRHR)
California Inventory of Historic Resources (1976)
California Historical Landmarks
California Points of Historical Interest listing
Office of Historic Preservation Built Environment Resource Directory (BERD) and the Archaeological Resources Directory (ARD)
Survey of Surveys (1989)
Caltrans State and Local Bridges Inventory
General Land Office Plats
Other pertinent historic data available at the CCaIC for each specific county

The following details the results of the records search:

Prehistoric or historic resources within the project area:

- There are no formally reported prehistoric or historic archaeological resources or historic buildings or structures within the project area.

- The General Land Office survey plat for T3S R11E (dated 1854) shows the N ½ of the NW ¼ of Section 33 as an 80-acre parcel.

- The Official Map of the County of Stanislaus, California (1906) shows the layout of the City of Waterford, with J. M. Finley shown as the landowner of the project area at that time.

- The 1916 edition of the Waterford USGS quadrangle shows the layout of the City of Waterford but no historic features within the project area. The 1953 edition shows the alignments of Pasadena Avenue and Washington Road.

Prehistoric or historic resources within the immediate vicinity of the project area: None has been formally reported to the Information Center.

Resources that are known to have value to local cultural groups: None has been formally reported to the Information Center.

Previous investigations within the project area: None has been formally reported to the Information Center.

Recommendations/Comments:

Please be advised that a historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. Since the project area has not been subject to previous investigations, there may be unidentified features involved in your project that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

If the current project does not include ground disturbance, further study for archaeological resources is not recommended at this time. If ground disturbance is considered a part of the current project, we recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources.

If the proposed project contains buildings or structures that meet the minimum age requirement (45 years in age or older) it is recommended that the resource/s be assessed by a professional familiar with architecture and history of the county. Review of the available historic building/structure data has included only those sources listed above and should not be considered comprehensive.

If at any time you might require the services of a qualified professional the Statewide Referral List for Historical Resources Consultants is posted for your use on the internet at http://chrisinfo.org

If archaeological resources are encountered during project-related activities**,** work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources.

If human remains are discovered, California Health and Safety Code Section 7050.5 requires you to protect the discovery and notify the county coroner, who will determine if the find is Native American. If the remains are recognized as Native American, the coroner shall then notify the Native American Heritage Commission (NAHC). California Public Resources Code Section 5097.98 authorizes the NAHC to appoint a Most Likely Descendant (MLD) who will make recommendations for the treatment of the discovery.

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

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.

We thank you for contacting this office regarding historical resource preservation. Please let us know when we can be of further service. Thank you for sending the **Access Agreement Short Form.**

Note: Billing will be transmitted separately via email from the Financial Services office ($150.00), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services

7.4 Appendix D: NAHC Letter

Prepared by Native American Heritage Commission dated September 10, 2024.

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710

September 10, 2024

Isaiah Medina
Precision Civil Engineering

Via Email to: imedina@precisioneng.net

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Waterford Subdivision Project, Stanislaus County

Dear Mr. Medina:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment