DRAFT Initial Study/Mitigated Negative Declaration for El Monte Way & Road 56 Roundabout

December 2023



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City of Dinuba
405 E El Monte Way
Dinuba, CA 93618

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Section 1

Initial Study/Negative Declaration Process

City of Dinuba
405 E El Monte Way
Dinuba, CA 93291

SECTION 1
CEQA Review Process

Project Title: El Monte Way and Road 56 Roundabout

1.1 California Environmental Quality Act Guidelines

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

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

1.2 Initial Study

The Initial Study provided herein covers the potential environmental effects of the proposed conversion of a four-way signalized intersection into a single-lane roundabout. The proposed Project Site is 0.5 miles west of the City of Dinuba city limit but within the City's Sphere of Influence. The City of Dinuba will act as the Lead Agency for this Project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

1.3 Environmental Checklist

The Lead Agency may use the CEQA Environmental Checklist Form [CEQA Guidelines, Section 15063(d)(3) and (f)] in preparation of an Initial Study to provide information for determining if there are significant effects of the Project on the environment. A copy of the completed Environmental Checklist is outlined in **Section Three**.

1.4 Notice of Intent to Adopt a Negative Declaration

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

Before approving the Project, the Lead Agency shall consider the proposed Negative Declaration and any comments received during the public review process. It shall adopt the proposed Negative Declaration only if it finds, based on the whole record before it, that there is no substantial evidence that the Project will significantly affect the environment and that the Negative Declaration reflects the Lead Agency's independent judgment and analysis.

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

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

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

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

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

1.5 Negative Declaration or Mitigated Negative Declaration

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

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

1.6 Intended Uses of Initial Study/Negative Declaration documents

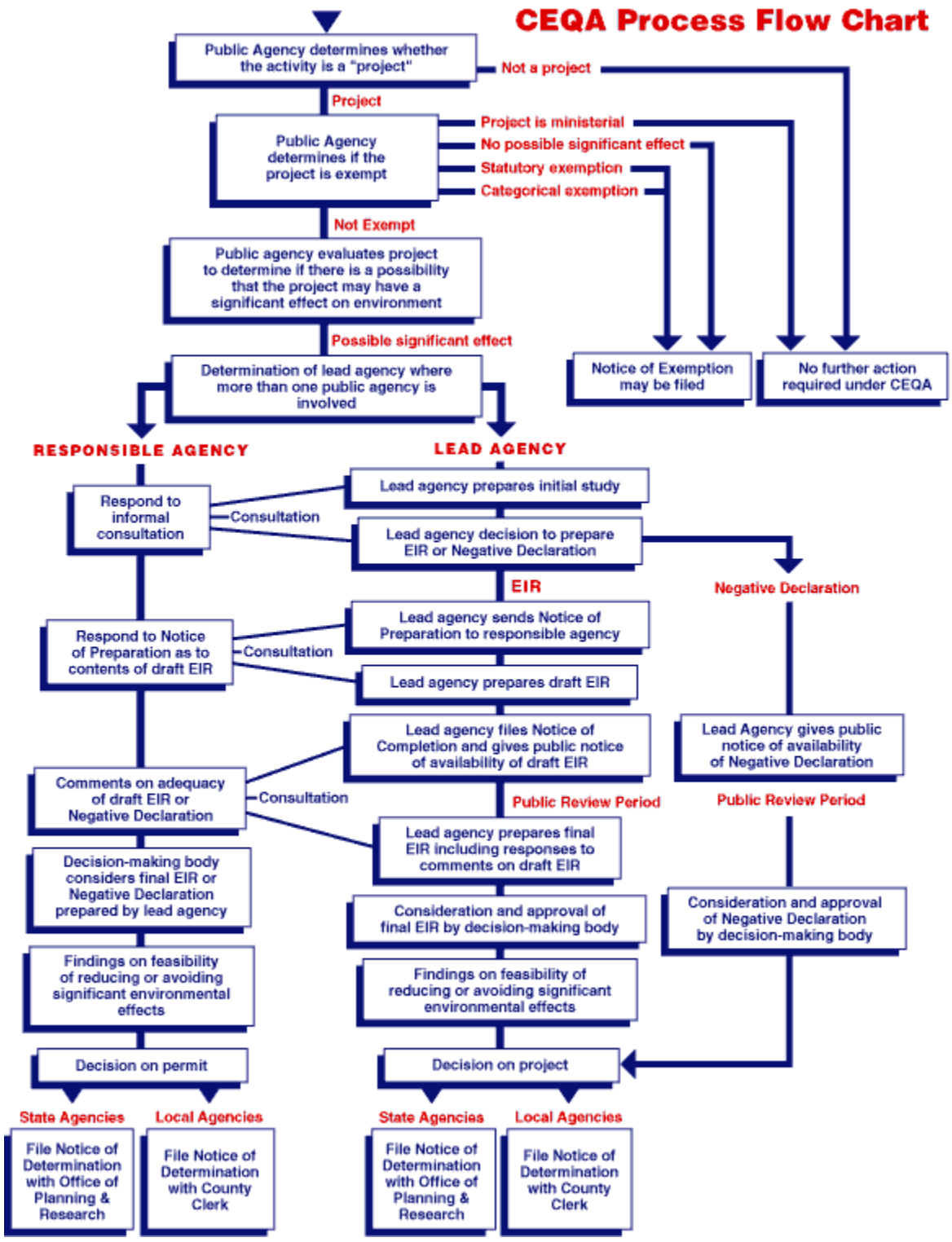
The Initial Study/Negative Declaration document is an informational document intended to inform decision-makers, other responsible or interested agencies, and the general public of the potential environmental effects of the proposed project. The environmental review process has been established to enable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

1.7 Notice of Determination (NOD)

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

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

1.8 CEQA Process Flow Chart



Section 2

Project Description

City of Dinuba
405 E El Monte Way
Dinuba, CA 93291

SECTION 2
Project Description

Project Title: El Monte Way and Road 56 Roundabout

2.1 Project Description & Purpose

The Project aims to improve safety, congestion, and air quality by implementing congestion reduction and traffic flow improvements consistent with the CMAQ (Congestion Mitigation and Air Quality Improvement) program. The Project includes converting a four-way signalized intersection into a roundabout with multi-lane entries from El Monte Way and single-lane entries from Road 56. El Monte Way will have an inner lane for through and left movements and an outer lane for through and right movements. Road 56 will have one lane for all traffic. The Project will require approximately 0.6 acres of ROW acquisition to accommodate the proposed design.

Equipment staging will be provided within the temporary construction easement areas. No specific disposal or borrow sites have been identified. These facilities will be established in accordance with the Standard Specifications. Construction activities will include demolition of existing asphalt, sidewalk, and curbs where needed, adding aggregate base and pavement placement, piping existing irrigation ditch underground, sewer and stormwater lines through intersection extension, and street light installation. Roadway detours and/or lane closures may be used to control traffic during construction. Maps showing the Project layout and regional location are provided in Figures 2-1, 2-2, and 2-3. Detailed improvement plans are provided in Appendix A.

2.2 Project Location

The proposed Project Site is located within the northwest portion of Tulare County, approximately 0.5 miles west of the City of Dinuba city limit, but within the Sphere of Influence of the City. The Project would affect approximately 7.5 acres within City ROW and temporary construction easement areas along El Monte Way & Road 56. Adjacent land uses include agriculture to the north, south, east, and west, and one residence on the southwest corner of the existing intersection.

2.3 Existing Setting

The existing El Monte Way & Road 56 intersection is a 4-way and signalized. This intersection serves as a western entry point into the City of Dinuba and is surrounded by agricultural land uses, with one residence located on the southwest corner of the proposed Project. Adjacent properties are mostly underdeveloped and under agricultural use.

2.4 Other Permits and Approvals

Other permits and approvals required for the El Monte Way & Road 56 Roundabout Project are listed below. It should be noted that this list is not exhaustive, and additional permits and approvals may also be required.

- *City of Dinuba Building and Encroachment Permits*
- *City of Dinuba Grading Permits*
- *City of Dinuba approved Landscape and Design Plans*
- *San Joaquin Valley Air Pollution Control District (SJVAPCD)*. The proposed Project is within the jurisdiction of the SJVAPCD and will be required to comply with Rule VIII, 3135, 4101, and 9510.
- *Central Valley Regional Water Quality Control Board, SWPPP*. The proposed Project Site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater as a result of Project construction.



Figure 2-1. Intersection Design

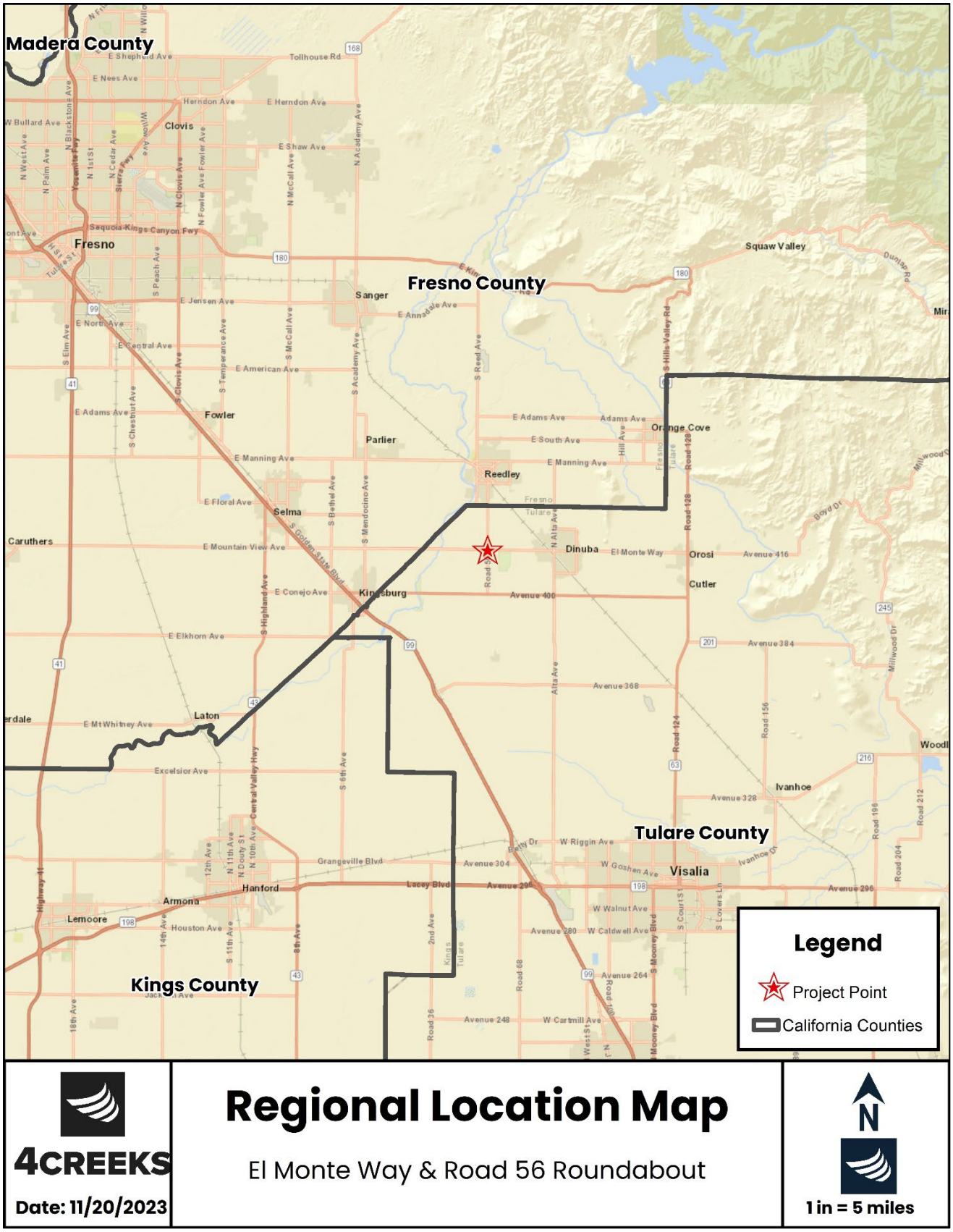


Figure 2-2. Regional Location Map



Figure 2-3. Vicinity Map

Section 3

Evaluation of Environmental Impacts

City of Dinuba
405 E El Monte Way
Dinuba, CA 93291

SECTION 3
Evaluation of Environmental Impacts

Project Title: El Monte Way and Road 56 Roundabout

This document is the Initial Study/Mitigated Negative Declaration for the proposed conversion of a four-way signalized intersection into a single-lane roundabout. The proposed project site is located within the City of Dinuba. The City of Dinuba will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

3.1 PURPOSE

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

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

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.).

According to Section 15070(a), a Negative Declaration is appropriate if it is determined that:

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

3.2 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1. **Project Title:** El Monte Way & Road 56 Roundabout

2. **Lead Agency:** City of Dinuba
   405 E El Monte Way
   Dinuba, CA 93618
   (559) 591-5900

3. **Applicant:** City of Dinuba
   Contact Person: George Avila
   1088 E Kamm Avenue
   Dinuba, CA 93618
   (559) 591-5906

4. **Project Location:** The proposed project Site is located 0.5 miles west of the City of Dinuba limits and within Dinuba's Sphere of Influence. The project would affect approximately 7.5 acres and temporary construction easement areas along West El Monte Way and Road 56. Adjacent land uses include agriculture to the north, south, east, and west, with one residence on the southwest corner of the existing intersection.

5. **General Plan Designation**: West El Monte Avenue and Road 56 are designated arterial streets in the City of Dinuba General Plan Circulation Element.

6. **Zoning Designation:** The project will occur outside of zoning designations within ROW.

7. **Project Description:** The Project aims to improve safety, congestion, and air quality by implementing congestion reduction and traffic flow improvements consistent with the CMAQ (Congestion Mitigation and Air Quality Improvement) program. The Project includes converting a four-way signalized intersection into a roundabout with multi-lane entries from El Monte Way and single-lane entries from Road 56. El Monte Way will have an inner lane for through and left movements and an outer lane for through and right movements. Road 56 will have one lane for all traffic. The Project will require approximately 0.6 acres of ROW acquisition to accommodate the proposed design.

   Equipment staging will be provided within the temporary construction easement areas (see Attachment E). No specific disposal or borrow sites have been identified. These facilities will be established in accordance with the Standard Specifications. Construction activities will include the demolition of existing asphalt, sidewalk, and curb where needed, placement of aggregate base and pavement, extension of sewer, water mains, and stormwater lines through the intersection, and street light/landscaping installation. Roadway detours and/or lane closures may be used to control traffic during construction. Maps showing the Project layout and regional location are provided in Figures 3-1, 3-2, and 3-3. Detailed improvement plans are provided in Appendix A.

8. **Surrounding Land Use Designations and Settings:**
   Northeast: Planned for General Commercial, currently under agricultural use
   Northwest: Planned for Community Commercial, currently under agricultural use
   Southeast: Planned for Urban Reserve, currently under agricultural use
   Southwest: Planned for Community Commercial, currently agricultural use, and one single-family residence.

9. **Required Approvals:** No discretionary approvals are required from the City of Dinuba for the proposed Project.

10. **Native American Consultation:** A Native American Heritage Commission's Sacred Lands File search and Native American outreach were conducted as part of an Archaeological Survey Report prepared by Applied Earthworks in December 2022. The Native American Heritage Commission Sacred Lands File search and Native American contacts did not identify any sacred areas or provide information on Native American resources.

11. **Parking and access:** During construction, workers will utilize temporary construction easements adjacent to the Project Site for parking and equipment staging.

12. **Landscaping and Design:** The landscape and design plans will be required when the Project submits for a building permit on the Project and will be subject to the City of Dinuba's Water Efficient Landscape Ordinance (WELO).

13. **Utilities and Electrical Services:** The proposed Project will include an extension of sewer and stormwater lines through the intersection and street light installation as part of current development standards. Pacific Gas and Electric provide electrical services, and the project will involve the relocation of multiple existing power poles.

Acronyms

BMP	Best Management Practices
CAA	Clean Air Act
CCR	California Code of Regulation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CWA	California Water Act
DHS	Department of Health Services
FEIR	Final Environmental Impact Report
FPPA	Farmland Protection Policy Act
ISMND	Initial Study Mitigated Negative Declaration
MCL	Maximum Contaminant Level
ND	Negative Declaration
NAC	Noise Abatement Criteria
RCRA	Resource Conservation and Recovery Act of 1976
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWPPP	Storm Water Pollution Prevention Plan

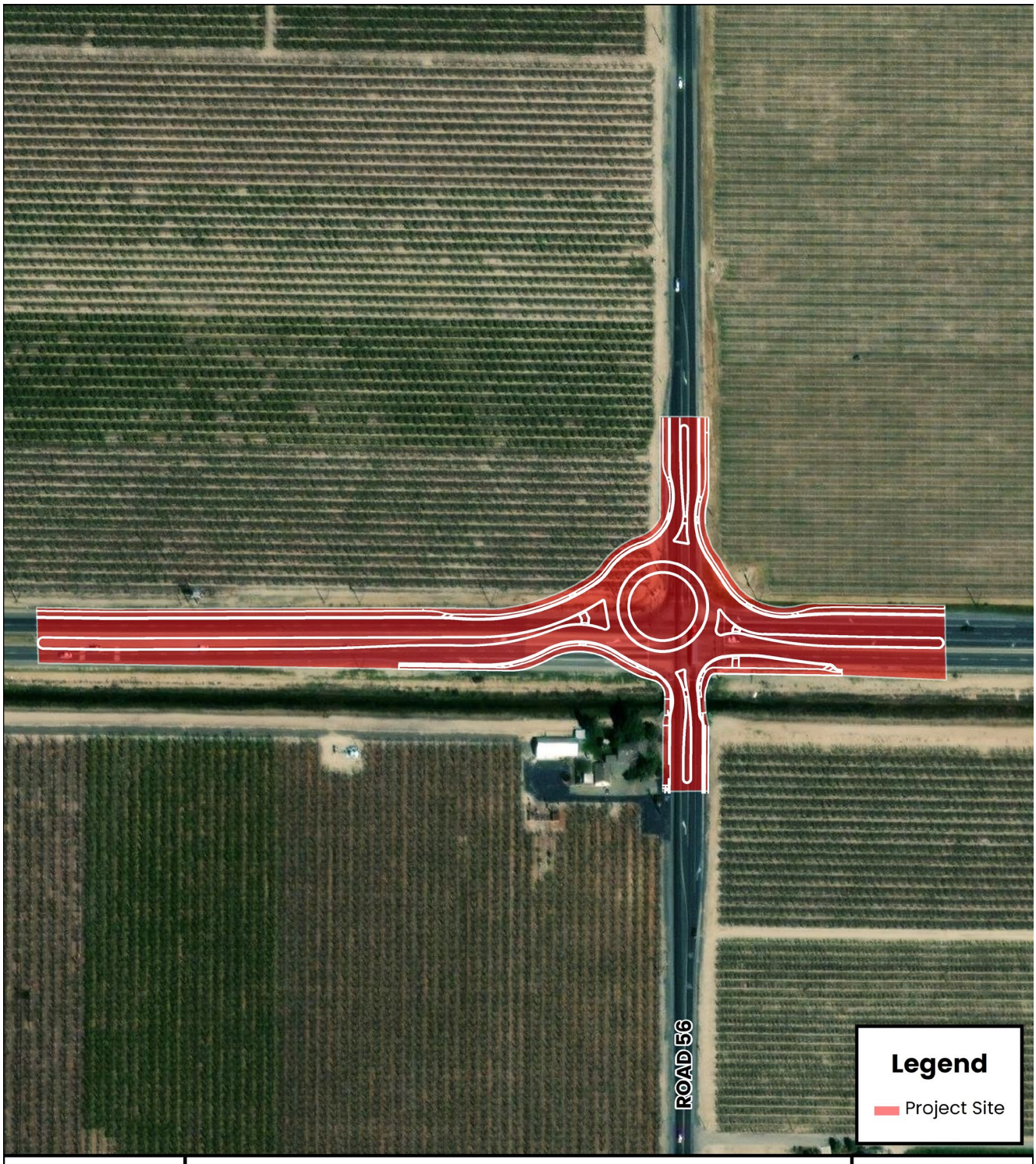


Figure 3-1. Project Site

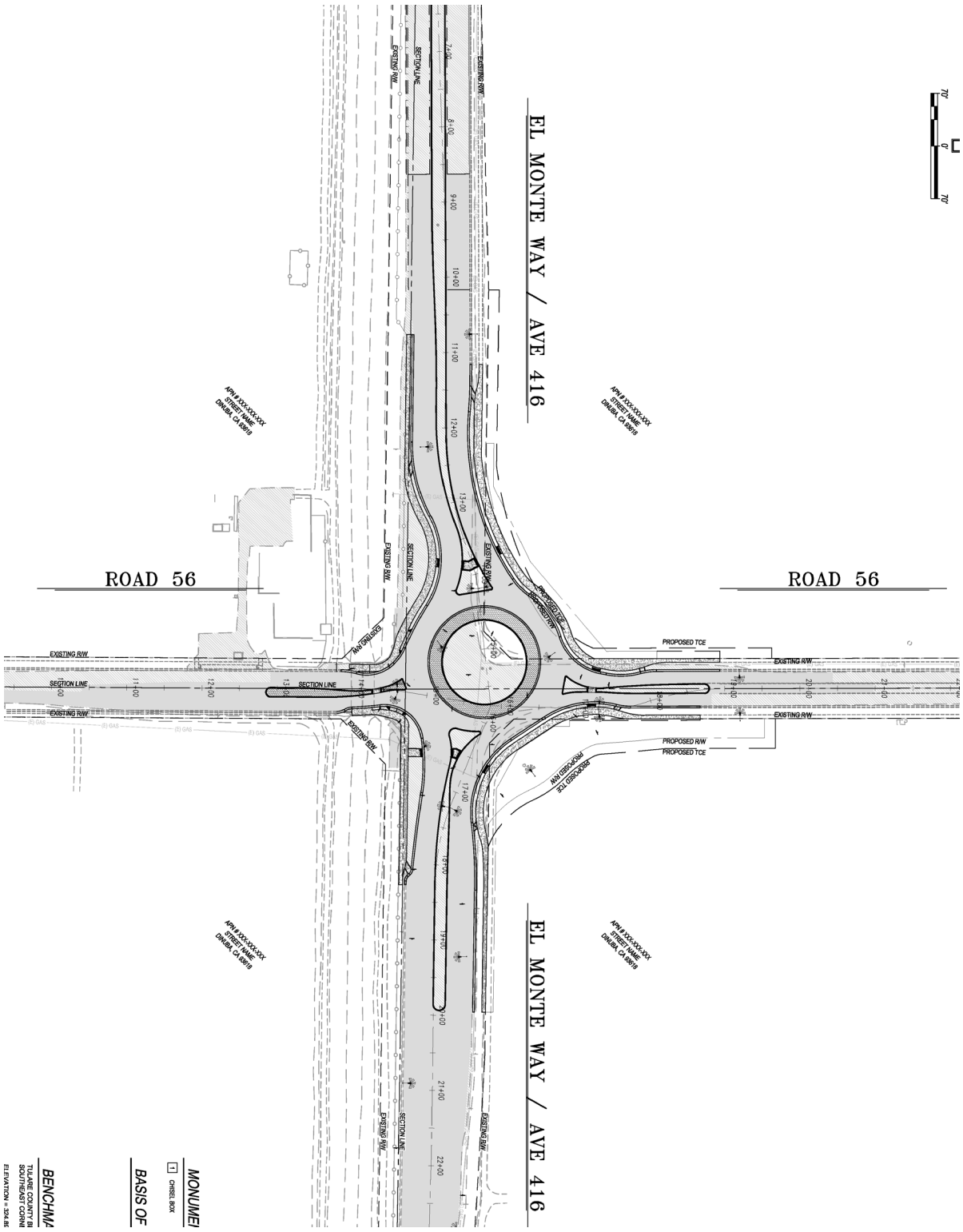


Figure 3-2. Site Plan



Figure 3-3. Vicinity Map

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately support by the information sources a lead agency cites, in the parentheses following each question. A "No Impact" answer is adequately supported if the reference information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR if required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequate analyzed in an earlier EIR or negative declaration. Section 15063(c) (3)(D). In this case, a brief discussion should identify the following.

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated." Describe and mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

3.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture and Forest Resources	☐ Hazards and Hazardous Materials	☐ Recreation
☐ Air Quality	☑ Hydrology and Water Quality	☐ Transportation
☑ Biological Resources	☐ Land Use and Planning	☐ Utilities and Service System
☑ Cultural Resources	☐ Mineral Resources	☐ Wildfire
☐ Energy	☐ Noise	☐ Mandatory Findings of Significance
☐ Geology and soils	☐ Population	

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

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION WILL BE PREPARED.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

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

SIGNATURE _____ DATE 12/5/23

George Avila, Public Works Director — PRINTED NAME

City of Dinuba — AGENCY

3.5 ENVIRONMENTAL ANALYSIS

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

I. AESTHETICS

Except as provided in Public Resource Code Section 210999, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway?	☐	☐	☐	☑
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

Environmental Setting

No aesthetic resources are identified in the City of Dinuba General Plan; however, the views of the Sierra Nevada Mountains are considered an important scenic vista in Tulare County.

Sierra Nevada Mountains: The Sierra Nevada mountain range and its foothills stretch along the east area of the county and are a valuable aesthetic resource. Additionally, Sequoia National Park is located within the stretch of the Sierra Nevada Mountains located in Tulare County. Sequoia National Forest is a U.S. National Forest known for its mountain scenery and natural resources. Located directly north of Sequoia National Park is Kings Canyon National Park, a U.S. National Park known for its towering sequoia trees and scenic vistas. The Sierra Nevada Mountains are approximately 15 miles east of the proposed Project Site, but views of the mountains are not visible on most days due to poor air quality.

The following photos demonstrate the aesthetic character of the Project area. The proposed Project Site is located in a relatively flat area with primarily agricultural uses.

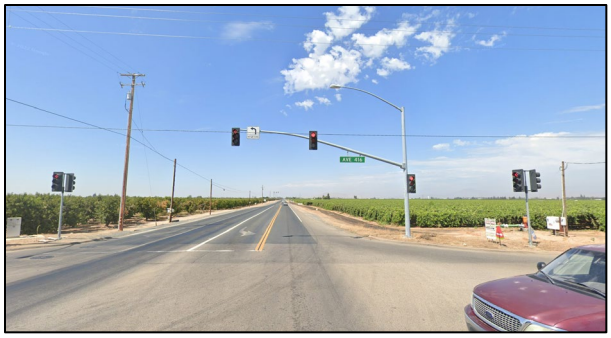


Photo 1: View of intersection looking north.
Source: Google Earth, August 2022



Photo 2: View of intersection looking south.
Source: Google Earth, August 2022



Photo 3: View of intersection looking east.
Source: Google Earth, August 2022

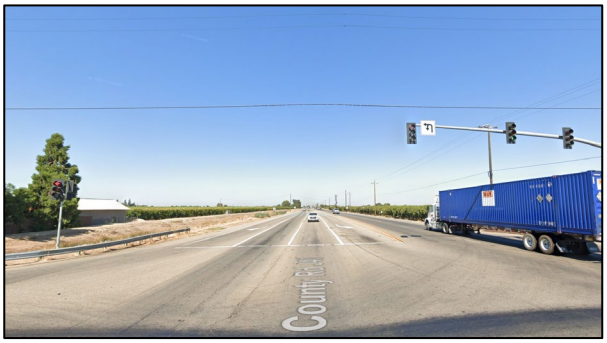


Photo 4: View of intersection looking west.
Source: Google Earth, August 2022

Regulatory Setting

State Scenic Highways: The State Scenic Highway Program was implemented by Caltrans and developed to preserve the aesthetic quality of specific highway corridors. Highways included in this program are designated as scenic highways. A highway is designated as scenic based on how much of the natural landscape is visible to travelers, the quality of that landscape, and the extent to which development obstructs views of the landscape. No designated eligible or officially designated state scenic highways within the City of Dinuba exist.

Discussion

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

No Impact: A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The Sierra Nevada Mountains are the primary scenic vista within this region. The foothills of the Sierra Nevada Mountains are approximately 15 miles east of the proposed Project Site; however, views of the mountains are not visible on most days due to poor air quality. The proposed Project would not result in any vertical construction that could affect views of the Sierra Nevada Mountains or any other scenic vista. There is *no impact.*

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

No Impact: There are no designated Eligible or Officially Designated State Scenic Highways within the City of Dinuba. Highway 180 is the nearest State Scenic Highway and is located approximately 13 miles north of the Project Site. Significant urban development between the Project Site and Highway 180 completely eliminates visibility of the Project Site from the highway. There is *no impact.*

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

No Impact: The proposed Project Site is located in an area characterized by agricultural activity; however, the Project would not negatively impact the existing visual character. Proposed improvements include a landscaped center island, stamped concrete splitter islands, decorative monument signage, new street lighting, landscaping, etc. All proposed improvements will be made in accordance with City development standards and will not affect the surrounding visual character. There is *no impact.*

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

Less than Significant Impact: The proposed Project would result in new street lighting consistent with the City's development standards, which are developed to minimize impacts related to excessive light and glare. The impacts are *less than significant.*

Mitigation Measures for Aesthetic Resources

None Required

II. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☑
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned timberland Production (as defined by Government Code section 51104(g)?	☐	☐	☐	☑
d) Result in the loss of forestland or conversion of forest land to non-forest use?	☐	☐	☐	☑
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☑

Environmental Setting

Agriculture is a vital component of the City of Dinuba's economy and is a significant source of the City's cultural identity. As such, preserving the productivity of agricultural lands is integral to maintaining the City's culture and economic viability.

According to the California Department of Conservation, the lands adjacent to the Project include "prime farmland." However, the Project will not require ROW acquisition of any prime farmland. The ROW to be acquired is not currently used for crops and is vacant land.

Regulatory Setting

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

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

- ***Prime Farmland*** has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years before classification and can produce sustained yields.
- ***Farmland of Statewide Importance*** has also been used for irrigated production four years before classification and is only slightly poorer quality than Prime Farmland.
- ***Unique Farmland*** has been cropped in the four years before classification and does not meet the criteria for Prime Farmland or Farmland of Statewide Importance but has produced specific crops with high economic value.
- ***Farmland of Local Importance*** encompasses farmland that does not meet the criteria for the previous three categories. These may lack irrigation, produce major crops, zoned as agricultural, and/or support dairy.
- ***Grazing Land*** has vegetation that is suitable for grazing livestock.

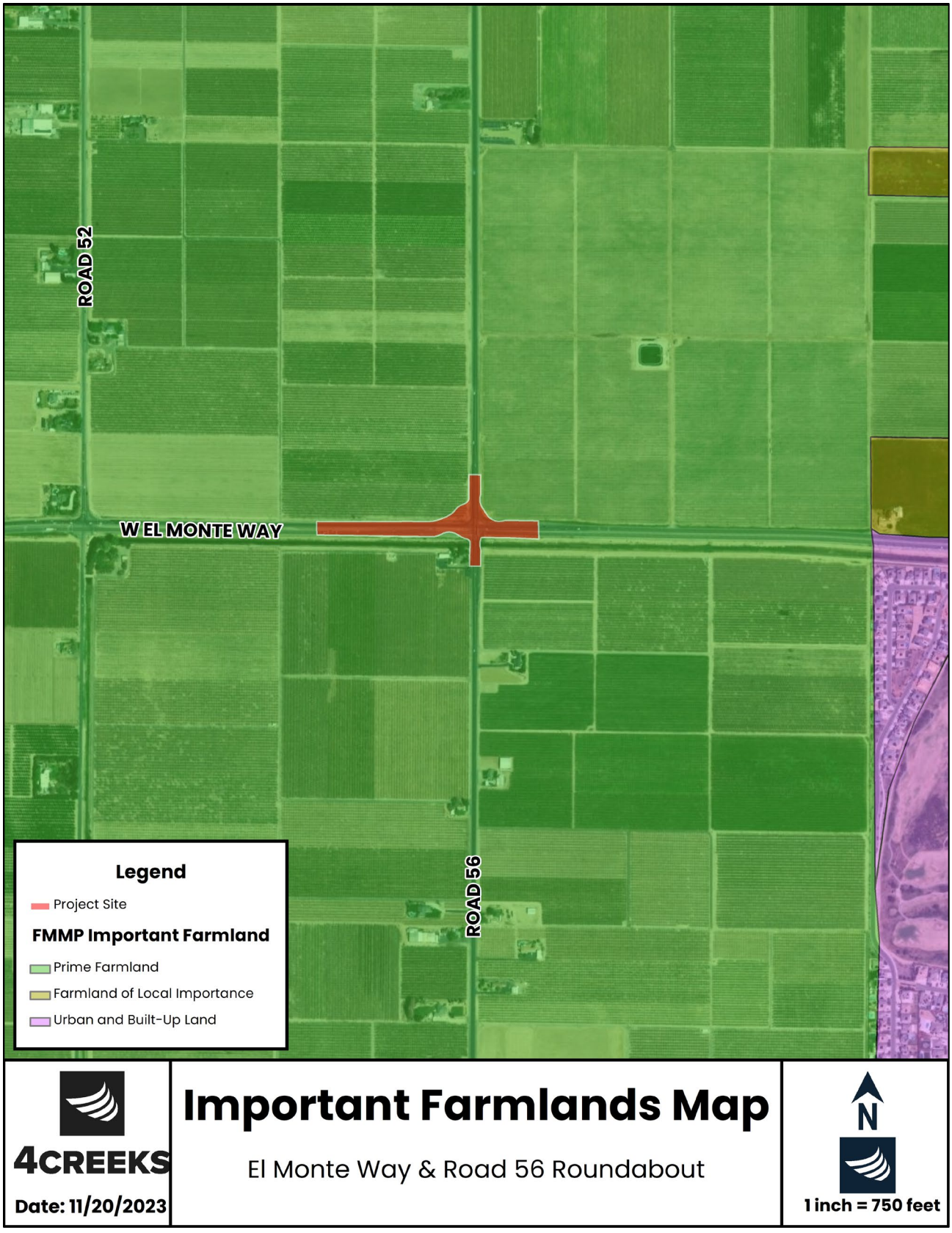


Figure 3-4. Important Farmland Map

Discussion

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

No Impact: The area around the proposed Site includes lands classified as Prime Farmland by the California Department of Conservation Farmland Mapping and Monitoring Program. However, the Project will not require a ROW acquisition of Prime Farmland and does not propose the development of adjacent agricultural properties. The Project would not result in a significant loss of agricultural lands, and there is *no impact.*

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

No Impact: The proposed Project Site is within the public ROW and is therefore not zoned for agricultural use or under a Williamson Act Contract. There is *no impact.*

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

No Impact: The Project Site is located within the public ROW and is therefore not zoned for forest or timberland production. There is n*o impact.*

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

No Impact: The proposed Project Site is located within the public ROW and would not convert forestland to non-forest use. There is *no impact.*

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

No Impact: As discussed above, the proposed Project Site is located within the public ROW. The Project would not result in the loss of Farmland to non-agricultural use or forestland to non-forest use. There is *no impact.*

Mitigation Measures for Agricultural and Forest Resources

None Required

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☑	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☑	☐

Environmental Setting

Air pollution is directly related to regional topography. Topographic features can either stimulate the movement of air or restrict air movement. California is divided into regional air basins based on topographic air drainage features. The proposed Project Site is within the San Joaquin Valley Air Basin, with the eastern border set by the Sierra Nevada Mountains, Coastal Ranges to the west, and the Tehachapi Mountains to the south. The mountain ranges surrounding the San Joaquin Valley Air Basin (SJVAB) restrict air movement and prevent pollution dispersal. Table 3-1 shows that the SJVAB is nonattainment for several pollutant standards.

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – One hour	No Federal Standard[D]	Nonattainment/Severe
Ozone – Eight hour	Nonattainment/Extreme[C]	Nonattainment
PM 10	Attainment[A]	Nonattainment
PM 2.5	Nonattainment[B]	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

A. On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.
B. The Valley is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).
C. Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).
D. Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

Table 3-1. San Joaquin Valley Attainment Status; Source: SJVAPCD

Regulatory Setting

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

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

The state and federal standards for the criteria pollutants are presented in Section 8.4 of The San Joaquin Valley Unified Air Pollution Control District's 2015 "Guidance for Assessing and Mitigating Air Quality Impacts." These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation, and other aspects of the general welfare. The U.S. EPA revoked the national 1-hour ozone standard on June 15, 2005, and the annual PM_{10} standard on September 21, 2006, when a new $PM_{2.5}$ 24-hour standard was established.

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (03)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet 8 Hour Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	20 µg/m3		--		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour		Gravimetric or Beta Attenuation	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	12 µg/m^3		15 µg/m^3		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	--	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		--	--	
Nitrogen Dioxide	1 Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	--	Gas Phase Annual

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
(NO_2)[8]	Arithmetic Mean	0.030 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	53 ppb (100 µg/m^3)	Same as Primary Standard	Chemiluminescence
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)9	--	
	Annual Arithmetic Mean	--		0.030 ppm (for certain areas)9	--	
Lead[10,11]	30 Day Average	1.5 µg/m^3	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m3 (for certain areas)11	Same as Primary Standard	
	Rolling 3-Month Average	--		0.15 µg/m^3		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standard		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.
9. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 3-2. Ambient Air Quality Standards; Source: SJVAPCD

San Joaquin Valley Air Pollution Control District (SJVAPCD) – The SJVAPCD enforces air quality standards in the Project area. To meet state and federal air quality objectives, the SJVAPCD adopted the following significance thresholds for projects (Table 3-3). Additionally, the following SJVAPCD rules and regulations may apply to the proposed project:

- **Rule 3135:** Dust Control Plan Fee. All projects that include construction, demolition, excavation, extraction, and/or other earth-moving activities as defined by Regulation VIII (Described below) must submit a Dust Control Plan and required fees to mitigate dust-related impacts.
- **Rule 4101:** Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color and/or have the potential to obstruct visibility.
- **Rule 9510:** Indirect Source Review (ISR). This rule reduces the impact of PM10 and NOX emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development projects to reduce emissions through onsite mitigation, offsite SJVAPCD-administered projects, or a combination of the two.
- **Regulation VIII:** Fugitive PM10 Prohibitions. Regulation VIII comprises eight rules that aim to limit PM10 emissions by reducing fugitive dust. These rules contain required management practices to limit PM10 emissions during construction, demolition, excavation, extraction, and/or other earth-moving activities.

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

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

Discussion

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

No Impact: The proposed Project is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and would result in air pollutant emissions that are regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in Tulare County into compliance with federal and state air quality standards. The air district has Particulate Matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plan for the basin. Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards.

Construction Phase. Project construction would generate pollutant emissions from the following activities: grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade, and paving. The construction-related emissions from these activities were calculated using Road Construction Emissions Model, Version 9.0.0. The full Emissions Model results are available in Appendix B. As shown

in Table 3-4 below, Project construction-related emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Construction	**1.65**	**0.17**	**0.00**	**1.67**	**1.60**	**0.38**
SJVAPCD Air Quality Thresholds of Significance	**100**	**10**	**27**	**10**	**15**	**15**
*Threshold established by SJVAPCD for SOx; however, emissions are reported as SO2 by the Road Construction Emissions Model.						

Table 3-4. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Construction; Source: SJVAPCD, Road Construction Emissions Model, Version 9.0.0 (Appendix B)

Operational Phase. The proposed Project is being implemented as part of the FHWA's CMAQ program, which funds air quality improvement projects. As such, the Project is expected to result in significant emissions reductions. The Project would not generate any additional vehicle trips, and there will be no stationary source emissions resulting from the Project.

Because the emissions from Project construction would not exceed the thresholds of significance established by the SJVAPCD, and the Project would not result in operational emissions, the Project would not conflict with or obstruct the implementation of an applicable air quality plan, and there is *no impact.*

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

Less Than Significant Impact: The SJVAPCD accounts for cumulative impacts on air quality in Section 1.8, "Thresholds of Significance – Cumulative Impacts," in its 2015 Guide for Assessing and Mitigating Air Quality Impacts. When developing its significance thresholds, the SJVAPCD considered basin-wide cumulative impacts on air quality. Because Project emissions are below the significance thresholds adopted by the air district, and compliance with SJVAPCD rules will address any cumulative impacts regarding operational emissions, impacts regarding cumulative emissions would be *less than significant.*

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

Less Than Significant Impact: The single-family residence at 41577 Road 56 is the closest sensitive receptor. The Project would not exceed emissions thresholds established by the SJVAPCD and would not increase operational emissions beyond existing conditions. The Project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be *less than significant.*

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact: The Project will create temporary localized odors during construction. These odors are not likely to be noticeable for extended periods beyond the perimeter of the Project Site. Once constructed, the Project will not create any new sources of odor that result directly from

the project. The Project would not create objectionable odors affecting many people, and the impacts would be *less than significant.*

Mitigation Measures for Air Quality

None Required

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish & Game or U.S. fish and Wildlife Service?	☐	☑	☐	☐
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?	☐	☐	☐	☑
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director removal, filling, hydrological interruption, or other means?	☐	☐	☑	☐
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?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Environmental Setting

The proposed Project Site is located in a portion of the central San Joaquin Valley that has experienced intensive agricultural and urban disturbances for decades. The Central San Joaquin Valley experiences a Mediterranean climate with warm, dry summers and cool, wet winters. Summer temperatures are often over 90 degrees Fahrenheit, and winter temperatures range from mid-50s to high-60 degrees Fahrenheit. Due to the heavy disturbance associated with converting upland, riparian and aquatic habitats to agricultural and urban land uses, once abundant native plant and animal species have experienced significant population reductions or have been locally extirpated. As a result, the remaining suitable habitats for native species that still occur in the region are particularly valuable.

Agricultural operations are the dominant land use directly adjacent to the existing intersection and surrounding area. There are currently orchards to the northwest, southwest, southeast, and one vineyard

northeast of the existing 4-way intersection, including one single-family residence on the southeast corner of the intersection at 41577 Road 56. The Project is approximately 2 miles east of the lower portion of the Kings River, which passes briefly through northwest Tulare County before flowing to Kings County. There is an intermittent riverine habitat that runs adjacent to the southern boundary of the Project Site along El Monte Way and along the eastern boundary of Road 56. The seasonal tributaries are part of the Upper Kaweah River channel, and both contain very sparsely vegetated riparian corridors that generally lack vegetation to support wildlife. According to the National Wetlands Inventory database, these two waterways have undergone channel excavation by humans for water conveyance and flood control purposes to accommodate the agricultural activities in the area. The streams may be seasonally flooded early in the growing season but are completely dewatered by the end of the growing season in most years.

Special Status Species

In order to identify potential species present at the Site, a desktop review of the California Natural Diversity Database (CDDB) and the California Native Plant Society (CNPS) inventory database were conducted. Seven special status species have been recorded in the Reedley 7.5-minute USGS topographic quad, but the Project Site does not contain suitable or desirable habitat for many of the species. Table 3-5 indicates all special status species in the Project vicinity, their protections, and the potential for suitable habitat on the Project Site. Of the seven species, four species have a low potential for occurrence and are not expected to occur on or near the Project Site due to the area being highly disturbed by development, lacking suitable habitat and/or being outside the species' current range.

Species Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Habitat Type	Potential to Occur
Burrowing owl – *Athene cunicularia*	None	None	SSC	-	Grassland and upland scrub, open agricultural fields with friable soil, ground squirrel burrows.	Low. The agricultural fields surrounding the Site are occupied by trees; may inhabit barren areas along the southern canal.
Valley elderberry longhorn beetle – *Desmocerus californicus dimorphus*	Threatened	None	None	-	Elderberry (*Sambucus spp.)* plants with stems at ground-level.	None. No native tree species are present at the project Site.
Pallid bat – *Antrozous pallidus*	None	None	SSC	-	Arid/semi-arid locations with rock crevices, caves, mine shafts, bridges, buildings, and trees hollows for roosting.	None. No roosting habitat present at the Project Site.
Western pond turtle – *Emys marmorata*	None	None	SSC	-	Ponds, rivers, marshes, streams, and irrigation ditches with aquatic vegetation.	Low. The stream is intermittently filled and is generally lacking wetland conditions (including aquatic vegetation) to support this species.
Sanfords arrowhead – *Sagittaria sanfordii*	None	None	None	1B.2	Freshwater wetlands, wetland-riparian; ponds, sloughs and ditches.	Low. There are occurrences within 5 miles of the Project Site but wetland conditions are generally absent at Project Site.
San Joaquin adobe sunburst – *Pseudobahia peirsonii*	Threatened	Endan gered	None	1B.1	Cismontane woodland and, valley and foothill grassland	None. There are no grassland habitats present near the Project Site.
California satintail – *Imperata brevifolia*	None	None	None	2B.1	Chaparral, coastal scrub, Mojavean desert scrub, alkali meadows and seeps, riparian scrub	Low. Project Site may contain conditions to support the species but is unlikely from being highly disturbed by agricultural activities.

Table 3-5. Special status species list; protections and potential habitat suitability on the Project Site.

Regulatory Setting

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

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

Although the USFWS and its parent administration, the U.S. Department of the Interior, have traditionally interpreted the FMBTA as prohibiting incidental as well as intentional "take" of birds, a January 2018 legal opinion issued by the Department of the Interior now states that incidental take of migratory birds while engaging in otherwise lawful activities is permissible under the FMBTA. However, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513) and any other native non-game bird (Section 3800), even if incidental to lawful activities.

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

Clean Water Act: Section 404 of the Clean Water Act of (1972) is to maintain, restore, and enhance the physical, chemical, and biological integrity of the nation's waters. Under Section 404 of the Clean Water Act, the US Army Corps of Engineers (USACE) regulates discharges of dredged and fill materials into "waters of the United States" (jurisdictional waters). Waters of the US, including navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Waters of the United States also include non-navigable tributaries to traditional navigable, relatively permanent waters, meaning that they contain water at least seasonally (40 CFR § 120.2).

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

Discussion

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

Less than Significant Impact with Mitigation Incorporation: Based upon a preliminary screening using "CNDDB QuickView" (see Appendix C) and the CNPS Rare Plant Inventory Database, there are two species listed on either/both the Federal Endangered Species Act, three species designated as "special of special concern" by the CDFW, and three plants with a California Rare Plant Ranking. From these known species, there is a minimal amount of suitable habitat within the Project limits or in the general Project vicinity due to intense agricultural and urban development. Project construction will occur within the immediate ROW and will not extend far past the existing intersection, so impacts to any species present would be unlikely. However, two federally protected wetlands (riverine) on the southern and eastern Project boundaries can potentially serve as habitat to three of the seven species recorded in the Reedley 7.5-minute USGS topographic quad. Humans excavated the channels and are highly disturbed, so the occurrence of any special status species is unlikely, but seasonally wet conditions may provide habitat intermittently. Due to potentially significant impacts on the burrowing owl (*Athene cunicularia*), western pond turtle (*Emys marmorata*), Sanfords arrowhead (*Sagittaria sanfordii*), and the California satintail (*Imperata brevifolia*) from construction activities, implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 will ensure that impacts remain *less than significant*.

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

No Impact: The Project will occur within or immediately adjacent to a heavily disturbed public right-of-way; however, there is a manmade stream channel bordering the southern and eastern portions of the intersection. However, this channel lacks a riparian habitat due to being highly disturbed, so proposed Project activities would not impact any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife (CDFW), or United States Fish and Wildlife Service (USFWS). There is *no impact.*

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

Less than Significant Impact with Mitigation Incorporation: There are two manmade stream channels adjacent to the southern and eastern boundaries of the Project Site. These two channels have been identified as riverine habitats by the National Wetlands Inventory but are not federally protected as Waters of the United States. The two stream channels were excavated for agricultural uses and are not part of the natural watershed but have been artificially connected to natural tributaries such as Travers Creek. Due to this, disturbance and pollution of these channels can potentially alter the chemical, physical or biological integrity of nearby natural tributaries that are federally protected. Construction-related impacts related to stream channel disturbance will be temporary and subject to best management practices (BMPs) required by the Stormwater Pollution Prevention Plan (SWPPP),

which are developed to prevent significant impacts related to water quality and erosion. Implementing the required best management practices associated with the SWPPP would prevent significant impacts on the two channels near the Project Site so that the impact will remain *less than significant.*

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?

No Impact: The Project involves the conversion of an existing 4-way intersection into a roundabout. The Project is not expected to impact the ease of movement of resident or migratory wildlife species. There is *no impact.*

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

No Impact: The Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no tree removal will occur as part of Project construction. There is *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 proposed Project is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan. There is *no impact.*

Mitigation Measures for Biological Resources

BIO-1 Protect Western pond turtle.

A pre-construction survey shall be conducted by a qualified biologist to ensure that the western pond turtle is not present and will not be impacted during Project construction. The pre-construction survey should be done no more than 14 days before Project construction. The biologist will search for the presence of aquatic habitat for turtles and potential nesting habitat on the Project Site. If a nest is found, the biologist shall determine the size of a construction-free buffer for the duration of the nesting cycle. Wildlife exclusion fencing will also be built along the buffer and weighed down to ensure that wildlife cannot enter. Exit funnels will also be provided to allow turtles and other wildlife to exit the wildlife enclosure.

BIO-2 Protect Burrowing Owl

A qualified biologist shall conduct a pre-construction survey to ensure that the burrowing owl is not present on the Project Site, and to assess whether there is any suitable habitat near the existing stream channels. During this survey, the qualified biologist shall assess soil types and properties on the Site to determine whether there are suitable conditions for owl burrows. Surveys for burrowing owls will occur 14 days before any ground disturbance, regardless of the season. This survey will cover potential burrowing owl burrows in the Project area and suitable habitats within 150 meters (500

feet). Evaluation of use by owls shall be by California Department of Fish and Wildlife survey guidelines (CBOC 1993, CDFG 1995, CDFG 2012). Surveys will document if burrowing owls are nesting or using habitat in or directly adjacent to the Project area. Survey results will be valid only for the season (breeding (Feb 1-Aug 31) or non-breeding (Sept 1-Jan 31) during which the survey is conducted. If no active nests or burrows are detected during the pre-construction survey, no further action is required. If an active nest or burrow is seen, then minimization measures (described below) shall be implemented.

A. Minimization/Establish Buffers: If burrowing owls are detected within the survey area, CDFW should be consulted to determine the suitable buffer. These buffers will consider the level of disturbance of the Project activity, existing disturbance of the Site (vehicle traffic, humans, pets, etc.), and time of year (nesting vs. wintering). If avoidance is not feasible, the District shall work with CDFW to determine appropriate mitigation, such as passive exclusion or translocation, and associated mitigation land offset.

BIO-3 Botanical Survey

A qualified biologist shall conduct a pre-construction survey to ensure that Sanford's arrowhead and California satintail are not present in the riparian corridors located on the southern and eastern boundaries of the Project Site. The qualified biologist shall assess soil types and Site conditions to determine whether the Site contains suitable habitat to support both of the special status plant species. If either species is found, buffers may be established to minimize impacts to the plant species.

V. CULTURAL RESOURCES

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

Environmental Setting

Taylored Archaeology prepared an Archaeological Survey Report in June 2023. The full report can be found in Appendix D.

Taylored Archaeology conducted a Phase 1 archaeological survey within the Project's Area of Potential Effects (APE) for the El Monte Way and Road 56 Roundabout Project to determine whether historical resources are present and whether they have the potential to be affected by the proposed work. Taylored Archaeology's investigation included a records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Information System (CHRIS) to identify previously recorded resources and prior studies within 1 mile of the APE, a review of the Native American Heritage Commission's (NAHC) Sacred Lands File and initiation of nongovernmental Native American outreach, and a pedestrian survey of the APE. The cultural records search included a review of pertinent USGS topographic maps, reports of previous cultural resource investigations, archaeological site, and survey base maps, cultural resource records (DPR forms), listings of the Historic Properties Directory of the Office of Historic Preservation, General Land Office Maps, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources.

The records search did not identify any cultural resources within the APE. One previous cultural resources investigation was conducted in 2001 by PAR Environmental Services, who evaluated an earthen, trough-shaped segment of the Traver Canal and a bridge along Road 56 (P-54-002171). The resource was evaluated for potential eligibility under the National Register of Historical Places, and it was determined that the resource is not eligible for listing due to major modifications (Appendix D). Three prior studies (TU-00183, TU-01189, and TU-01190) were conducted within the Direct APE.

The Native American Heritage Commission Sacred Lands File search and Native American contacts did not identify any sacred areas or provide information pertaining to Native American resources.

Taylored Archeology's' pedestrian survey on May 5th, 2023, did not identify any archaeological sites or tribal cultural resources within the Direct APE.

Regulatory Setting

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

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

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

Discussion

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

Less Than Significant Impact with Mitigation: An Archaeological Survey Report was prepared in June 2023 for the proposed project. The Report included Southern San Joaquin Valley Information Center records search, a Native American Heritage Commission Sacred Lands File search, Native American outreach, archival research, and pedestrian survey. This investigation did not identify any historic resources within the Project APE that could qualify for inclusion in the CRHR or NRHP. One previous cultural resources investigation was conducted in 2001 by PAR Environmental Services, who evaluated an earthen, trough-shaped segment of the Traver Canal, which was constructed in 1883, and a bridge along Road 56, which was constructed in 1963 (P-54-002171). The resource was evaluated for potential eligibility under the National Register of Historical Places, and it was determined that the resource is not eligible for listing due to major modifications that have significantly diminished its integrity. The Project does not propose any changes or alterations to the bridge or Traver Canal within the APE. The full Archaeological Survey Report is available in Appendix D.

Based on the results of this Archaeological Survey Report, no prehistoric or historic archaeological materials are located within the Project Site. The presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that impacts to this checklist item will be *less than significant with mitigation incorporation*.

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

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

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

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

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.

Mitigation Measure CUL-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the Site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

VI. ENERGY

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

Environmental Setting

Pacific Gas and Electric (PG&E) provides the region with natural gas and electricity services. PG&E is a subsidiary of the PG&E Corporation and serves approximately 16 million people throughout a 70,000-square-mile service area in northern and central California. PG&E supplies power to its customers from various renewable and nonrenewable sources. Table 3-6 below shows the proportion of each energy resource sold to California consumers by PG&E in 2017 compared to the statewide average.

Fuel Type		PG&E Power Mix	California Power Mix
Coal		0%	3%
Large Hydroelectric		4%	9.2%
Natural Gas		8.9%	37.9%
Nuclear		39.3%	9.3%
Other (Oil/Petroleum Coke/Waste Heat)		0%	0.2%
Unspecified Sources of Power[1]		0%	6.8%
Eligible Renewables	Biomass	4.2%	2.3%
	Geothermal	5.2%	4.8%
	Small Hydro	1.8%	1%
	Solar	25.7%	14.2%
	Wind	10.9%	11.4%
	Total Eligible Renewable	**47.7%**	**33.6%**

1. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

Table 3-6. 2021 PG&E and State average power resources; Source: California Energy Commission

Regulatory Setting

California Code of Regulations, Title 20 and Title 24: Title 20 of the California Code of Regulations establishes standards and requirements for appliance energy efficiency. The standards apply to a broad range of appliances sold in California. Title 24 of the California Code of Regulations is a broad set of standards designed to address the energy efficiency of new and altered homes and commercial buildings.

These standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Title 24 requirements are enforced locally by the City of Dinuba Building Department.

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

Discussion

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

Less Than Significant Impact: The proposed Project involves converting an existing 4-way intersection into a roundabout. During construction, energy use is primarily from the electricity and fuel consumed by construction vehicles and equipment. Energy use associated with Project construction was estimated using the Road Construction Emissions Model Version 9.0 (Appendix B) and EMFAC data. Energy use calculations are provided in Appendix E and summarized below in Table 3-7.

Source	Energy Use	
	Gallons	MBTU
Off-Road Equipment Fuel (Diesel)	32,402	4504
On-Road Vehicle Fuel (Gasoline)	11,605	1347
On-Road Vehicle Fuel (Diesel)	966	134
Total Construction Energy Use		**5,985**
Average Annual Construction Energy Use		**5,985**

Table 3-7. Construction Related Energy Use. Source: Road Construction Emissions Model & EMFAC (See Appendix E)

Title 24 Building Energy Efficiency Standards would guide construction techniques to maximize energy conservation. As such, it is anticipated that construction vehicle fuel energy would not involve wasteful, inefficient, or unnecessary energy consumption.

During Project operations, energy consumption would be minimal. Street lighting is proposed throughout the Project area, resulting in some energy use. However, the City of Dinuba Engineering Standards requires new streetlights to utilize energy-efficient LED luminaires. Additionally, the roundabout would replace the existing traffic signals, so the actual difference in energy demand would be negligible. Therefore, it is not anticipated that Project operations would result in wasteful, inefficient, or unnecessary energy consumption.

Because the proposed Project will comply with all energy efficiency standards required under Title 24 of the California Building Code and City of Dinuba Engineering Standards, it is presumed that the Project will not result in wasteful, inefficient, or unnecessary energy consumption. The impact is *less than significant.*

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

No Impact: The proposed Project will not conflict with or obstruct any state or local renewable energy or energy efficiency plans. The Project will be designed to meet Title 24 and the City of Dinuba's energy efficiency standards. The City of Dinuba Building Division will enforce compliance with these standards. There is *no impact*

Mitigation Measures for Energy

None Required

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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.	☐	☐	☑	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☑
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct and indirect risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☑	☐

Environmental Setting

Geologic Stability and Seismic Activity

- **Seismicity**: Tulare County is considered a low to moderate earthquake hazard area. The San Andreas Fault is California's longest and most significant fault zone and is approximately 40 miles west of the Tulare County Boundary. Owens Valley fault zone is the only active fault located within Tulare County. Section 5 of the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the Project Site as likely to experience low to moderate shaking from earthquakes and may experience higher levels if an earthquake occurs in or near the County. Ground shaking can

result in other geological impacts, including liquefaction, landslides, lateral spreading, subsidence, or collapse.

- **Liquefaction**: Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state due to severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil, which can result in landslides and lateral spreading. No specific countywide assessment of liquefaction has been performed; however, the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types in the area were either too coarse or too high in clay content to be suitable for liquefaction.

- **Landslides**: Landslides refer to a wide variety of processes that result in the downward and outward movement of soil, rock, and vegetation under gravitational influence. Natural and human-induced slope stability changes can cause landslides and often accompany other natural hazard events, such as floods, wildfires, or earthquakes. The eastern portions of the County are considered to be at a higher risk of landslides with steep slopes. However, because of its flat topography, most of the County, including the proposed Project Site, is at low risk of landslides and mudslides. The 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan states that landslide events within Tulare County's populated areas are unlikely.

- **Subsidence**: Land Subsidence refers to the vertical sinking of land due to either manmade or natural underground voids. Subsidence has occurred throughout the Central Valley at differing rates since the 1920s due to groundwater, oil, and gas withdrawal. Tulare County is prone to accelerated subsidence during drought, with some areas sinking up to 28 feet. Although western portions of the County show signs of deep and shallow subsidence, most of the County, including the proposed Project Site, is not considered at risk of subsidence-related hazards.

Soils Involved in Project: The proposed Project involves the construction on top of one soil type. The properties of this soil are described below:

- **Hanford Sandy Loam, 0 to 2 percent slopes:** The Hanford series consists of deep, well-drained soils formed in moderately coarse-textured alluvium derived primarily from granite. These soils form in floodplains and alluvial fans, have high permeability to a depth of over 80 inches, and have a very low runoff class.

Regulatory Setting

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

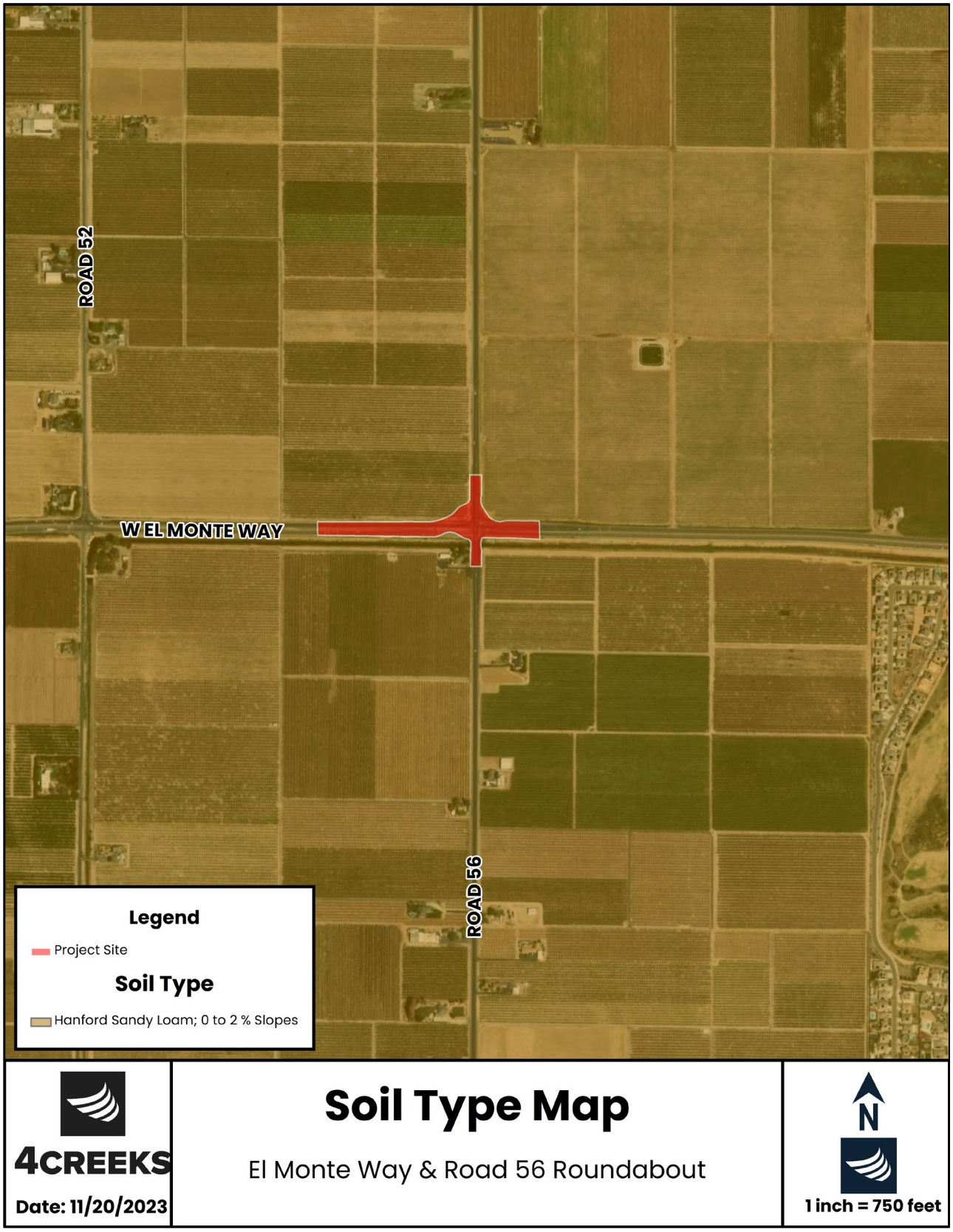


Figure 3-5. Soils Map

Discussion

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

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

Less than Significant Impact: According to the Tulare Multi-Jurisdictional Local Hazard Mitigation Plan, no active faults underlay the Project Site. Although the Project is located in an area of relatively low seismic activity, the Project could be affected by ground shaking from nearby faults. The potential for strong seismic ground shaking on the Project Site is not a significant environmental concern due to the infrequent seismic activity of the area and the distance to the faults. The Project has no potential to indirectly or directly cause the rupture of an earthquake fault. Therefore, the risk of loss, injury, or death involving a rupture of a known earthquake fault would be *less than significant.*

ii. Strong seismic ground shaking?

No Impact: According to the Tulare Multi-Jurisdictional Local Hazard Mitigation Plan, the Project Site is located in an area of relatively low seismic activity. The proposed Project does not include any activities or components which could feasibly cause strong seismic ground shaking, either directly or indirectly. There is *no impact.*

iii. Seismic-related ground failure, including liquefaction?

No Impact: No specific countywide assessment of liquefaction has been performed; however, the Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types are unsuitable for liquefaction. There is *no impact.*

iv. Landslides?

No Impact: The proposed Project Site is generally flat, with no hill slopes. As a result, there is almost no potential for landslides. No geologic landforms exist on or near the Site that would result in a landslide event. There is *no impact.*

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

Less Than Significant Impact: Because the Project Site is relatively flat, the potential for erosion is low. However, construction-related activities and increased impermeable surfaces can increase the probability of erosion. Construction-related impacts related to erosion will be temporary and subject to best management practices (BMPs) required by SWPPP, which are developed to prevent significant impacts from construction. The Project would extend stormwater collection lines through the intersection, and stormwater from the roundabout would be collected and conveyed through the City's stormwater management system. Because erosion-related impacts would be temporary and

limited to construction and require best management practices would prevent significant impacts related to erosion, the impact will remain *less than significant.*

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

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

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

No Impact: Expansive soils contain large amounts of clay, which absorb water and cause the soil to increase in volume. Conversely, the soils associated with the proposed Project Site have relatively low levels of clay. Because the soils associated with the Project are not suitable for expansion, implementation of the Project will pose no direct or indirect risk to life or property caused by expansive soils, and there is *no impact.*

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

No Impact: No wastewater will be generated as a part of the proposed project. There is no *impact.*

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

Less Than Significant Impact: There are no unique geologic features and no known paleontological resources located within the Project area and no excavation is proposed in undisturbed soils, particularly to a depth with a potential to unearth paleontological resources. Potential impacts resulting from Project implementation would be *less than significant.*

Mitigation Measures for Soils and Geology

None Required

VIII. GREENHOUSE GAS EMISSIONS

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

Environmental Setting

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

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

GHGs, as defined by AB 32, include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs, as defined by AB 32, are summarized in Table 3-8. Each gas's effect on climate change depends on three main factors. The first is the quantity of these gases in the atmosphere, followed by how long they stay, and finally, how strongly they impact global temperatures.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Methane (CH4)	Is a flammable gas and is the main component of natural gas	12 years	21	Emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Carbon dioxide (CO2)	An odorless, colorless, natural greenhouse gas.	30-95 years	1	Enters the atmosphere through burning fossil fuels (coal, natural gas and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
Chloro-fluorocarbons	Gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are non-toxic nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	55-140 years	3,800 to 8,100	Were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone.
Hydro-fluorocarbons	A man-made greenhouse gas. It was developed to replace ozone-depleting gases found in a variety of appliances. Composed of a group of greenhouse gases containing carbon, chlorine an at least one hydrogen atom.	14 years	140 to 11,700	Powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases.
Nitrous oxide (N2O)	Commonly known as laughing gas, is a chemical compound with the formula N2O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effects.	120 years	310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
Pre-fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	An inorganic, odorless, colorless, and nontoxic nonflammable gas.	3,200 years	23,900	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing and as a tracer gas.

Table 3-8. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

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

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

Regulatory Setting

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

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

Discussion

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

Less Than Significant Impact: Greenhouse gas emissions for the proposed project's construction were modeled using the Road Construction Emissions Model, Version 9.0.0. The Emissions Model results can be found in Appendix B.

Construction: Greenhouse gasses would be generated during construction from activities including grubbing/land clearing, grading/excavation, drainage/utilities/subgrade, and paving. The Road Construction Emissions Model report predicts that this Project will create a maximum of 358.2 tons of CO2 emissions during construction. Because the SJVAPCD does not have numeric thresholds for assessing the significance of construction-related GHG emissions, predicted emissions from Project construction were compared to Council of Environmental Quality (CEQ) thresholds for construction-related GHG emissions. The CEQ currently has a presumptive threshold of 10,000 metric tons of CO2e per year for construction emissions amortized over a 30-year Project lifetime. Because Project construction would generate far less GHG emissions than this threshold, impacts related to GHG emissions during Project construction would be less than significant.

Operation: As discussed in the Air Quality section of this Initial Study, the proposed Project is being implemented as part of the FHWA's CMAQ program, which funds air quality improvement projects. As such, the Project is expected to result in significant emissions reductions. The Project would not

generate any additional vehicle trips, and there will be no stationary source emissions resulting from the Project.

Because the project's construction will result in less than significant increases in GHG emissions, and the project's operation would reduce GHG emissions at the subject intersection, the impact is considered *less than significant.*

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

No Impact: The proposed Project will comply with all Federal, State, and Local rules on regulating greenhouse gas emissions. In addition, the Project will implement Best Performance Standards developed by the SJVAPCD. Projects implementing Best Performance Standards are determined to have a less than significant impact on global climate change. The Project will not conflict with any plan, policy, or regulation developed to reduce GHG emissions. There is *no impact.*

Mitigation Measures for Greenhouse Gas Emissions

None Required

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☑	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☑	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard or excessive noise to the public or the environment?	☐	☐	☐	☑
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?	☐	☐	☐	☑
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
g) Expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

Environmental Setting

The proposed Project Site is located approximately 2.5 miles from the nearest existing school (Grand View Elementary School), 8.5 miles from the nearest public airport (Reedley Municipal Airport), and 10.25 miles from the nearest private airstrip (Gilbert Aviation Heliport – CA83).

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

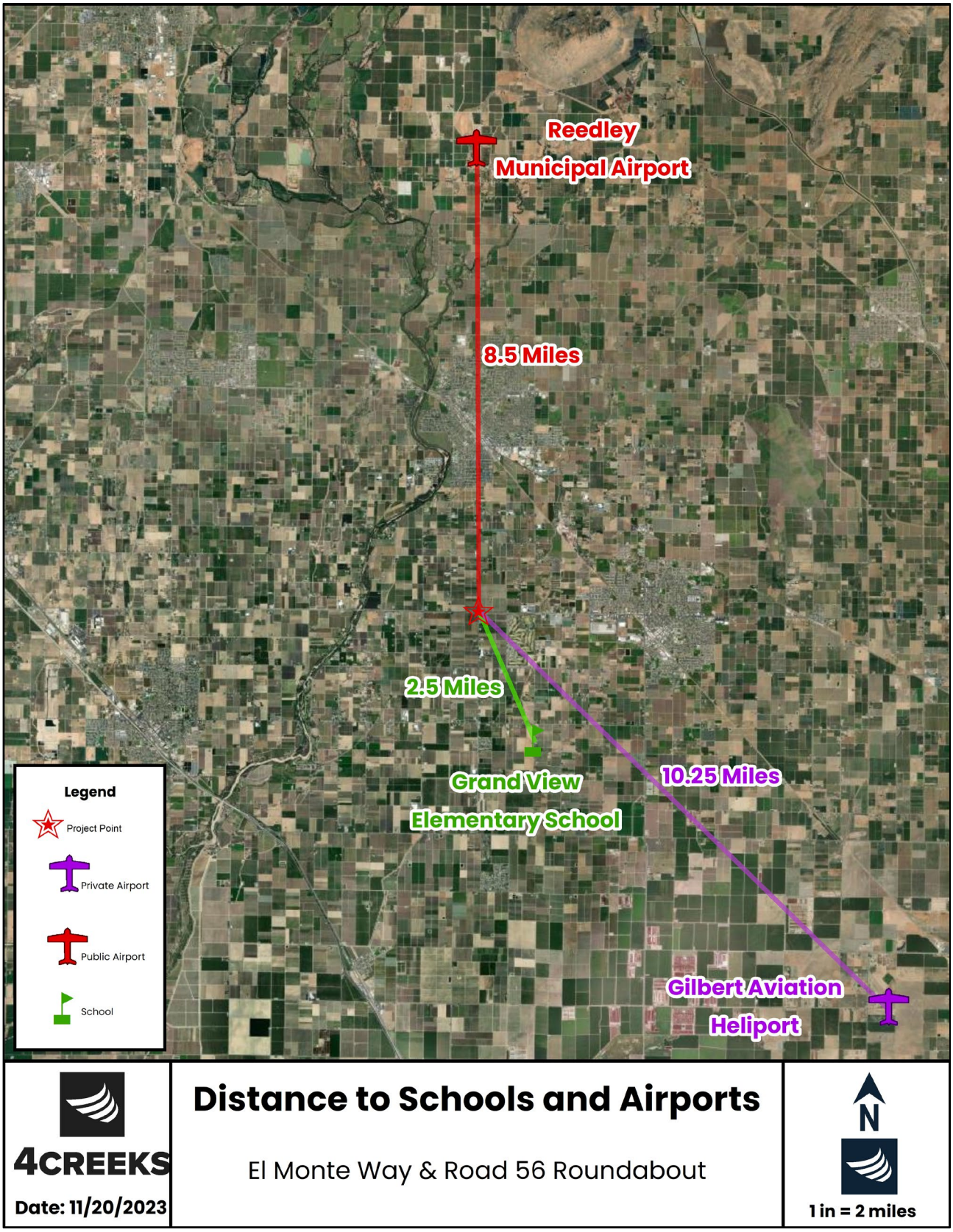


Figure 3-6. Distance to Schools and Airports Map

Regulatory Setting

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S. Code [U.S.C.] §9601 et seq.). The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or the Superfund Act) authorizes the President to respond to releases or threatened releases of hazardous substances into the environment.

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

Toxic Substances Control Act of 1976 (15 U.S.C. §2601 et seq.). The Toxic Substance Control Act was enacted by Congress in 1976 and authorized the EPA to regulate any chemical substances determined to cause an unreasonable risk to public health or the environment.

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

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

California Code of Regulations, Title 22, Chapter 11. Title 22 of the California Code of Regulations contains regulations for identifying and classifying hazardous wastes. The CCR defines waste as hazardous if it has the following characteristics: ignitability, corrosivity, reactivity, and/or toxicity.

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

Hazardous Materials Release Response Plans and Inventory Law of 1985. Pursuant to the Hazardous Materials Release Response Plans and Inventory Law of 1985, local agencies are required to develop "area plans" for response to releases of hazardous materials and wastes. Tulare County maintains a Hazardous Material Incident Response Plan to coordinate emergency response agencies for incidents and requires the submittal of business plans by persons who handle hazardous materials.

Discussion

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

Less than Significant Impact: Once constructed, the Project itself will not contain, use, or produce any hazardous materials. Project construction activities may involve using and transporting hazardous materials, such as fuels, oils, and other chemicals (e.g., pains, lead, adhesives, etc.) typically used during construction. Improper use, transportation, and storage of hazardous materials could result in accidental releases or spills that could pose health risks to workers, the public, and the environment. However, all materials used during construction would be contained, stored, and handled in compliance with all applicable standards and regulations established by DTSC, the EPA, and the Occupational Safety and Health Administration (OSHA). In addition, a Storm Water Pollution Prevention Plan (SWPPP) is required for the Project and will include emergency procedures for incidental hazardous materials releases. The SWPPP also includes Best Management Practices which include requirements for hazardous materials storage. Therefore, the impact is *less than significant.*

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

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

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

Less than Significant Impact: The Project is approximately 2.5 miles from the nearest school. The Project does not involve emissions or handling of hazardous materials, and the distance from the nearest school is over one-quarter mile, so there is *no impact.*

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

No Impact: The Project Site is not listed as a hazardous materials Site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control (DTSC). The Project would not create a significant hazard to the public or the environment, and there is *no impact.*

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

No Impact: The proposed Project is not located within an airport land use plan or two miles from an airport. Reedley Municipal Airport is the nearest airport to the Project Site, located approximately 8.5 miles away. Implementing the proposed Project would not result in a safety hazard or excessive noise for people residing or working in the Project area. There is *no impact.*

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

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

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

No Impact: The land surrounding the Project Site is developed with urban, suburban, and agricultural uses and is not considered wildlands. Additionally, the 2017 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan finds that fire hazards within the City of Dinuba, including the proposed Project Site, have low frequency, limited extent, magnitude, and significance. The proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and there is *no impact.*

Mitigation Measures for Hazards and Hazardous Materials

None Required

X. HYDROLOGY AND WATER QUALITY

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

Environmental Setting

Regional and Local Hydrology: The San Joaquin Valley has a variety of water sources, including the Sierra snowpack, rivers, and groundwater. The Central Valley has typical hot and dry summers. The Pacific Ocean is the source of storm events that spread rain over the Valley and its foothills while covering the high Sierra Nevada Mountains with snow.

Snowmelt runoff and flood flows caused by heavy rains are captured behind the Pine Flat Dam on the Kings River, the Terminus Dam on the Kaweah River, and the Friant Dam on the San Joaquin River. These large flows are managed and stored for flood control and spring and summer irrigation by tens of thousands of valley farmers.

The Project is in the Kings Subbasin aquifer of the San Joaquin Valley Groundwater Basin. The San Joaquin River bounds the Subbasin to the north, the Sierra Nevada foothills to the east, the South Fork of the Kings River to the south, and the Delta-Mendota and Westside Sub-basins to the west. Pumping water from the aquifer is vital for sustaining crops in places and at times when surface water is not available. Groundwater

is also the primary source of drinking water. The aquifer is not a limitless resource, and more water is being pumped out than replenished. However, this Project will not involve a well or sewage disposal or result in a threat of aquifer contamination or hazard to public health.

There are two agricultural canals on the southern and eastern border of the Project Site, which are classified as wetlands according to the National Wetland Inventory (Figure 7). Traver Canal runs along the southern boundary, and Buttonwillow Ditch runs along the eastern boundary. These canals are classified as riverine habitats by the National Wetlands Inventory, but the canals are entirely manmade and designed for water diversion and flood control, and the Project will not involve work directly on these waterways. There is also a manmade freshwater pond on the property on the southwestern corner of the intersection, but Project activities will not affect it. Within Dinuba are some small ponds, but the main water features are the network of agricultural canals and flood control channels traversing the area and the Lower Kings River, which is roughly 2 miles west of the City limits. Numerous agricultural ponds, groundwater recharge basins, and other similar features also occur in the surrounding landscape.

Existing Water Quality

- ***Surface Water Quality Objectives/Standards and Beneficial Uses***: Dinuba does not use surface water. The City may explore future opportunities to purchase surface water. The agricultural channels adjacent to the Project Site are man-made surface water delivery canals that deliver groundwater to rural and urban users. There are no natural water courses directly adjacent to the area. The Ditch is not listed as an impaired water body by the California Office of Environmental Health Hazard Assessment, nor does it appear on the 303(d) for any proposed TMDLs. However, the Lower Kings River, where water from the Ditch can potentially flow, is listed for moderate toxicity and is approximately 2 miles west of the intersection.
- ***Groundwater Quality Objectives/Standards and Beneficial Uses:*** The groundwater in Dinuba and the Project area is the sole water supply source. The water quality from the Kings Subbasin is sufficient for drinking water, agricultural uses, and all other uses. The Kings Subbasin is designated as critically over-drafted. The Project construction will require minimal water for dirt compaction and landscaping and will not affect the groundwater supply.

Regulatory Setting

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

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

City of Dinuba General Plan: The Dinuba General Plan contains the following hydrology and water quality policies.

- OSCR-3.10: Protect areas of natural groundwater recharge from land uses and disposal methods which would degrade groundwater quality. Promote activities which combine stormwater control, and water recharges.
- OSCR-3.11: The City will expand programs that enhance groundwater recharge in order to maintain the groundwater supply, including the installation of detention/retention ponds in new growth areas.
- PS-7.1: Continue to coordinate community irrigation ditch issues with Alta Irrigation District, private ditch companies, private landowners, and public agencies. Require that irrigation ditches be piped prior to development on adjacent property.
- PS-7.6: Design runoff drainage structures to decrease erosion.
- S-8.44: In flood-hazard areas, natural watercourses should be identified, and their flow capacities shall be preserved. This does not prohibit relocation. All grading, including relocation and agricultural grading, which can substantially affect natural drainage channels shall require a grading plan and City permit. The Director of Public Works shall review and approve the grading plan before work may be initiated.

Discussion

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

Less than Significant Impact: The Project will have less than a significant impact on water quality due to potentially polluted runoff generated during construction activities. Construction would include excavation, grading, and other earthwork that may occur across most of the 7.5-acre Project Site. During storm events, exposed construction areas across the Project Site may cause runoff to carry pollutants, such as chemicals, oils, sediment, and debris. However, implementation of a Stormwater Pollution Prevention Plan (SWPPP) will be required for the project. An SWPPP identifies all potential sources of pollution that could affect stormwater discharges from the Project Site and identifies best management practices (BMPs) related to stormwater runoff. Therefore, implementation of the SWPPP would render the impacts *less than significant.*

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

No Impact: The proposed Project, once operational, will not require ongoing use of water and, therefore, will not affect an aquifer or local water table. Therefore, the Project will have *no impact.*

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?

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

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

iv. Impede or redirect flood flows?

Less than Significant Impact with Mitigation Implementation:

Short-Term Impacts during Construction: During Project construction, there will be no changes to Traver Canal, and all flows will be able to pass through normally during construction. To reduce the potential impact of Project activities on the Traver Canal, the contractor will not initiate any work during the irrigation season, which varies annually.

Construction activities would involve soil-disturbing activities such as trenching, grading, and preparing the soil for the new piping and infrastructure for utilities, including water, storm drainage, and electrical services. Disturbed soil would be exposed to wind and water-generated erosion. All disturbed soil will be compacted to a minimum of 90% density to reduce erosion. All temporarily affected areas will be restored to pre-construction contours and conditions upon completion of construction activities.

The disturbed area of the Project Site does not discharge to a sensitive water body, either directly or indirectly. The receiving water risk is low, and the impact is less than significant with the implementation of Mitigation Measure HYD-1.

Long-Term Impacts During Operation and Maintenance: Runoff pollution from El Monte Way and Road 56 during operation can include dirt, rubber deposits, metal deposits, antifreeze, engine oil, and litter. However, the existing irrigation ditch contains underground irrigation pipes that do not return to the surface until outside the ROW. Therefore, impacts from the street and vehicles will be minimal and have already been considered when the irrigation pipes were constructed before this Project. Additionally, the existing underground pipes are expected to have been consistent with requirements outlined in the City of Dinuba Public Works Improvement Standards to safely divert water and prevent contamination from pollutants from the roadway.

By implementing Mitigation Measure HYD-1, the Project will not significantly impact water quality during construction or operation. The impact is *less than significant with mitigation.*

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

No Impact: The proposed Project is located inland and not near an ocean or large body of water and, therefore, would not be affected by a tsunami. The proposed Project is located in a relatively flat area and would not be impacted by inundation related to mudflow. Since the Project is located in an area that is not susceptible to inundation, the Project would not risk the release of pollutants due to Project inundation. As such, there is *no impact.*

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

No Impact: The proposed Project will not conflict with or obstruct the implementation of a water quality control plan. The proposed Project will be subject to the requirements of the NPDES Stormwater Program and will be required to comply with an SWPPP, which will identify all potential sources of pollution that could affect stormwater discharges from the Project Site and identify BMPs to prevent significant impacts related to stormwater runoff.

The proposed Project Site is within the jurisdiction of the Kings River East Groundwater Sustainability Agency (GSA). The Kings River East GSA adopted the Groundwater Sustainability Plan (GSP) in December 2019. The plan was reviewed for consistency with the proposed project, and it was determined that it does not conflict with and would not obstruct the implementation of the GSP. There is *no impact.*

Mitigation Measures for Hydrology and Water Quality

Mitigation Measure HYD-1: The Project shall implement the following Best Management Practices to prevent run-on and runoff pollution, properly dispose of wastes, and train employees and subcontractors.

- Construction will begin outside of the irrigation season when the Ditch will be dry. Soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses. All areas disturbed by Project activities shall be protected from washout or erosion. All drainage protective devices such as swales, interception ditches, protective berms, concrete channels, or other measures designed to protect improvements from runoff must be constructed before the construction of the project.
- The amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking should be minimized by applying water or other dust palliatives, as necessary. Watering should occur at least twice a day with complete coverage, preferably in the late morning and after work is completed for the day. Covering small stockpiles or areas is an alternative to applying water. The stockpiles should be located a minimum of fifty feet away from concentrated flows of stormwater, drainage courses, and inlets. The stockpiles should be protected using a temporary perimeter sediment barrier. All clearing, grading, earth moving, or excavation activities will cease during periods of high winds greater than twenty mph. Vehicles will be prohibited from being on non-active portions of the Project Site. All vehicles on Site will be limited to 15 MPH to reduce dust forming. The contractor shall maintain dust control on the Site as specified by "Caltrans Standard Specifications 2015".
- Stabilized construction access should be provided at entrances to reduce or eliminate the tracking of sediment onto public streets. Visible sediment tracking should be swept or vacuumed daily. For solid waste management from clearing and grubbing, BMPs would include providing designated waste collection areas and containers and arranging for regular disposal. For concrete waste management, the washout should be conducted offsite or in a designated area at least fifty feet from the Ditch.
- Vehicle and equipment cleaning, fueling, and maintenance should be done offsite or in a designated, contained area only. The discharge of petroleum products or other excavated materials to surface water channels is prohibited. The Discharger shall notify the City of Dinuba immediately of any spill of petroleum products or other organic or earthen materials.
- Following construction, all trenches will be filled to reduce any impact.
- The Discharger shall maintain a copy of the supporting documentation at the project Site during construction for review by Site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed project shall be adequately informed and trained regarding the conditions of the certification.
- The project disturbs over one acre of soil, therefore a Water Pollution Control Program and SWPPP will need to be prepared by the contractor per Caltrans 2010 Standard Specification Section 13-2.
- The Discharger shall notify the City of Dinuba immediately if any of the above conditions are violated, along with a description of measures it is taking to remedy the violation. By incorporating proper and accepted engineering practices and BMPs, the proposed project will not produce significant impacts on water quality during construction or its operation.

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Environmental Setting

The proposed project Site is 0.5 miles west of the City of Dinuba city limits and would affect approximately 7.5 acres and temporary construction easement areas along West El Monte Way and Road 56, with approximately 1.3 acres of ROW acquisitions would be required to complete the proposed project. El Monte Way and Road 56 are designated as arterial streets in the City of Dinuba General Plan. General Plan Land Use designations for properties adjacent to the intersection include Community Commercial to the northwest and southwest, General Commercial to the northeast, and Urban Reserve to the southeast. Although the proposed project is within the Sphere of Influence of the City of Dinuba, the project area is not included in the zoning code for the City. The project area is zoned under the Tulare County Zoning Ordinance as an Exclusive Agricultural Zone with a minimum of 20 acres to the north, south, east, and west.

Regulatory Setting

City of Dinuba General Plan: West El Monte Way and Road 56 are designated as arterial streets in the City of Dinuba General Plan.

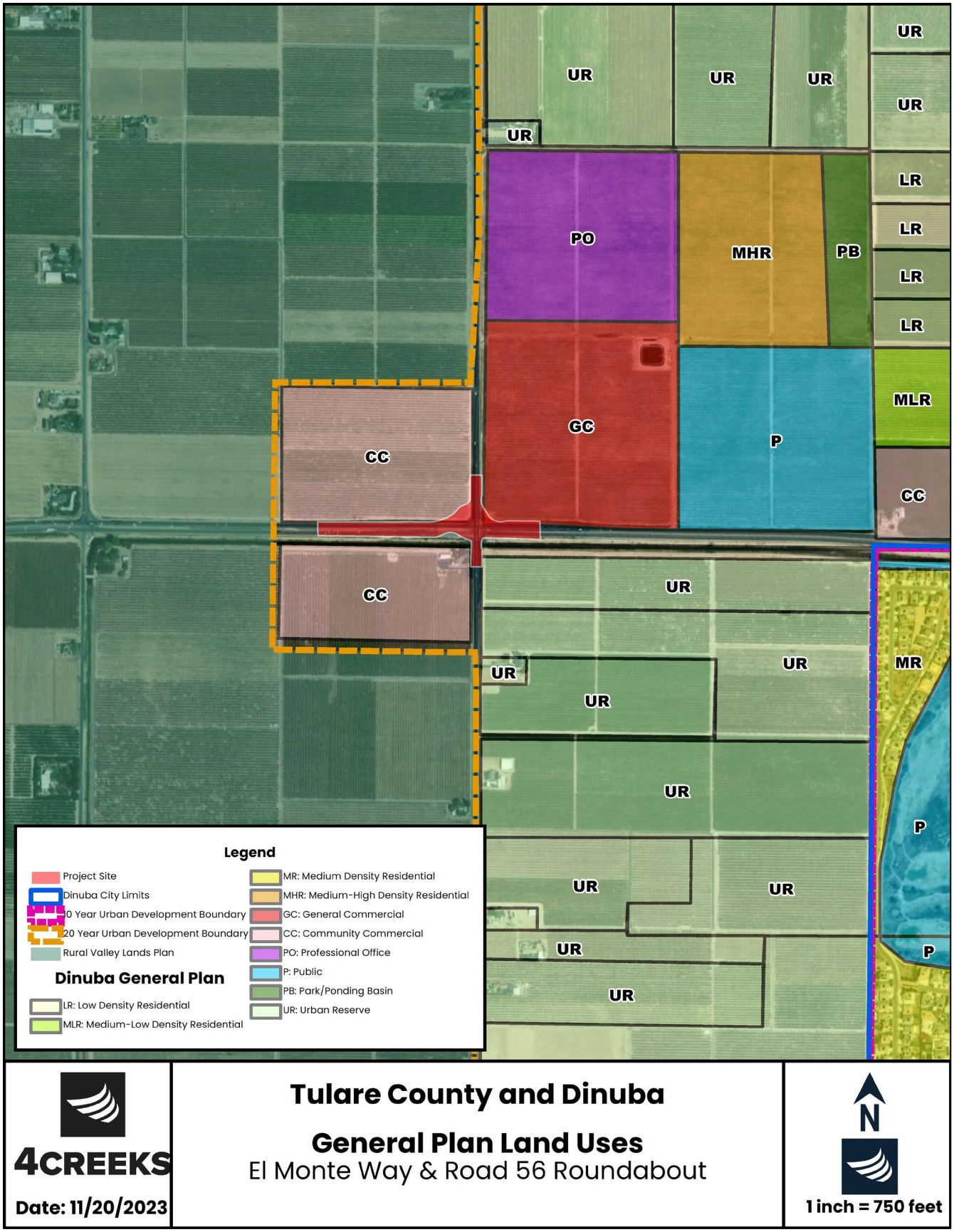


Figure 3-7. General Plan Land Use Map

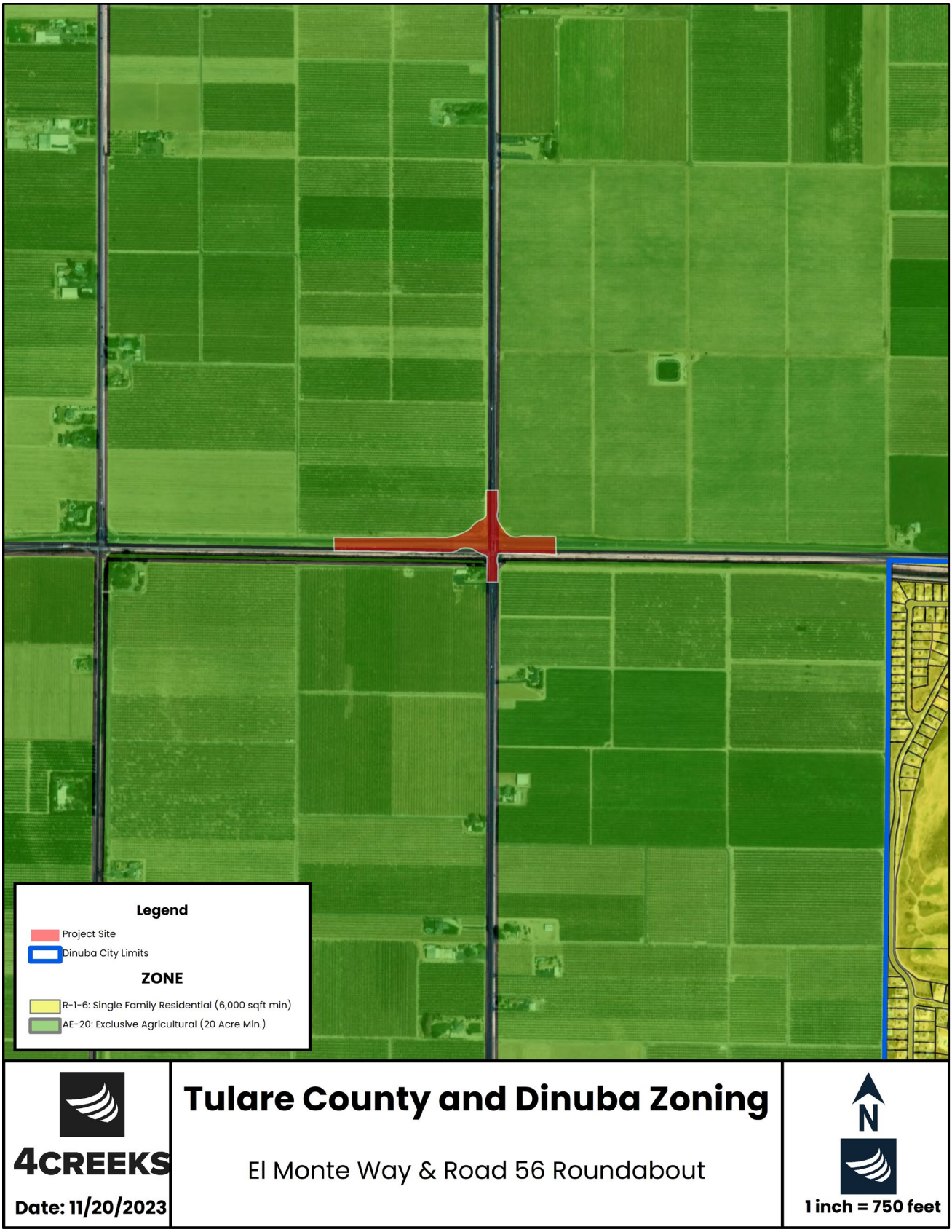


Figure 3-7. Tulare County Zoning Map

Discussion

a) Would the project physically divide an established community?

No Impact: The project proposes the replacement of a 4-way signalized intersection with a roundabout. The project would not act as a physical barrier within a community. There is *no impact.*

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact: The proposed project does not conflict with any applicable land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect. There is *no impact.*

Mitigation Measures for Land Use and Planning

None Required

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally - important mineral resource recovery site delineated on a local general plan, specific plan or other lands use plan?	☐	☐	☐	☑

Environmental Setting

Tulare County has no mineral resource zones, and no mineral extraction occurs on or adjacent to the proposed project Site. Historical mines within the County include mineral deposits of tungsten, copper, gold, magnesium, and lead; however, most of these mines are now closed – leaving only 37 active mining operations. There are no active mining operations within the City of Dinuba.

Regulatory Setting

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

Discussion

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

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

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

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

Mitigation Measures for Mineral Resources
None Required

XIII. NOISE

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

Environmental Setting

Noise is often described as an unwanted sound. Sound is the variation in air pressure that the human ear can detect. If the pressure variations occur at least 20 times per second, they can be detected by the human ear. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, called Hertz (Hz). Ambient noise is the "background" noise of an environment. Ambient noise levels on the proposed project Site are primarily due to agricultural activities and traffic. Construction activities usually result in an increase in sound above ambient noise levels.

Discussion

a) Would the project result in generation of a substantial temporary or permeant increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact: Project construction is anticipated to last approximately three months and will involve temporary noise sources. The average noise levels generated by construction equipment used in the proposed project are shown below.

Type of Equipment	dBA at 50 feet
Air Compressors	81
Excavators	81
Concrete/Industrial Saws	76
Cranes	83
Forklifts	75
Generators	81
Pavers	89
Rollers	74
Dozers	85
Tractors	84
Loaders	85
Backhoes	80
Graders	85
Scrapers	89
Welders	74

Table 3-9. Noise levels of noise-generating construction equipment. Source: Federal Highway Administration Construction Noise Handbook.

The City of Dinuba Noise Ordinance identifies the following noise thresholds (Table 3-10). However, Section 9.54.070 of the Noise Ordinance states that noise regulations do not apply to construction, repair, or remodeling work accomplished according to a building electrical, plumbing, mechanical, or other construction permit issued by the city or other governmental agency or to the site preparation and grading, provided such work takes place between the hours of seven a.m. and ten p.m. on any day. The project will comply with these regulations, and construction will only occur Monday through Friday between 6:00 AM and 7:00 PM.

Distance from Inhabited Building	Noise Threshold
300 feet to the noise receiver	Unrestricted noise level
200 feet to the noise receiver	90 decibels at the property line of the noise source
100 feet to the noise receiver	80 decibels at the property line of the noise source
50 feet to the noise receiver	70 decibels at the property line of the noise source

Table 3-10. Noise Thresholds for Construction Sites.

The project itself will not generate long-term noise levels. The project will improve local roadway operations but not generate additional vehicle trips through the intersection. Therefore, The Project is not considered growth-inducing and will not result in noise impacts beyond what was previously analyzed in the City's General Plan EIR.

Because of the following factors, the impact is *less than significant.*

- Noise generated from construction would be temporary
- The construction activities would comply with all measures established by the City to limit construction-related noise impacts
- Operational noise would be consistent with existing noise levels, which was previously analyzed in the City's General Plan EIR.

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

Less than Significant Impact: Ground-borne vibration or ground-borne noise levels may occur as part of construction activities associated with the project. Construction activities will be temporary and will not expose persons to such vibration or noise levels for an extended period. Therefore, the impacts are *less than significant.*

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

No Impact: The Project Site is approximately 8.5 miles from the nearest airport (Reedley Municipal Airport). The Site is not within an Airport Land Use Plan and would not expose people to excessive airport noise. There is *no impact*.

Mitigation Measures for Noise

None Required

XIV. POPULATION AND HOUSING

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

Environmental Setting

The United States Census Bureau estimated the population in the City of Dinuba to be 25,139 in 2021. This population is an increase from the 2020 census, which counted the population in the City of Dinuba to be 24,563. Factors that influence population growth include job availability, housing availability, and the capacity of existing infrastructure.

Regulatory Setting

The development code and Land Use Element of the General Plan control the population size in the City of Dinuba. These documents regulate the number of dwelling units per acre allowed on various land uses and establish minimum and maximum lot sizes. These factors have a direct impact on the City's population size. The project Site is located entirely within the public ROW. Therefore, no residences are permitted within the project area.

Discussion

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

No Impact: The project proposes no new homes or residential structures currently on-site. The Project will improve local roadway operations but not generate additional vehicle trips. The Project is not considered to be growth-inducing. The proposed Project will not affect any regional population, housing, or employment projections anticipated by City of Dinuba policy documents. Therefore, there is *no impact*.

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

No Impact: The Project does not involve the removal of existing residences and would not displace any people. There is *no impact.*

Mitigation Measures for Population and Housing

None Required

XV. PUBLIC SERVICES

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

Environmental Setting

Fire: The City of Dinuba Fire Department serves the project Site. The City of Dinuba Fire Department will continue to provide fire protection services to the proposed project Site upon development.

Police: Law enforcement services are provided to the project Site via the Dinuba Police Department. The City of Dinuba will continue to provide police protection services to the proposed project Site upon development.

Schools: The proposed project Site is located within Dinuba Unified School District.

Discussion

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

a. Fire protection?

No Impact: The City of Dinuba Fire Department will continue to provide fire protection services within the project Site. No additional fire personnel or equipment is anticipated, as the Fire Station already serves the Site. There is *no impact.*

b. Police protection?

No Impact: The proposed Project will continue to be served by the City's Police Department. No additional police personnel or equipment is anticipated. There is *no impact.*

c. Schools?

No Impact: The proposed project does not contain any residential uses typically associated with an increased demand for schools. The project would not increase the population within the City of Dinuba and would therefore not increase demand upon School District resources. There is *no impact.*

d. Parks?

No Impact: The proposed Project would not increase demand for parks or other recreation facilities because it would not cause an increase in population. There is *no impact.*

e. Other public facilities?

No Impact: The proposed Project is not growth-inducing and is within the land use and growth projections identified in the City's General Plan. The Project would not result in increased demand for, or impacts on, other public facilities. There is *no impact.*

Mitigation Measures for Public Services

None Required

XVI. PARKS AND RECREATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Environmental Setting

The City of Dinuba owns and operates 12 parks within the City limits. Rose Ann Vuich Park is the closest recreational area to the project Site and is located approximately 3.5 miles east of the project Site.

Discussion

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

No Impact: The proposed project does not contain any features that would increase the use of existing neighborhood parks, regional parks, or other recreational facilities. There is *no impact.*

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact: The proposed project does not include any recreational facilities and would not necessitate the construction or expansion of additional recreational facilities. There is *no impact.*

Mitigation Measures for Parks and Recreation

None Required

XVII. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☑	☐
b) Conflict or be inconsistent with the CEQA guidelines Section 15064.3, Subdivision (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)?	☐	☐	☑	☐
d) Result in inadequate emergency access?	☐	☐	☑	☐

Environmental Setting

Vehicular Access: The project includes converting a four-way signalized intersection into a two-lane roundabout at El Monte Way/Avenue 416 and Road 56. Vehicular access to the project is available from Road 56 to the north and South and from El Monte Way/Avenue 416 to the east and west. The project will involve the construction of multi-lane entries from El Monte Avenue to better conform to the existing two-lane roadway and to facilitate right-turn-only lanes onto Road 56. The construction may use roadway detours and/or lane closures to control traffic during construction. The project area is not located in an area with significant pedestrian or cyclist travel, so no pedestrian or cyclist facilities are proposed, as these uses are not expected to increase in the future.

Parking: During construction, workers will utilize a temporary construction easement adjacent to the project Site for parking and equipment staging. No permanent personnel will be on-Site during project operations, and no additional parking facilities will be required.

Regulatory Setting

City of Dinuba Improvement Standards: The City of Dinuba Improvement Standards are developed and enforced by the City of Dinuba's Engineering Division to guide the development and maintenance of City Roads.

City of Dinuba General Plan: El Monte Way and Road 56 are designated as arterial streets in the City of Dinuba General Plan.

Discussion

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

Less than Significant Impact: The project includes converting a four-way signalized intersection into a single-lane roundabout, installation of pedestrian/cyclist facilities where needed (sidewalks, crosswalks, bicycle ramps), and related improvements (signage/striping, landscaping). The proposed project is located in the City of Dinuba and would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. A project's effect on automobile delay, typically measured based on "level of service" (LOS), would not constitute a significant environmental impact under the CEQA Guidelines effective July 1, 2020. This impact is *less than significant.*

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

Less than Significant Impact: As described in Section 15064.3: "Vehicle miles traveled" refers to the amount and distance of automobile travel "attributable to a project." The OPR Technical Advisory recommends several VMT metrics, screening criteria, VMT evaluation methodology, and significance thresholds for different types of projects.

For Transportation projects, OPR recommends evaluating projects based on their likelihood of inducing a measurable and substantial increase in vehicle travel. The OPR Technical Advisory states that installing roundabouts or traffic circles will not likely lead to a substantial or measurable increase in vehicle travel and should generally not require an induced travel analysis.

Because installation of the proposed roundabout is not anticipated to result in a substantial or measurable increase in vehicle travel, the project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b). The impact is *less than significant.*

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

Less than Significant Impact: The proposed project is not anticipated to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Improvements would include converting a four-way signalized intersection into a two-lane roundabout. This roundabout includes multi-lane entries on all four sides that transition into right-turn-only lanes and a standard truck apron around the central island to accommodate large trucks that often pass through the intersection. Construction activities will include the demolition of existing asphalt, sidewalk, and curb within project limits, placement of aggregate base and pavement, piping of existing irrigation ditch underground, the extension of sewer and stormwater lines through the intersection, and street light installation. The proposed project design will be subject to review and permitting by the City of Dinuba and other agencies (as described in the Project Description) to ensure the design and construction are consistent with applicable standards. This impact is *less than significant.*

d) Would the project result in inadequate emergency access?

Less Than Significant Impact: The proposed project would replace an existing 4-way signalized intersection with a roundabout. The project is expected to reduce travel delays and improve roadway operations. Therefore, the proposed project is anticipated to enhance emergency access and would not result in inadequate emergency access. This impact is l*ess than significant.*

Mitigation Measures for Transportation

None Required

XVIII. TRIBAL CULTURAL RESOURCES

Would the project: 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:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 Public Resources Code section 5020.1(k), or	☐	☑	☐	☐
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.	☐	☑	☐	☐

Environmental Setting

Taylored Archaeology prepared an Archaeological Survey Report in June 2023. The full report can be found in Appendix D.

Taylored Archaeology conducted an archaeological survey of the Area of Potential Effects (APE) to determine if cultural resources are present and whether they have the potential to be affected by the proposed work. Taylored Archaeology's investigation included a records search to identify previously recorded resources and prior studies within 1 mile of the APE, a review of the Native American Heritage Commission's Sacred Lands File and initiation of Native American outreach, a review of pertinent topographic maps, aerial photographs, and General Land Office Plat Maps, and a pedestrian survey of the APE.

The records search did not identify any cultural resources within the APE, and there were three prior studies (TU-00183, TU-01189, and TU-01190) within the Direct APE. One previous cultural resources investigation was conducted in 2001 by PAR Environmental Services, who evaluated a segment of the Traver Canal and a bridge along Road 56 (P-54-002171). The resource was evaluated for potential eligibility under the National Register of Historical Places, and it was determined that the resource is not eligible for listing due to major modifications (Appendix D).

The Native American Heritage Commission Sacred Lands File search and Native American contacts did not identify any sacred areas or provide information pertaining to Native American resources.

Taylored Archaeology's pedestrian survey on May 5th, 2023, did not identify any archaeological sites, isolated artifacts, features, or tribal cultural resources within the Direct APE.

Definitions

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

- **Archaeological Resources:** As stated above, archaeological resources may be considered historical. If they do not meet the qualifications under the California Public Resources Code 21084.1 or California Code of Regulations Section 15064.5, they are instead determined to be "unique" as defined by the CEQA Statute Section 21083.2. A unique archaeological resource is an artifact, object, or site that: (1) contains information (for which there is a demonstrable public interest) needed to answer important scientific research questions; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

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

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

Regulatory Setting

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

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

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.

- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

Discussion

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: An Archaeological Survey Report was prepared by Taylored Archaeology in June 2023. The full report can be found in Appendix D. Taylored Archaeology's investigation included a records search to identify previously recorded resources and prior studies within 1 mile of the APE, a review of the Native American Heritage Commission's Sacred Lands File, and initiation of Native American outreach, a review of pertinent topographic maps, aerial photographs, and General Land Office Plat Maps, and a pedestrian survey of the APE.

The Native American Heritage Commission Sacred Lands File search and Native American contacts did not identify any sacred areas or provide information pertaining to Native American resources. Taylored Archaeology's pedestrian survey on May 5th, 2023, did not identify any prehistoric archaeological sites or tribal cultural resources within the Direct APE.

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

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: Based on the findings of the Archaeological Survey Report, which included a Cultural Resources Records Search, Native American Heritage Commission (NAHC) Sacred Lands File Search, Archival Research, Native American Outreach, and a Pedestrian Survey, there are no known tribal cultural resources within the project area. The full Archaeological Survey Report is available in Appendix D.

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

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.

Mitigation Measure CUL-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the Site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

XIX. UTILITIES AND SERVICE SYSTEMS

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

Environmental Setting

Wastewater: The proposed project will not generate wastewater. Sewer lines would be extended through the intersection as part of the proposed improvements, per City of Dinuba Public Improvement Standards.

Solid Waste: The proposed project will not generate solid waste and will not require solid waste collection services.

Water: No existing water lines are on the project Site, and water resources would be needed to support drought-tolerant landscaping. Water lines will be extended through the intersection as part of the proposed improvements to align with the City of Dinuba General Plan policies and per the City's Public Improvement Standards. The project would utilize minimal water resources to support drought-tolerant landscaping.

Storm Drainage: As part of proposed improvements, the Project includes extending storm drain lines through the intersection, according to City of Dinuba Development Standards. Stormwater would be collected and conveyed to the City's existing stormwater management system.

Regulatory Setting

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

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

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

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

Discussion

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

Less than Significant Impact: The proposed project will extend sewer, water, and stormwater lines through the project area to improve the El Monte Way and Road 56 intersection.

Although the project would result in the construction of new stormwater and wastewater collection facilities, the project itself will not generate wastewater, so it does not have to potential to exceed wastewater treatment capacities.

The proposed improvements would result in new impervious surfaces that could increase the amount of stormwater runoff. However, the project proposes to extend stormwater lines through the project area as part of the intersection improvements. Stormwater would be collected and conveyed through the City's existing stormwater management system, which has adequate capacity to accommodate these flows. The project will also incorporate appropriate pollution prevention and BMPs following the City design standards and RWQCB requirements. The extension of the existing water mains located approximately 0.5 miles from the project Site would be expanded to accommodate the irrigation of drought-tolerant landscaping on the roundabout's central island, which would utilize minimal water resources.

Because the improvements to the El Monte Way and Road 56 intersection, including sewer lines, stormwater lines, and water lines, would not require the construction of any additional water, wastewater treatment, storage drainage, electric power, natural gas, or telecommunications facilities beyond those analyzed in this IS/MND, the impact is *less than significant.*

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

Less than Significant Impact: The only water the proposed project uses would be to support project landscaping. The project would incorporate drought-tolerant landscaping, so water use is expected to be minimal. Existing water supplies are sufficient to serve the project during normal, dry, and multiple dry years. The impact is *less than significant.*

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

No Impact: The project itself will not generate wastewater. There is *no impact.*

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

No Impact: The project itself will not generate solid waste and would, therefore, not impair the attainment of solid waste reduction goals. There is *no impact.*

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

No Impact: The project will not generate solid waste and would, therefore, not conflict with any federal, state, or local management and reduction statutes or regulations related to solid waste. There is *no impact.*

Mitigation Measures for Utilities and Service Systems

None Required

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Regulatory Setting

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

Tulare County Disaster Preparedness Guide (2011): The Tulare County Preparedness Guide provides guidelines regarding disaster preparedness and evacuation planning for Tulare County residents.

Tulare County Multi-Jurisdictional Hazard Mitigation Plan (2018): The 2018 Tulare County Multi-Jurisdictional Hazard Mitigation Plan assesses the natural, technological, and human-caused risks to Communities within Tulare County. The proposed project Site is not in an area designated as a Fire Hazard Severity Zone by the Tulare County Multi-Jurisdictional Hazard Mitigation Plan.

Discussion

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

No Impact: The project would not substantially impair an adopted emergency response or evacuation plan. There is *no impact.*

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

No Impact: The project is on flat land with little fire risk. The Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan identifies fire risk within the City of Dinuba as having an unlikely frequency, limited extent, magnitude, and low significance. The project would not exacerbate wildfire risks and expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. There is *no impact.*

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

No Impact: The proposed project involves the installation of fire hydrants as part of proposed street improvements. If anything, installing these features would reduce fire risks within the vicinity of the project Site. There is *no impact.*

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

No Impact: The project Site is located on land with relatively flat topography. Therefore, the project would not be susceptible to downslope, downstream flooding, or landslides due to post-fire instability or drainage changes. There is *no impact.*

Mitigation Measures for Wildfire

None Required

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

Discussion

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

Less Than Significant Impact with Mitigation: This initial study/mitigated negative declaration found the project could significantly impact water, cultural, and Tribal cultural resources. However, implementing the identified mitigation measures for each respective section would ensure that impacts are *less than significant with mitigation incorporation.*

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact: CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the project's effects

are cumulatively considerable. The significance of the cumulative effects of a project must be assessed in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed project would not contribute substantially to cumulative adverse conditions or create any substantial indirect impacts (i.e., an increase in population could lead to an increased need for housing, an increase in traffic, air pollutants, etc.). Impacts would be *less than significant*.

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

Less Than Significant Impact: The analyses of environmental issues in this Initial Study indicate that the project is not expected to impact human beings, either directly or indirectly, substantially. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to less than significant, resulting in a less significant impact on this checklist item.

3.6 MITIGATION MONITORING AND REPORTING PROGRAM

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the project to monitor the implementation of the mitigation measures adopted for the project. This Mitigation Monitoring and Reporting Program (MMRP) has been created based upon the Initial Study/Mitigated Negative Declaration (IS/MND) findings for the El Monte Way & Road 56 Roundabout Project in the City of Dinuba.

The first column of the table identifies the mitigation measure. The second column names the party responsible for carrying out the required action. The third column, "Timing of Mitigation Measure," identifies when the mitigation measure should be initiated. The fourth column, "Responsible Party for Monitoring," names the party ensuring the mitigation measure is implemented. The City of Dinuba will use the last column to ensure that the individual mitigation measures have been monitored. Plan checking and verification of mitigation compliance shall be the responsibility of the City of Dinuba.

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1: A pre-construction survey shall be conducted by a qualified biologist to ensure that the western pond turtle is not present and will not be impacted during project construction. The pre-construction survey should be done no more than 14 days before project construction. The biologist will search for the presence of aquatic habitat for turtles and potential nesting habitat on the project site. If a nest is found, the biologist shall determine the size of a construction-free buffer for the duration of the nesting cycle. Wildlife exclusion fencing will also be built along the buffer and weighed down to ensure that wildlife cannot enter. Exit funnels will also be provided to allow turtles and other wildlife to exit the wildlife enclosure.	Project Sponsor & Construction Contractor	No more than 14 days before construction, Ongoing during construction.	City of Dinuba	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-2: A qualified biologist shall conduct a pre-construction survey to ensure that the burrowing owl is not present on the project site, and to assess whether there is any suitable habitat near the existing stream channels. During this survey, the qualified biologist shall assess soil types and properties on the site to determine whether there are suitable conditions for owl burrows. Surveys for burrowing owls will occur 14 days before any ground disturbance, regardless of the season. This survey will cover potential burrowing owl burrows in the project area and suitable habitats within 150 meters (500 feet). Evaluation of use by owls shall be by California Department of Fish and Wildlife survey guidelines (CBOC 1993, CDFG 1995, CDFG 2012). Surveys will document if burrowing owls are nesting or using habitat in or directly adjacent to the project area. Survey results will be valid only for the season (breeding (Feb 1-Aug 31) or non-breeding (Sept 1-Jan 31) during which the survey is conducted. If no active nests or burrows are detected during the pre-construction survey, no further action is required. If an active nest or burrow is seen, then minimization measures (described below) shall be implemented. A. Minimization/Establish Buffers: If burrowing owls are detected within the survey area, CDFW should be consulted to determine the suitable buffer. These buffers will consider the level of disturbance of the project activity, existing disturbance of the site (vehicle traffic, humans, pets, etc.), and time of year (nesting vs. wintering). If avoidance is not feasible, the District shall work with CDFW to determine appropriate mitigation, such as passive exclusion or translocation, and associated mitigation land offset.	Project Sponsor & Construction Contractor	No more than 14 days before construction, Ongoing during construction.	City of Dinuba	
Mitigation Measure BIO-3: A qualified biologist shall conduct a pre-construction survey to ensure that Sanford's arrowhead and California satintail are not present in the riparian corridors located on the southern and eastern boundaries of the project site. The qualified biologist shall assess soil types and site conditions to determine whether the site contains suitable habitat to support both of the special status plant species. If either species are found, buffers may be established to minimize impacts to the plant species.	Project Sponsor & Construction Contractor	No more than 14 days before construction, Ongoing during construction.	City of Dinuba	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Dinuba	
Mitigation Measure CUL-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Dinuba	

Mitigation Measure HYD-1: The Project shall implement the following Best Management Practices to prevent run-on and runoff pollution, properly dispose of wastes, and train employees and subcontractors. • Construction will begin outside of the irrigation season when the Ditch will be dry. Soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses. All areas disturbed by project activities shall be protected from washout or erosion. All drainage protective devices such as swales, interception ditches, protective berms, concrete channels, or other measures designed to protect improvements from runoff must be constructed before the construction of the project. • The amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking should be minimized by applying water or other dust palliatives, as necessary. Watering should occur at least twice a day with complete coverage, preferably in the late morning and after work is completed for the day. Covering small stockpiles or areas is an alternative to applying water. The stockpiles should be located a minimum of fifty feet away from concentrated flows of stormwater, drainage courses, and inlets. The stockpiles should be protected using a temporary perimeter sediment barrier. All clearing, grading, earth moving, or excavation activities will cease during periods of high winds greater than twenty mph. Vehicles will be prohibited from being on non-active portions of the Project site. All vehicles on site will be limited to 15 MPH to reduce dust forming. The contractor shall maintain dust control on the site as specified by "Caltrans Standard Specifications 2015". • Stabilized construction access should be provided at entrances to reduce or eliminate the tracking of sediment onto public streets. Visible sediment tracking should be swept or vacuumed daily. For solid waste management from clearing and grubbing, BMPs would include providing designated waste collection areas and containers and arranging for regular disposal. For concrete waste management, the washout should be conducted offsite or in a designated area at least fifty feet from the Ditch. • Vehicle and equipment cleaning, fueling, and maintenance should be done offsite or in a designated, contained area only. The discharge of petroleum products or other excavated materials to surface water channels is prohibited. The Discharger shall notify the City of Dinuba immediately of any spill of petroleum products or other organic or earthen materials. • Following construction, all trenches will be filled to reduce any impact. • The Discharger shall maintain a copy of the supporting documentation at the project site during	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Dinuba	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
construction for review by site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed project shall be adequately informed and trained regarding the conditions of the certification. • The project disturbs over one acre of soil, therefore a Water Pollution Control Program and SWPPP will need to be prepared by the contractor per Caltrans 2010 Standard Specification Section 13-2. • The Discharger shall notify the City of Dinuba immediately if any of the above conditions are violated, along with a description of measures it is taking to remedy the violation. By incorporating proper and accepted engineering practices and BMPs, the proposed project will not produce significant impacts on water quality during construction or its operation.				

3.7 Supporting Information and Sources

1. AB 3098 List
2. City of Dinuba General Plan
3. City of Dinuba General Plan EIR
4. City of Dinuba Public Improvement Standards (2023)
5. City of Dinuba Urban Water Management Plan
6. City of Dinuba Zoning Ordinance
7. Engineering Standards, City of Dinuba
8. SJVAPCD Regulations and Guidelines
9. Flood Insurance Rate Maps
10. California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
11. 2008 (California Environmental Quality Act CEQA Guidelines
12. California Building Code
13. CalEnviroScreen 4.0 Indicator Maps
14. California Natural Diversity Database (CNDDB) Bios6 Viewer
15. California Stormwater Pollution Prevention Program (SWPPP)
16. "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
17. California Native Plan Society (CNPS) Inventory of Rare Plants Database
18. Government Code Section 65962.5
19. California Environmental Protection Agency (CEPA)
20. California Energy Efficiency Strategic Plan: New Residential Zero Net Energy Action Plan 2015-2020, June 2015
21. National Wetlands Inventory (USFWS)
22. San Joaquin Valley Air Pollution Control District Mitigation Measures (http://www.valleyair.org/transportation/Mitigation-Measures.pdf)
23. "Residential Water Use Trends and Implications for Conservation Policy." Legislative Analyst's Office/The California Legislature's Nonpartisan Fiscal and Policy Advisor. March 2017.

Section 4

List of Preparers

City of Dinuba
405 E El Monte Way
Dinuba, CA 93291

SECTION 4
List of Preparers

Project Title: El Monte Way and Road 56 Roundabout

List of Preparers

4-Creeks Inc.

- David Duda, AICP, GISP
- Molly Baumeister, AICP, Planner/Project Manager
- Nate Antepenko, Assistant Planner
- Jason Watts, PE City Engineer

Persons and Agencies Consulted

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

City of Dinuba

- George Avila, Director of Public Works

Taylored Archaeology

- Consuelo Y. Sauls, Registered Professional Archaeologist

Appendix A

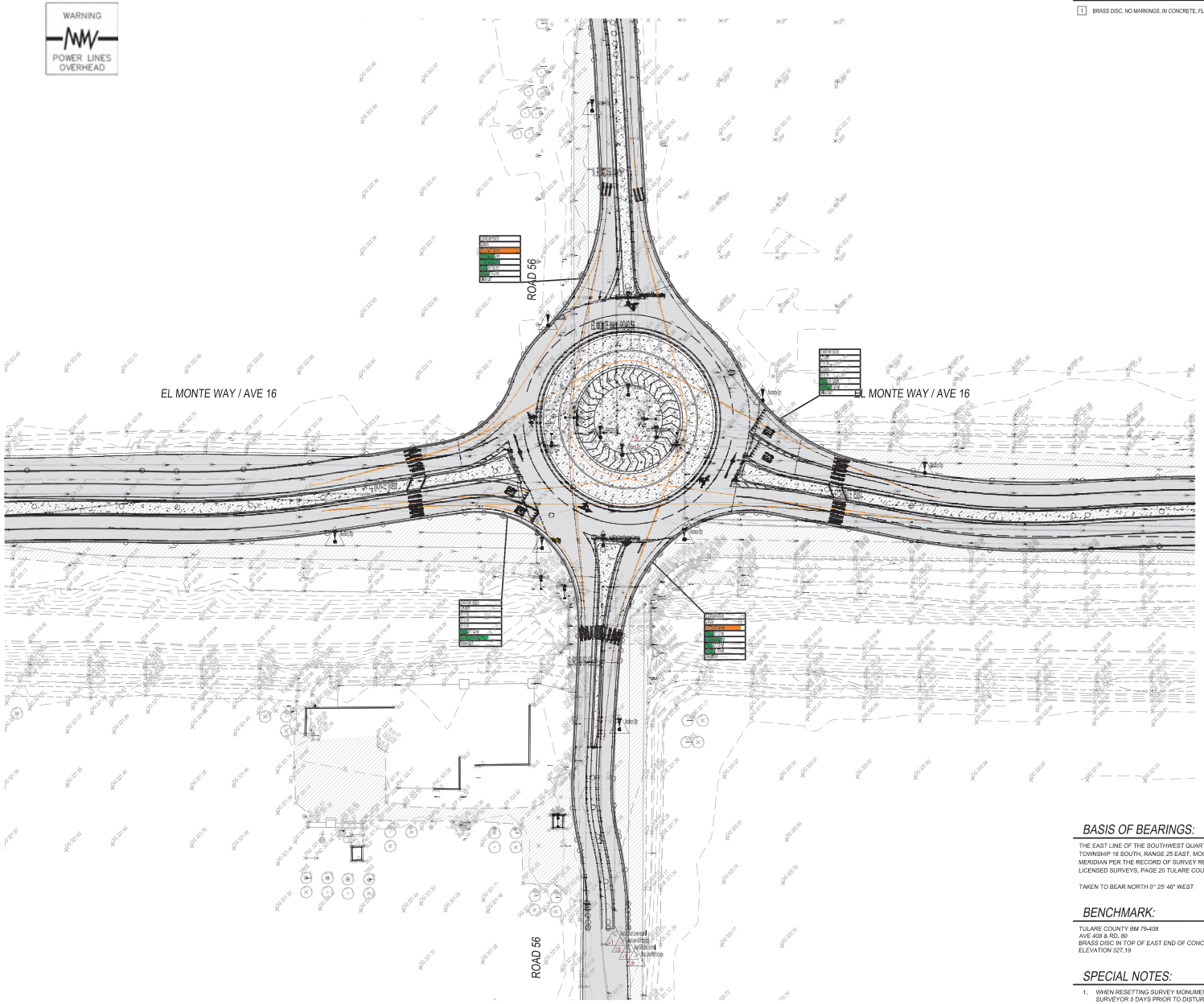
Improvement Plans

811
Know what's below.
Call before you dig.

WARNING
POWER LINES
OVERHEAD

MONUMENT DESCRIPTIONS:

1 BRASS DISC, NO MARKINGS, IN CONCRETE, FLUSH



BASIS OF BEARINGS:

THE EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 18 SOUTH, RANGE 25 EAST, MOUNT DIABLO BASE AND MERIDIAN PER THE RECORD OF SURVEY RECORDED IN VOLUME 20 OF LICENSED SURVEYS, PAGE 20 TULARE COUNTY RECORDS.

TAKEN TO BEAR NORTH 0° 25' 46" WEST

BENCHMARK:

TULARE COUNTY BM 79-408
AVE 408 & RD. 80
BRASS DISC IN TOP OF EAST END OF CONCRETE HEADWALL ON NORTH SIDE OF AVE. 408
ELEVATION 327.19

SPECIAL NOTES:

1. WHEN RESETTING SURVEY MONUMENT, THE CONTRACTOR SHALL NOTIFY THE CITY SURVEYOR 5 DAYS PRIOR TO DISTURBING THE SURVEY MONUMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECONSTRUCTING THE SURVEY MONUMENT IN ACCORDANCE WITH THE CITY OF DINUBA STANDARDS.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL ACQUIRE A CONSULTANT TO PERFORM A CORNER RECORD TO ENSURE THE RESETTING OF THE MONUMENT IS INSTALLED PER CITY SURVEYOR DIRECTION AND CITY OF DINUBA STANDARDS.

REVISIONS			
DATE	BY	DESCRIPTION	

SCOTT FOR CONSTRUCTION

APPROVED BY:
DATE
JASON WITTE, PE
PROJECT ENGINEER
RCE 65594

PREPARED BY:
4CREEKS
234 S. SANTA FE ST., STE. A
P.O. BOX 7193
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3315

DRN BY: AB | CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93616
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

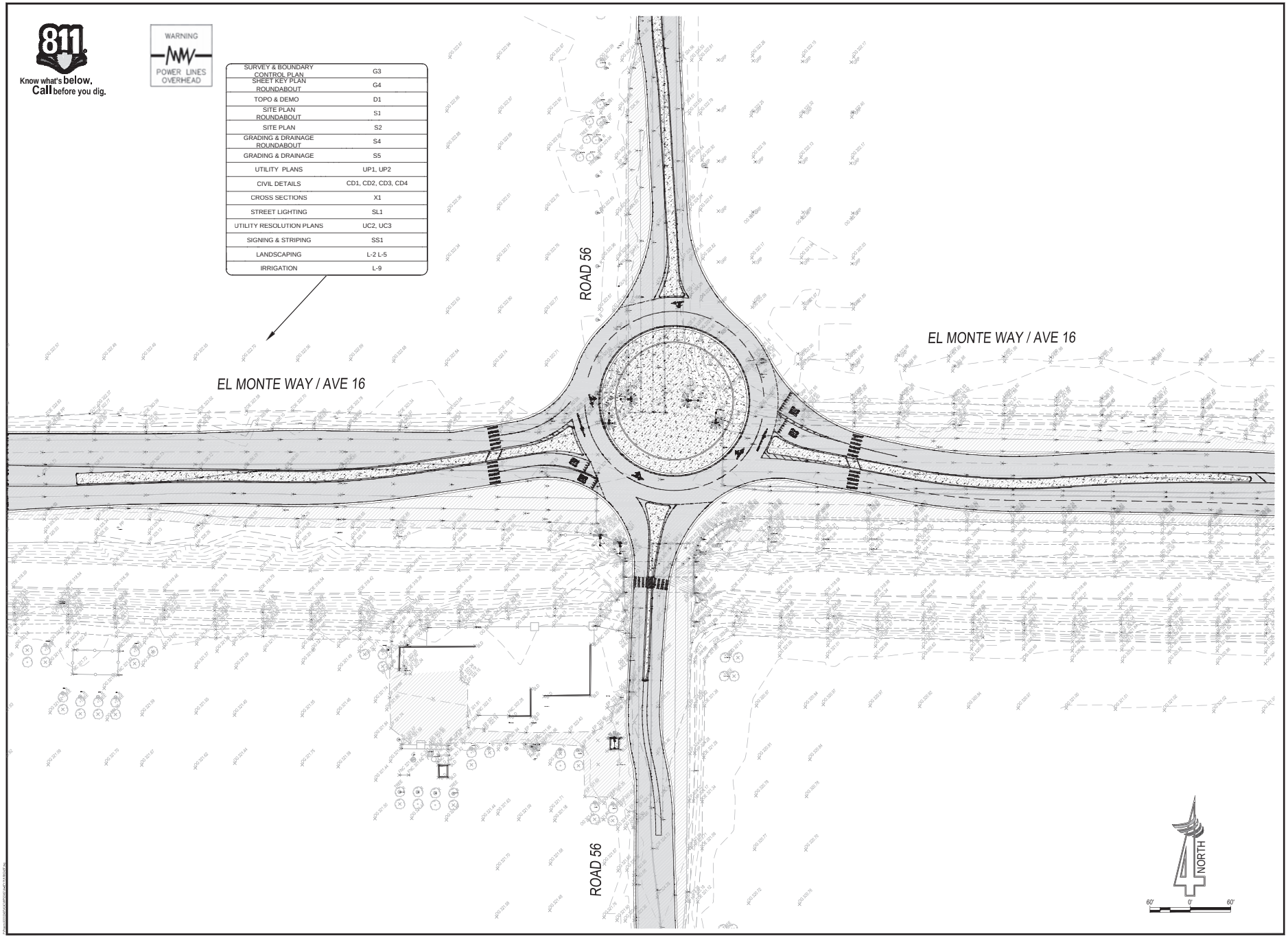
EL MONTE WAY / ROAD 56 ROUNDABOUT
SURVEY & BOUNDARY CONTROL PLAN

PLOT DATE:	5/11/2023
JOB NO.:	22497
FILE NAME:	22497-03-SRVY & BNDRY CNTRL
	G3
SHEET NO.:	3 OF 29

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WARNING
POWER LINES OVERHEAD

SURVEY & BOUNDARY CONTROL PLAN	G3
SHEET KEY PLAN ROUNDABOUT	G4
TOPO & DEMO	D1
SITE PLAN ROUNDABOUT	S1
SITE PLAN	S2
GRADING & DRAINAGE ROUNDABOUT	S4
GRADING & DRAINAGE	S5
UTILITY PLANS	UP1, UP2
CIVIL DETAILS	CD1, CD2, CD3, CD4
CROSS SECTIONS	X1
STREET LIGHTING	SL1
UTILITY RESOLUTION PLANS	UC2, UC3
SIGNING & STRIPING	SS1
LANDSCAPING	L-2 L-5
IRRIGATION	L-9



REVISIONS			
DATE	BY	DESCRIPTION	

APPROVED BY:
DATE
JASON WATTS, PE
PROJECT ENGINEER
RCE 85594

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CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 597-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
SHEET KEY PLAN ROUNDABOUT

PLOT DATE:	5/11/2023
JOB NO.:	22497
FILE NAME:	22497-04-KEY PLN RNDABT
	G4
SHEET NO.:	4 OF 29

811
Know what's below.
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WARNING
POWER LINES
OVERHEAD

DEMOLITION KEYNOTES

1. PACIFIC GAS AND ELECTRIC UTILITY POLE AND/OR GUY WIRE TO BE RELOCATED BY PG&E. CONTRACTOR TO COORDINATE AT NECESSARY
2. REMOVAL AND/OR RELOCATION OF EXIST. ELECTRICAL FACILITIES PER SEPARATE PLAN
3. SAWCUT EXIST. ASPHALT CONCRETE TO A NEAT CLEAN ON-GRADE EDGE
4. REMOVE & RELOCATE EXIST. SIGN PER SIGNING & STRIPING PLAN
5. REMOVE EXIST. TRAFFIC SIGNAL CONTROLLER ASSEMBLY, CONCRETE FOUNDATION AND BATTERY BACK UP & SALVAGE TO CITY OF DINUBA CORPORATE YARD
6. REMOVE EXIST. MAILBOX. NEW MAILBOX TO BE INSTALLED WITH DINUBA HIGH SCHOOL PROJECT. SEE SEPARATE PLANS
7. REMOVE EXIST. BOLLARD
8. PG&E TO REMOVE & RELOCATE EXIST. TRANSFORMER
9. REMOVE EXIST. ASPHALT DIKE
10. CONTRACTOR SHALL REMOVE AND SALVAGE EXIST. ELECTRICAL PULL BOX
11. NOT USED
12. PG&E TO REMOVE & RELOCATE EXIST. ELECTRICAL VAULT
13. NOT USED
14. REMOVE EXIST., CURB & GUTTER
15. CONTRACTOR SHALL PROTECT & RELOCATE EXIST., TESCO PANEL
16. REMOVE EXIST., TRAFFIC SIGNAL AND APPURTENANCES & SALVAGE TO CITY OF DINUBA CORPORATE YARD. CONTRACTOR SHALL REMOVE & DISPOSE EXIST. CONCRETE FOUNDATION
17. PACIFIC GAS AND ELECTRIC UTILITY POLE AND/OR GUY WIRE TO BE REPLACED BY PG&E. CONTRACTOR TO COORDINATE AT NECESSARY
18. REMOVE EXIST., TRAFFIC LOOPS, TYP.
19. REMOVE EXIST., CONCRETE
20. REMOVE & RELOCATE EXIST., UTILITY BOX (TO BE DONE BY OTHERS)
21. REMOVE EXIST. STORM DRAIN INLET/MANHOLE STRUCTURE
22. REMOVE EXIST. VENT PIPE
23. REMOVE EXIST. STORM DRAIN PIPE
24. REMOVE AND RELOCATE EXIST. SEWER LIFT STATION
25. EXIST. ALTA IRRIGATION DISTRICT (AID) FACILITIES WILL BE REMOVED OR REBAIN. AID IMPROVEMENTS WILL BE PERFORMED AS A SEPARATE PROJECT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REQUEST AS-BUILTS PRIOR TO CONSTRUCTION TO ENSURE CONFLICTS ARE AVOIDED
26. NOT USED
27. REMOVE & SALVAGE EXIST. STREET LIGHT
28. CONTRACTOR SHALL REMOVE AND SALVAGE EXIST. FIRE HYDRANT

PROTECTION NOTES (THIS SHEET ONLY)

1. PROTECT IN PLACE EXIST. ELECTRICAL BOX
2. PROTECT IN PLACE EXIST. 2" AND/OR 8" HIGH PRESSURE GAS PIPE
3. PROTECT IN PLACE EXIST. WELL AND STAND PIPE
4. PROTECT IN PLACE EXIST. MANHOLE & RAISE TO FINISHED GRADE
5. PROTECT IN PLACE EXIST. STORM DRAIN PIPE
6. PROTECT IN PLACE EXIST. WATER PIPE
7. PROTECT IN PLACE EXIST. SEWER PIPE
8. PROTECT IN PLACE EXIST. GAS VALVE
9. PROTECT IN PLACE EXIST. WATER VALVE & RAISE TO FINISHED GRADE

GENERAL DEMOLITION NOTES:

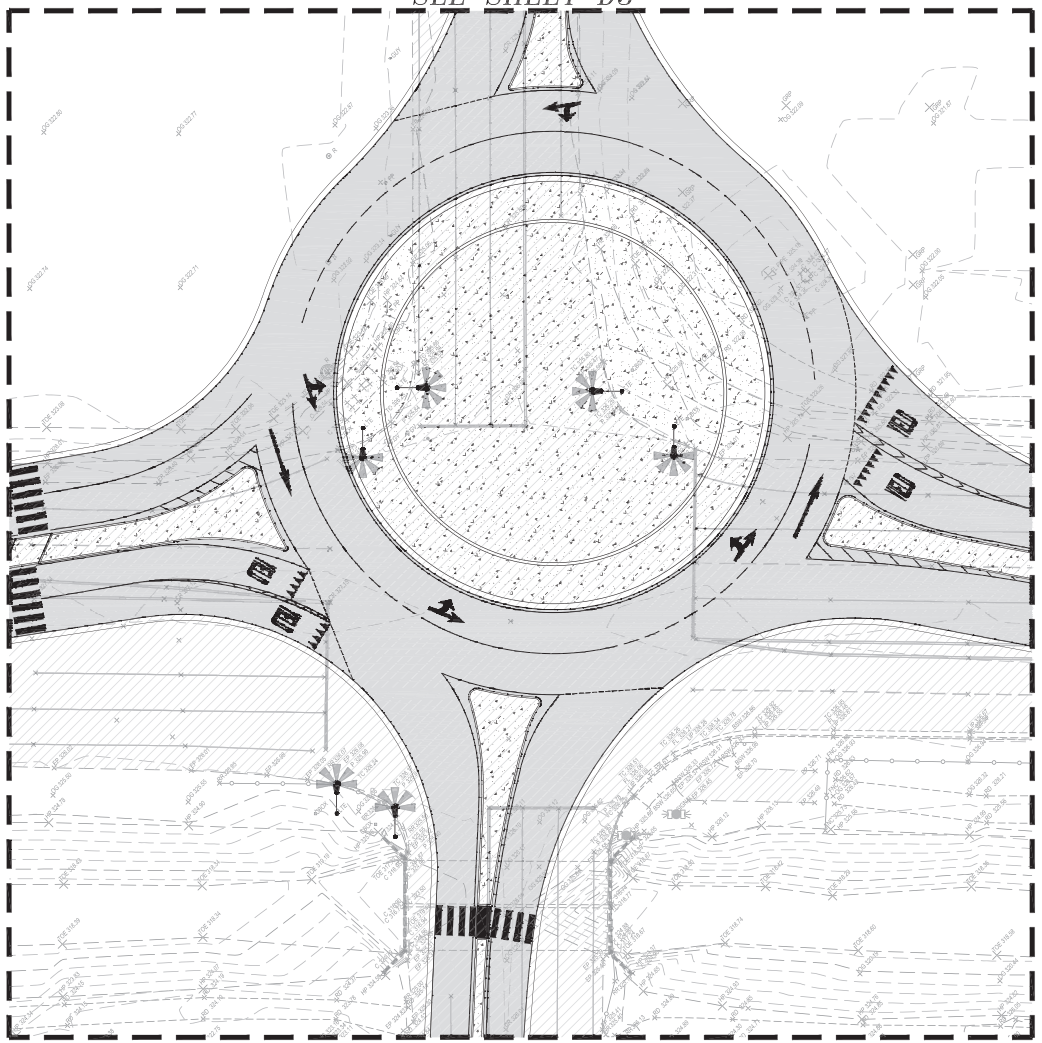
1. ALL SAWCUTS TO BE A NEAT, CLEAN ON GRADE EDGE.
2. CONTRACTOR TO REMOVE AND DISPOSE OF ALL VEGETATION, CONCRETE, IRRIGATION SYSTEMS, ASPHALT, AGGREGATE BASE , SOIL, FENCES, STRUCTURES, ETC, WITHIN APPROXIMATE LIMITS OF CLEARING, GRUBBING, AND DEMOLITION, UNLESS OTHERWISE NOTED ON THESE PLANS.
3. ALL EXISTING STREET SIGNS THAT CANNOT BE RE-USED SHALL BE RETURNED TO THE CITY OF DINUBA CORP. YARD.
4. ANY EXISTING MANHOLES AND/OR WATER VALVES ENCOUNTERED WHETHER OR NOT SHOWN ON THESE PLANS SHALL BE PROTECTED AND ADJUSTED TO FINISH GRADE.
5. ALL CONCRETE AND ASPHALT LOCATED OUTSIDE DEMOLITION LIMITS TO BE PROTECTED IN PLACE.
6. CONTRACTOR SHALL CAREFULLY REMOVE TREES AROUND EXISTING UNDERGROUND UTILITIES & PIPE LINES TO ENSURE NO DAMAGE OCCURS TO INFRASTRUCTURE.
7. CONTRACTOR SHALL NOT INITIATE ANY DEMOLITION ACTIVITY WITHIN ALTA I/25 EASEMENTS UNTIL RELOCATED IRRIGATION FACILITIES PASS INSPECTION AND ALTA ID ISSUES THE CONTRACTOR A NOTICE TO PROCEED FOR SAID ACTIVITY. SEE SHEETS XX-XX.
8. SEE SHEETS XX-XX FOR ALL DEMO ITEMS PERTAINING TO ALTA IRRIGATION DISTRICT FACILITIES

LEGEND

- APPROXIMATE LIMITS OF CLEARING, GRUBBING, & DEMOLITION
- EXISTING ASPHALT CONCRETE AND AGGREGATE BASE REMOVAL
- EXISTING CONCRETE REMOVAL
- EXISTING CURB & GUTTER / VALLEY GUTTER / ASPHALT CURB REMOVAL
- EXISTING VINE TRELLIS
- CONTRACTOR SHALL REMOVE EXIST. TREE OR SHRUB, REMOVE STUMP AND ROOTS TO A MINIMUM DEPTH OF 12" BELOW FINISHED GRADE. CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY PROPERTY OWNER 48 HOURS PRIOR TO REMOVAL
- EXISTING ASPHALT CONCRETE TO REMAIN AND BE PROTECTED

ROAD 56 STA: XX+00
SEE SHEET D3

EL MONTE WAY / AVE 16 STA: XX+00
SEE SHEET D2



EL MONTE WAY / AVE 16 STA: XX+00
SEE SHEET D2

ROAD 56 STA: XX+00
SEE SHEET D3

NORTH

20' 0' 20'

REVISIONS			
DATE	BY	DESCRIPTION	

APPROVED BY:
DATE
JASON MITTEL, RCE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
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CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
TOPO SURVEY & DEMO PLAN

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-05-TOPO & DEMO
ENGMT.
D1
SHEET NO.: 5 OF 29

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DEMOLITION KEYNOTES

1. PACIFIC GAS AND ELECTRIC UTILITY POLE AND/OR GUY WIRE TO BE RELOCATED BY PG&E. CONTRACTOR TO COORDINATE AT NECESSARY
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24. REMOVE AND RELOCATE EXIST. SEWER LIFT STATION
25. EXIST. ALTA IRRIGATION DISTRICT (AID) FACILITIES WILL BE REMOVED OR REMAIN. AID IMPROVEMENTS WILL BE PERFORMED AS A SEPARATE PROJECT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REQUEST AS-BUILTS PRIOR TO CONSTRUCTION TO ENSURE CONFLICTS ARE AVOIDED
26. NOT USED
27. REMOVE & SALVAGE EXIST. STREET LIGHT
28. CONTRACTOR SHALL REMOVE AND SALVAGE EXIST. FIRE HYDRANT

PROTECTION NOTES (THIS SHEET ONLY)

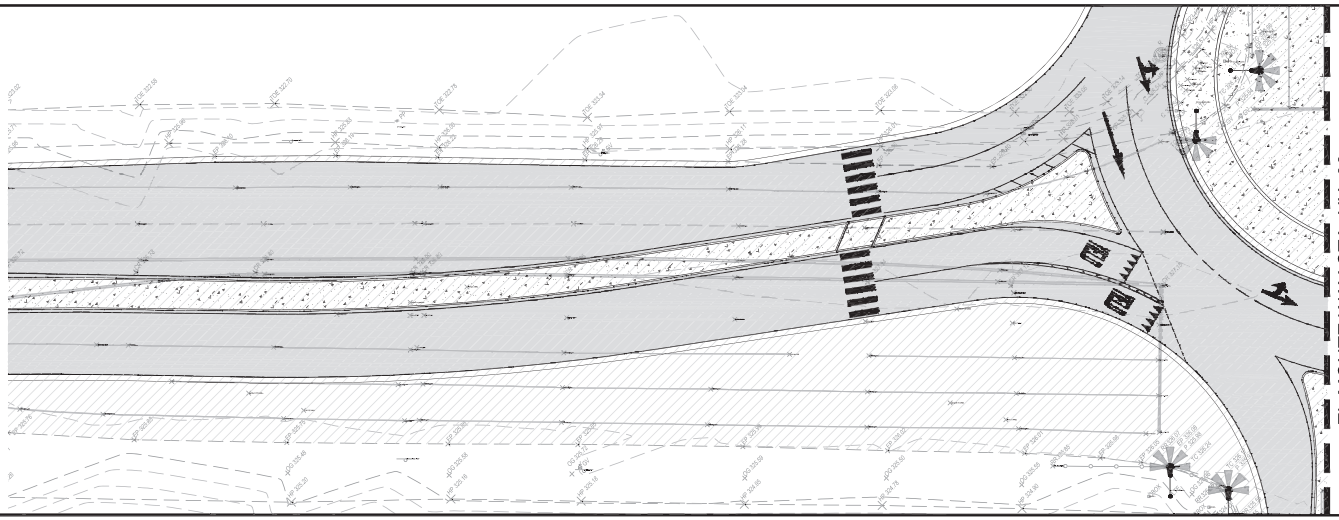
- PROTECT IN PLACE EXIST. ELECTRICAL BOX
- PROTECT IN PLACE EXIST. 2" AND/OR 8" HIGH PRESSURE GAS PIPE
- PROTECT IN PLACE EXIST. WELL AND STAND PIPE
- PROTECT IN PLACE EXIST. MANHOLE & RAISE TO FINISHED GRADE
- PROTECT IN PLACE EXIST. STORM DRAIN PIPE
- PROTECT IN PLACE EXIST. WATER PIPE
- PROTECT IN PLACE EXIST. SEWER PIPE
- PROTECT IN PLACE EXIST. GAS VALVE
- PROTECT IN PLACE EXIST. WATER VALVE & RAISE TO FINISHED GRADE

GENERAL DEMOLITION NOTES:

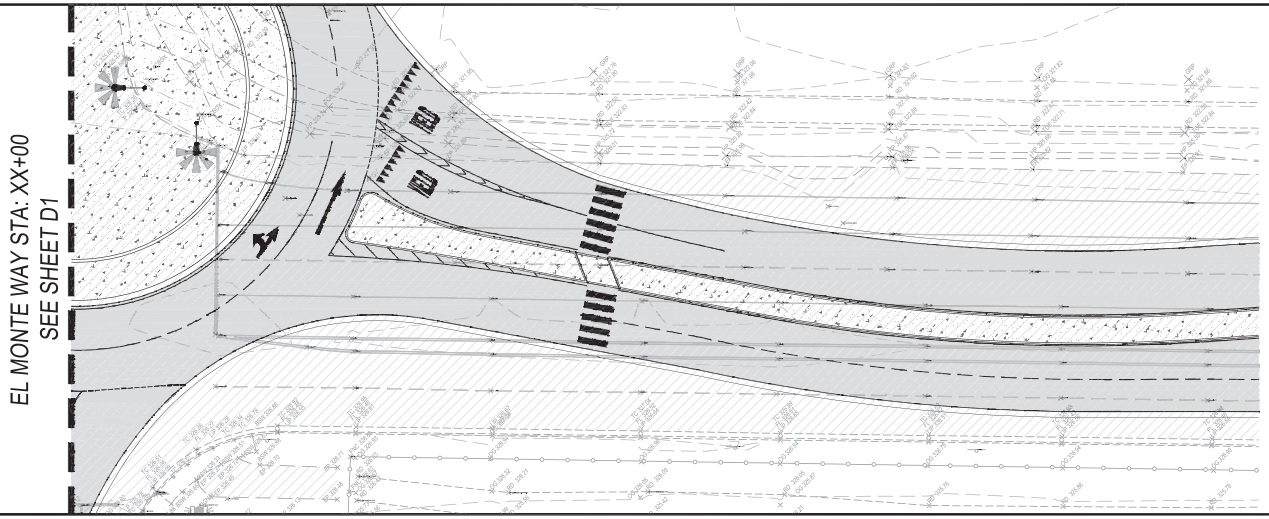
1. ALL SAWCUTS TO BE A NEAT, CLEAN ON GRADE EDGE.
2. CONTRACTOR TO REMOVE AND DISPOSE OF ALL VEGETATION, CONCRETE, IRRIGATION SYSTEMS, ASPHALT, AGGREGATE BASE , SOIL, FENCES, STRUCTURES, ETC, WITHIN APPROXIMATE LIMITS OF CLEARING, GRUBBING, AND DEMOLITION, UNLESS OTHERWISE NOTED ON THESE PLANS.
3. ALL EXISTING STREET SIGNS THAT CANNOT BE RE-USED SHALL BE RETURNED TO THE CITY OF DINUBA CORP. YARD.
4. ANY EXISTING MANHOLES AND/OR WATER VALVES ENCOUNTERED WHETHER OR NOT SHOWN ON THESE PLANS SHALL BE PROTECTED AND ADJUSTED TO FINISH GRADE.
5. ALL CONCRETE AND ASPHALT LOCATED OUTSIDE DEMOLITION LIMITS TO BE PROTECTED IN PLACE.
6. CONTRACTOR SHALL CAREFULLY REMOVE TREES AROUND EXISTING UNDERGROUND UTILITIES & PIPE LINES TO ENSURE NO DAMAGE OCCURS TO INFRASTRUCTURE.
7. CONTRACTOR SHALL NOT INITIATE ANY DEMOLITION ACTIVITY WITHIN ALTA I/S EASEMENTS UNTIL RELOCATED IRRIGATION FACILITIES PASS INSPECTION AND ALTA IO ISSUES THE CONTRACTOR A NOTICE TO PROCEED FOR SAID ACTIVITY. SEE SHEETS XX-XX.
8. SEE SHEETS XX-XX FOR ALL DEMO ITEMS PERTAINING TO ALTA IRRIGATION DISTRICT FACILITIES

LEGEND

- APPROXIMATE LIMITS OF CLEARING, GRUBBING, & DEMOLITION
- EXISTING ASPHALT CONCRETE AND AGGREGATE BASE REMOVAL
- EXISTING CONCRETE REMOVAL
- EXISTING CURB & GUTTER / VALLEY GUTTER / ASPHALT CURB REMOVAL
- EXISTING VINE TRELLIS
- CONTRACTOR SHALL REMOVE EXIST. TREE OR SHRUB, REMOVE STUMP AND ROOTS TO A MINIMUM DEPTH OF 12" BELOW FINISHED GRADE. CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY PROPERTY OWNER 48 HOURS PRIOR TO REMOVAL
- EXISTING ASPHALT CONCRETE TO REMAIN AND BE PROTECTED



EL MONTE WAY, STA: XX+00–XX+00





EL MONTE WAY, STA: XX+00–END

REVISIONS			
DATE	BY	DESCRIPTION	

APPROVED BY:

DATE

JASON LUTTRELL, QP
PROJECT ENGINEER
RCE 80594

PREPARED BY:

324 S. SANTA FE ST., STE. A
P.O. BOX 7293
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3315

4CREEKS

DRW BY: AB | CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
TOPO SURVEY & DEMO PLAN - EL MONTE WAY

PLOT DATE:	5/11/2023
JOB NO.:	22497
FILE NAME:	22497-06-TOPO & DEMO - EL MONTE
	D2
SHEET NO.:	8 OF 29

811 Know what's below. Call before you dig.



DEMOLITION KEYNOTES

1. PACIFIC GAS AND ELECTRIC UTILITY POLE AND/OR GUY WIRE TO BE RELOCATED BY PG&E. CONTRACTOR TO COORDINATE AT NECESSARY
2. REMOVAL AND/OR RELOCATION OF EXIST. ELECTRICAL FACILITIES PER SEPARATE PLAN
3. SAWCUT EXIST. ASPHALT CONCRETE TO A NEAT CLEAN DAYLIGHT EDGE
4. REMOVE & RELOCATE EXIST. SIGN PER SIGNING & STRIPING PLAN
5. REMOVE EXIST. TRAFFIC SIGNAL CONTROLLER ASSEMBLY, CONCRETE FOUNDATION AND BATTERY BACK UP & SALVAGE TO CITY OF DINUBA CORPORATE YARD
6. REMOVE EXIST. MAILBOX. NEW MAILBOX TO BE INSTALLED WITH DINUBA HIGH SCHOOL PROJECT. SEE SEPARATE PLANS
7. REMOVE EXIST. BOLLARD
8. PG&E TO REMOVE & RELOCATE EXIST. TRANSFORMER
9. REMOVE EXIST. ASPHALT DIKE
10. CONTRACTOR SHALL REMOVE AND SALVAGE EXIST. ELECTRICAL PULL BOX
11. NOT USED
12. PG&E TO REMOVE & RELOCATE EXIST. ELECTRICAL VAULT
13. NOT USED
14. REMOVE EXIST. CURB & GUTTER
15. CONTRACTOR SHALL PROTECT & RELOCATE EXIST. TESCO PANEL
16. REMOVE EXIST. TRAFFIC SIGNAL AND APPURTENANCES & SALVAGE TO CITY OF DINUBA CORPORATE YARD. CONTRACTOR SHALL REMOVE & DISPOSE EXIST. CONCRETE FOUNDATION
17. PACIFIC GAS AND ELECTRIC UTILITY POLE AND/OR GUY WIRE TO BE REPLACED BY PG&E. CONTRACTOR TO COORDINATE AT NECESSARY
18. REMOVE EXIST. TRAFFIC LOOPS, TYP.
19. REMOVE EXIST. CONCRETE
20. REMOVE & RELOCATE EXIST., UTILITY BOX (TO BE DONE BY OTHERS)
21. REMOVE EXIST. STORM DRAIN INLET/MANHOLE STRUCTURE
22. REMOVE EXIST. VENT PIPE
23. REMOVE EXIST. STORM DRAIN PIPE
24. REMOVE AND RELOCATE EXIST. SEWER LIFT STATION
25. EXIST. ALTA IRRIGATION DISTRICT (AID) FACILITIES WILL BE REMOVED OR REMAIN. AID IMPROVEMENTS WILL BE PERFORMED AS A SEPARATE PROJECT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REQUEST AS-BUILTS PRIOR TO CONSTRUCTION TO ENSURE CONFLICTS ARE AVOIDED
26. NOT USED
27. REMOVE & SALVAGE EXIST. STREET LIGHT
28. CONTRACTOR SHALL REMOVE AND SALVAGE EXIST. FIRE HYDRANT

PROTECTION NOTES (THIS SHEET ONLY)

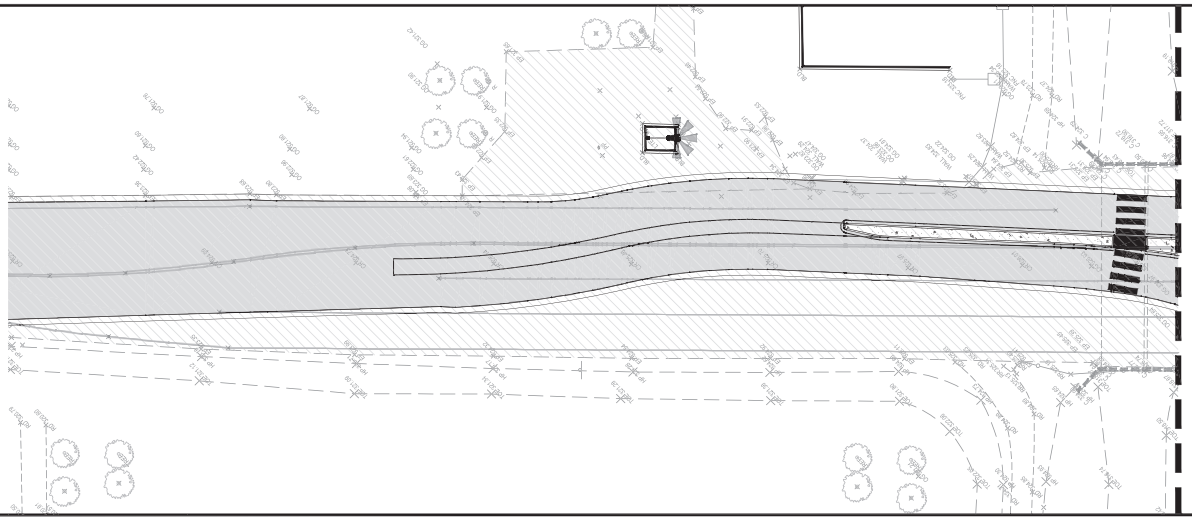
1. PROTECT IN PLACE EXIST. ELECTRICAL BOX
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6. PROTECT IN PLACE EXIST. WATER PIPE
7. PROTECT IN PLACE EXIST. SEWER PIPE
8. PROTECT IN PLACE EXIST. GAS VALVE
9. PROTECT IN PLACE EXIST. WATER VALVE & RAISE TO FINISHED GRADE

GENERAL DEMOLITION NOTES:

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2. CONTRACTOR TO REMOVE AND DISPOSE OF ALL VEGETATION, CONCRETE, IRRIGATION SYSTEMS, ASPHALT, AGGREGATE BASE , SOIL, FENCES, STRUCTURES, ETC, WITHIN APPROXIMATE LIMITS OF CLEARING, GRUBBING, AND DEMOLITION, UNLESS OTHERWISE NOTED ON THESE PLANS.
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6. CONTRACTOR SHALL CAREFULLY REMOVE TREES AROUND EXISTING UNDERGROUND UTILITIES & PIPE LINES TO ENSURE NO DAMAGE OCCURS TO INFRASTRUCTURE.
7. CONTRACTOR SHALL NOT INITIATE ANY DEMOLITION ACTIVITY WITHIN ALTA 10'S EASEMENTS UNTIL RELOCATED IRRIGATION FACILITIES PASS INSPECTION AND ALTA ID ISSUES THE CONTRACTOR A NOTICE TO PROCEED FOR SAID ACTIVITY, SEE SHEETS XX-XX.
8. SEE SHEETS XX-XX FOR ALL DEMO ITEMS PERTAINING TO ALTA IRRIGATION DISTRICT FACILITIES.

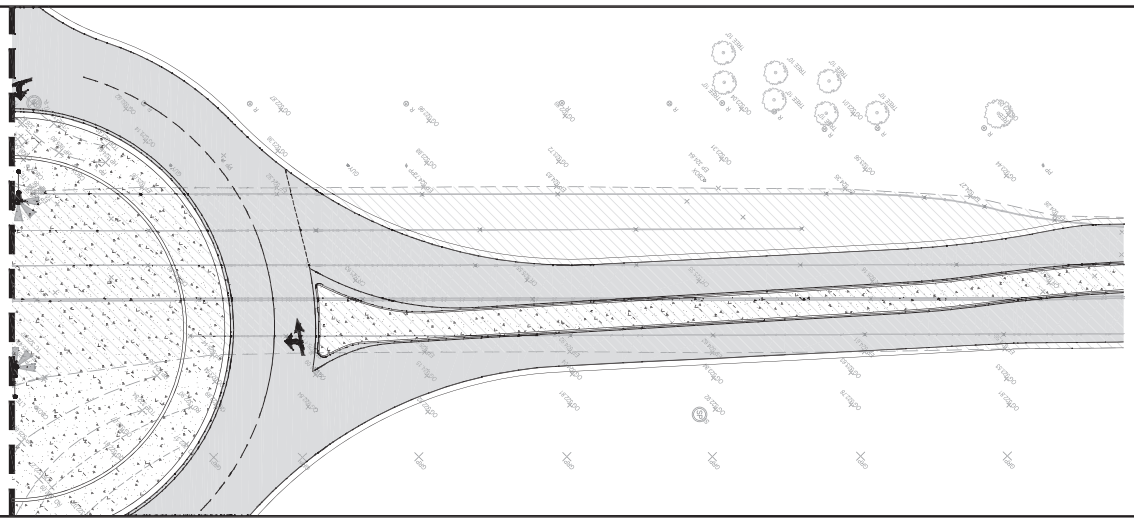
LEGEND

- APPROXIMATE LIMITS OF CLEARING, GRUBBING & DEMOLITION
- EXISTING ASPHALT CONCRETE AND AGGREGATE BASE REMOVAL
- EXISTING CONCRETE REMOVAL
- EXISTING CURB & GUTTER / VALLEY GUTTER / ASPHALT CURB REMOVAL
- EXISTING VINE TRELLIS
- CONTRACTOR SHALL REMOVE EXIST. TREE OR SHRUB. REMOVE STUMP AND ROOTS TO A MINIMUM DEPTH OF 12" BELOW FINISHED GRADE. CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY PROPERTY OWNER 48 HOURS PRIOR TO REMOVAL
- EXISTING ASPHALT CONCRETE TO REMAIN AND BE PROTECTED



ROAD 56, STA: XX+00–XX+00

ROAD 56
SEE SHEET D1



NORTH

20' 0' 20'

ROAD 56, STA: XX+00–END

REVISIONS	DATE	BY	DESCRIPTION

APPROVED BY:

DATE	JASON VETTEL, PE PROJECT ENGINEER	RCE 80594

PREPARED BY:

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DRW BY: AB | CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
TOPO SURVEY & DEMO PLAN

PLOT DATE:	5/11/2023
JOB NO.:	22497
FILE NAME:	22497-01-TOPO & DEMO - BOWLIN
	D3
SHEET NO.:	7 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

NORTH
20' 0' 20'

SITE PLAN KEYNOTES: (SHEETS S1-S3)

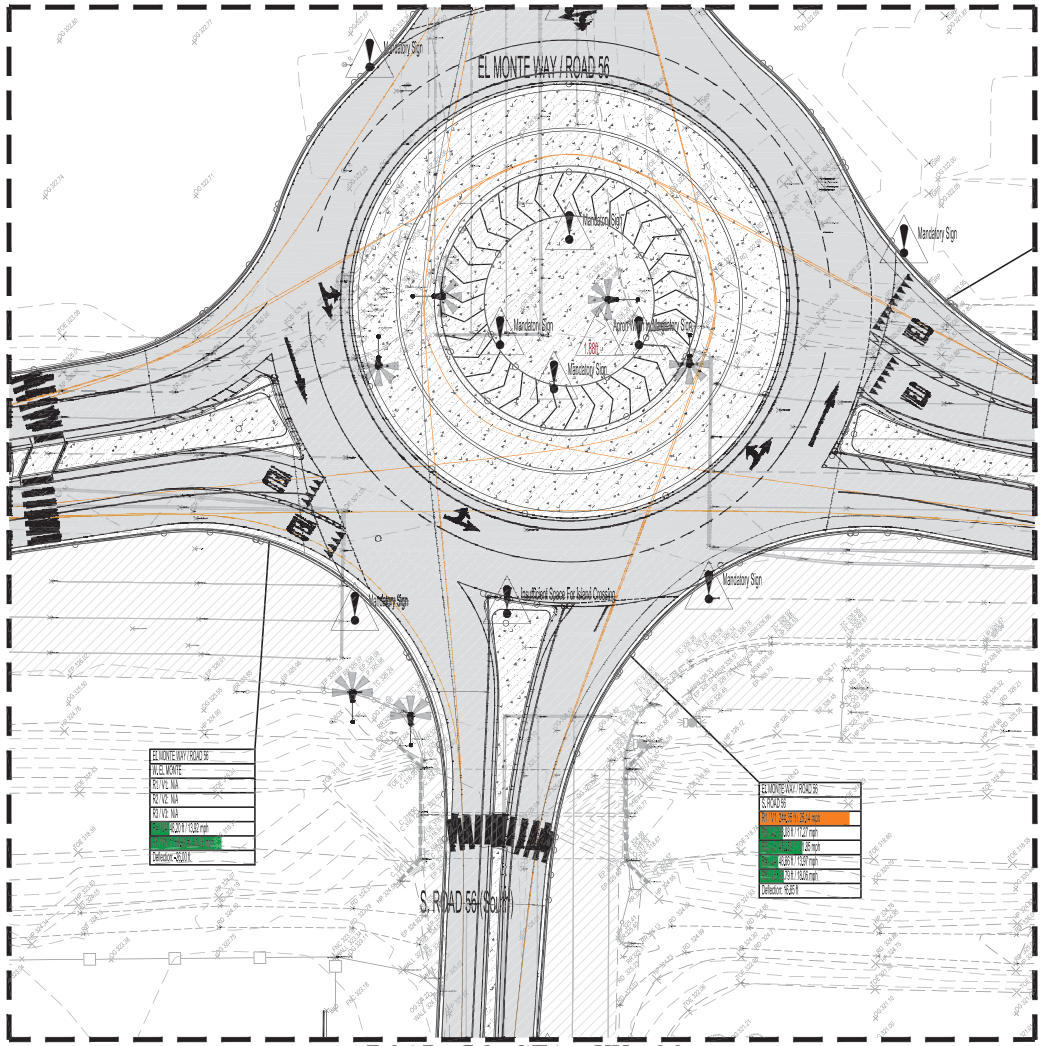
1. PROPOSED ASPHALT CONCRETE, SEE SHEET X1
2. PROPOSED CITY STANDARD CURB & GUTTER. SEE CITY STD. C-2, SHEET CD1
3. PROPOSED CONCRETE SIDEWALK. SEE CITY STD. C-3A, SHEET CD1. SEE THIS SHEET FOR WIDTHS
4. PROPOSED CONCRETE ROUNDABOUT TRUCK APRON, SEE SHEET X4
5. PROPOSED MEDIAN CURB, SEE CITY STD. C-5, SHEET CD1
6. PROPOSED MOUNTABLE CURB SEE DETAIL, SHEET X4
7. FIBER OPTIC SPLICE BOX, SEE ELECTRICAL SHEETS
8. PROPOSED DRIVE APPROACH, SEE SHEET C5 FOR LAYOUT DIMENSIONS AND ADDITIONAL INFORMATION.
9. PROPOSED BIKE RAMP DETAILS, SEE SHEETS C3 - C4
10. PROPOSED LANDSCAPE AREA (SEE LANDSCAPE & IRRIGATION PLANS)
11. PROPOSED BARRICADE, SEE DETAIL CX3-1, SHEET CD3
12. PROPOSED STREET LIGHT LOCATION (SEE PG&E PLANS)
13. PROPOSED RAMP DETAIL, SEE SHEETS C1 - C2
14. NEW SURVEY MONUMENT; SEE CITY STD. MN-1, SHEET CD15
15. NOT USED
16. FIBER OPTIC PULL BOX, SEE ELECTRICAL SHEETS
17. RELOCATED WATER METER / GAS METER
18. PROPOSED CITY STANDARD CURB & GUTTER, SEE CITY STD. C-2, SHEET CD1. CONTRACTOR SHALL TRANSITION CURB & GUTTER TO MATCH EXISTING.

LEGEND

- DETAIL REFERENCE
- EXISTING ASPHALT CONCRETE
- PROPOSED ASPHALT CONCRETE
- PROPOSED CONCRETE
- DETECTABLE WARNING SURFACE
- PROPOSED LANDSCAPE
- ROUNDABOUT TRUCK APRON (SEE SHEET X4 FOR CROSS SECTION)
- PROPOSED MEDIAN CURB
- PROPOSED LUM. ST. LIGHT
- PG&E POWER POLE

ROAD 56 STA: XX+00
SEE SHEET S3

EL MONTE WAY / AVE 16 STA: XX+00
SEE SHEET S2



EL MONTE WAY / AVE 16 STA: XX+00
SEE SHEET S2

ROAD 56 STA: XX+00
SEE SHEET S3

REVISIONS			
DATE	BY	DESCRIPTION	

NOT FOR CONSTRUCTION

APPROVED BY:
DATE
JASON WITTE, PE
PROJECT ENGINEER
RCE 60594

PREPARED BY:
4CREEKS
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TEL: 559.802.3052
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CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
SITE PLAN - ROUNDABOUT

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-08- SITE PLAN ROUNDABOUT
S1
SHEET NO.: 8 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

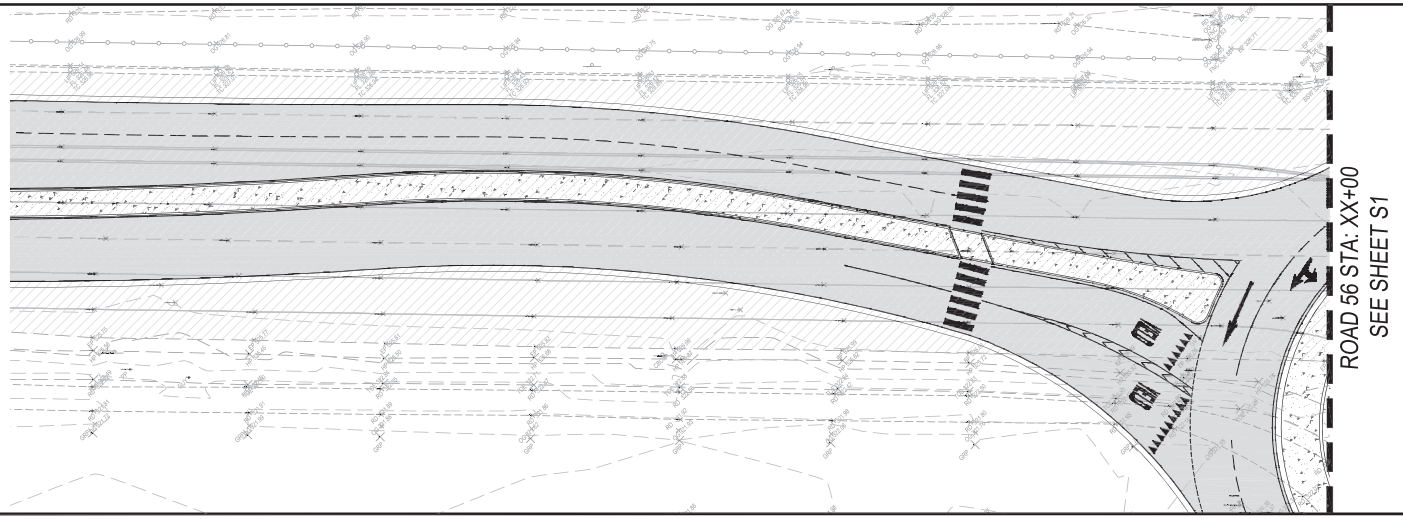
NORTH
20' 0' 20'

SITE PLAN KEYNOTES: (SHEETS S1-S3)

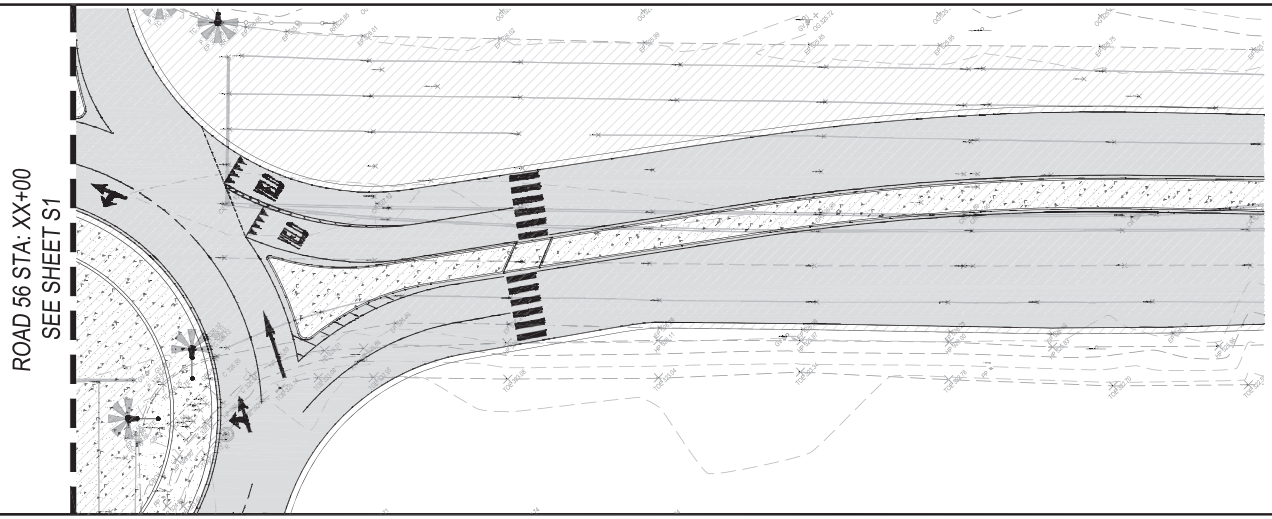
1. PROPOSED ASPHALT CONCRETE, SEE SHEET X1
2. PROPOSED CITY STANDARD CURB & GUTTER, SEE CITY STD. C-2, SHEET CD1
3. PROPOSED CONCRETE SIDEWALK. SEE CITY STD. C-3A, SHEET CD1. SEE THIS SHEET FOR WIDTHS
4. PROPOSED CONCRETE ROUNDABOUT TRUCK APRON, SEE SHEET X4
5. PROPOSED MEDIAN CURB, SEE CITY STD. C-5, SHEET CD1
6. PROPOSED MOUNTABLE CURB SEE DETAIL, SHEET X4
7. FIBER OPTIC SPLICE BOX, SEE ELECTRICAL SHEETS
8. PROPOSED DRIVE APPROACH, SEE SHEET C5 FOR LAYOUT DIMENSIONS AND ADDITIONAL INFORMATION.
9. PROPOSED BIKE RAMP DETAILS, SEE SHEETS C3 - C4
10. PROPOSED LANDSCAPE AREA (SEE LANDSCAPE & IRRIGATION PLANS)
11. PROPOSED BARRICADE, SEE DETAIL CK3-1, SHEET CD3
12. PROPOSED STREET LIGHT LOCATION (SEE PG&E PLANS)
13. PROPOSED RAMP DETAIL, SEE SHEETS C1 - C2
14. NEW SURVEY MONUMENT. SEE CITY STD. MN-1, SHEET CD15
15. NOT USED
16. FIBER OPTIC PULL BOX, SEE ELECTRICAL SHEETS
17. RELOCATED WATER METER / GAS METER
18. PROPOSED CITY STANDARD CURB & GUTTER, SEE CITY STD. C-2, SHEET CD1. CONTRACTOR SHALL TRANSITION CURB & GUTTER TO MATCH EXISTING.

LEGEND

- DETAIL REFERENCE
- EXISTING ASPHALT CONCRETE
- PROPOSED ASPHALT CONCRETE
- PROPOSED CONCRETE
- DETECTABLE WARNING SURFACE
- PROPOSED LANDSCAPE
- ROUNDABOUT TRUCK APRON (SEE SHEET X4 FOR CROSS SECTION)
- PROPOSED MEDIAN CURB
- PROPOSED LUM. ST. LIGHT
- PG&E POWER POLE



ROAD 56, STA: XX+00–XX+00



ROAD 56, STA: XX+00–END

REVISIONS			
DATE	BY	DESCRIPTION	

APPROVED BY:
DATE
JASON LUTTRELL, RCE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
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CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
SITE PLAN - ROAD 56

PLOT DATE:	5/11/2023
JOB NO.:	22497
FILE NAME:	22497-09-10- SITE PLAN- EL MONTE - MONTE
	S2
SHEET NO.:	9 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

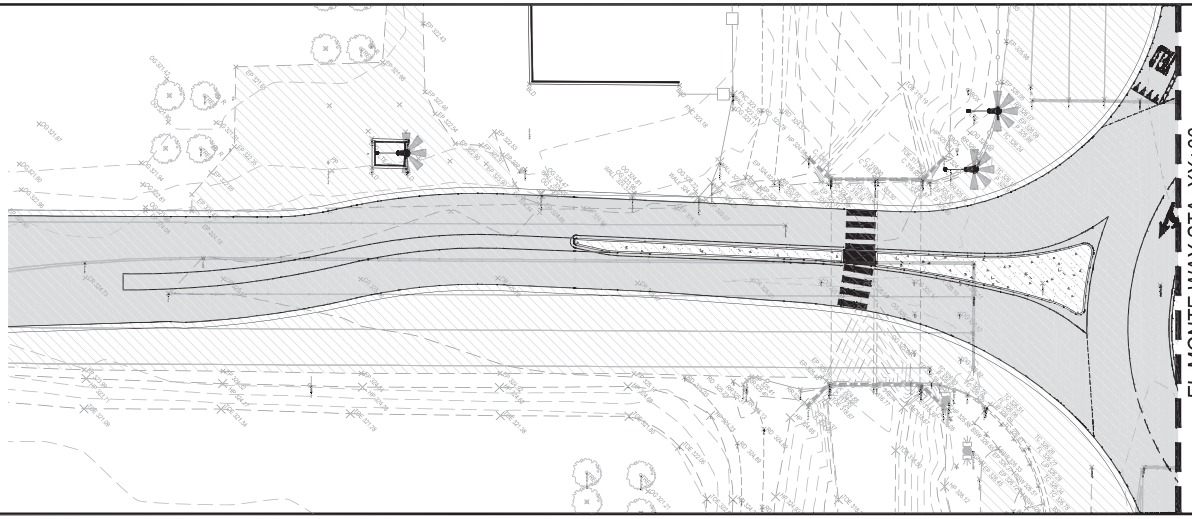
NORTH
20' 0' 20'

SITE PLAN KEYNOTES: (SHEETS S1-S3)

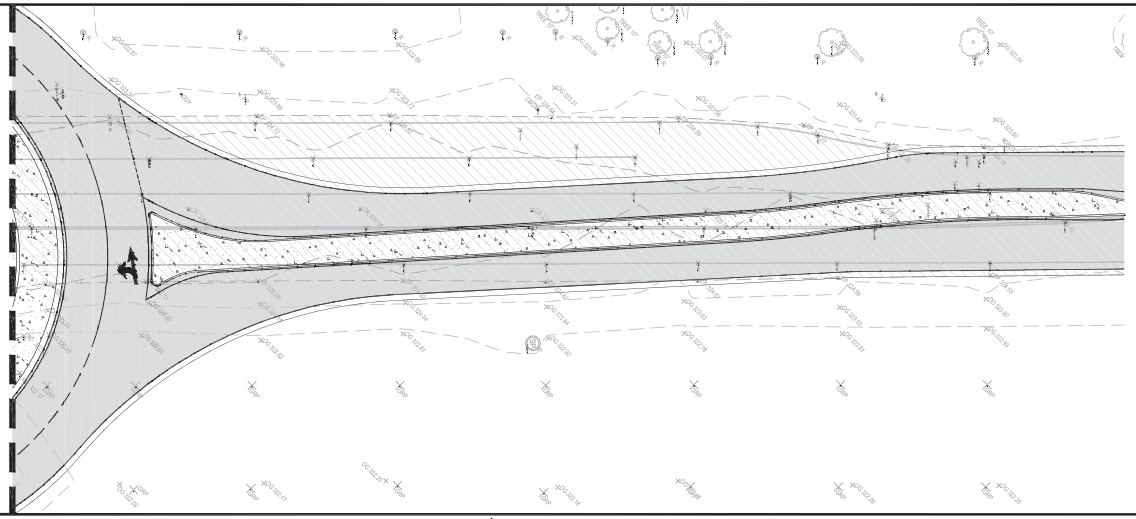
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3. PROPOSED CONCRETE SIDEWALK. SEE CITY STD. C-3A, SHEET CD1. SEE THIS SHEET FOR WIDTHS
4. PROPOSED CONCRETE ROUNDABOUT TRUCK APRON, SEE SHEET X4
5. PROPOSED MEDIAN CURB. SEE CITY STD, C-5, SHEET CD1
6. PROPOSED MOUNTABLE CURB SEE DETAIL, SHEET X4
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9. PROPOSED BIKE RAMP DETAILS, SEE SHEETS C3 - C4
10. PROPOSED LANDSCAPE AREA (SEE LANDSCAPE & IRRIGATION PLANS)
11. PROPOSED BARRICADE, SEE DETAIL CX3-1, SHEET CD3
12. PROPOSED STREET LIGHT LOCATION (SEE PG&E PLANS)
13. PROPOSED RAMP DETAIL, SEE SHEETS C1 - C2
14. NEW SURVEY MONUMENT, SEE CITY STD. MN-1, SHEET CD15
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LEGEND

- DETAIL REFERENCE
- EXISTING ASPHALT CONCRETE
- PROPOSED ASPHALT CONCRETE
- PROPOSED CONCRETE
- DETECTABLE WARNING SURFACE
- PROPOSED LANDSCAPE
- ROUNDABOUT TRUCK APRON (SEE SHEET X4 FOR CROSS SECTION)
- PROPOSED MEDIAN CURB
- PROPOSED LUM. ST. LIGHT
- PG&E POWER POLE



EL MONTE WAY / AVE 16, STA: XX+00–XX+00



EL MONTE WAY / AVE 16, STA: XX+00–END

REVISIONS

DATE	BY	DESCRIPTION

APPROVED BY:
DATE
JASON WITTE, PE
PROJECT ENGINEER
RCE 60594

PREPARED BY:
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DRW BY: AB
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
SITE PLAN - EL MONTE WAY / AVE 16

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-09-10- SITE PLAN- EL MONTE
S3
SHEET NO.: 10 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

NORTH
20' 0' 20'

GENERAL CONSTRUCTION NOTES:

1. ALL SAWCUTS TO BE A NEAT, CLEAN, ON GRADE EDGE.
2. ALL NEW CONCRETE IMPROVEMENTS SHALL BE DOWELED INTO EXIST. CONCRETE IMPROVEMENTS PER CITY STD. C-X2, SHEET CD1.
3. SEE SEWER & WATER PLANS FOR ADDITIONAL INFORMATION.
4. DINUBA HIGH SCHOOL OFF-SITE IMPROVEMENTS SHOWN FADED IN THE BACKGROUND FOR REFERENCE.

GENERAL GRADING NOTES:

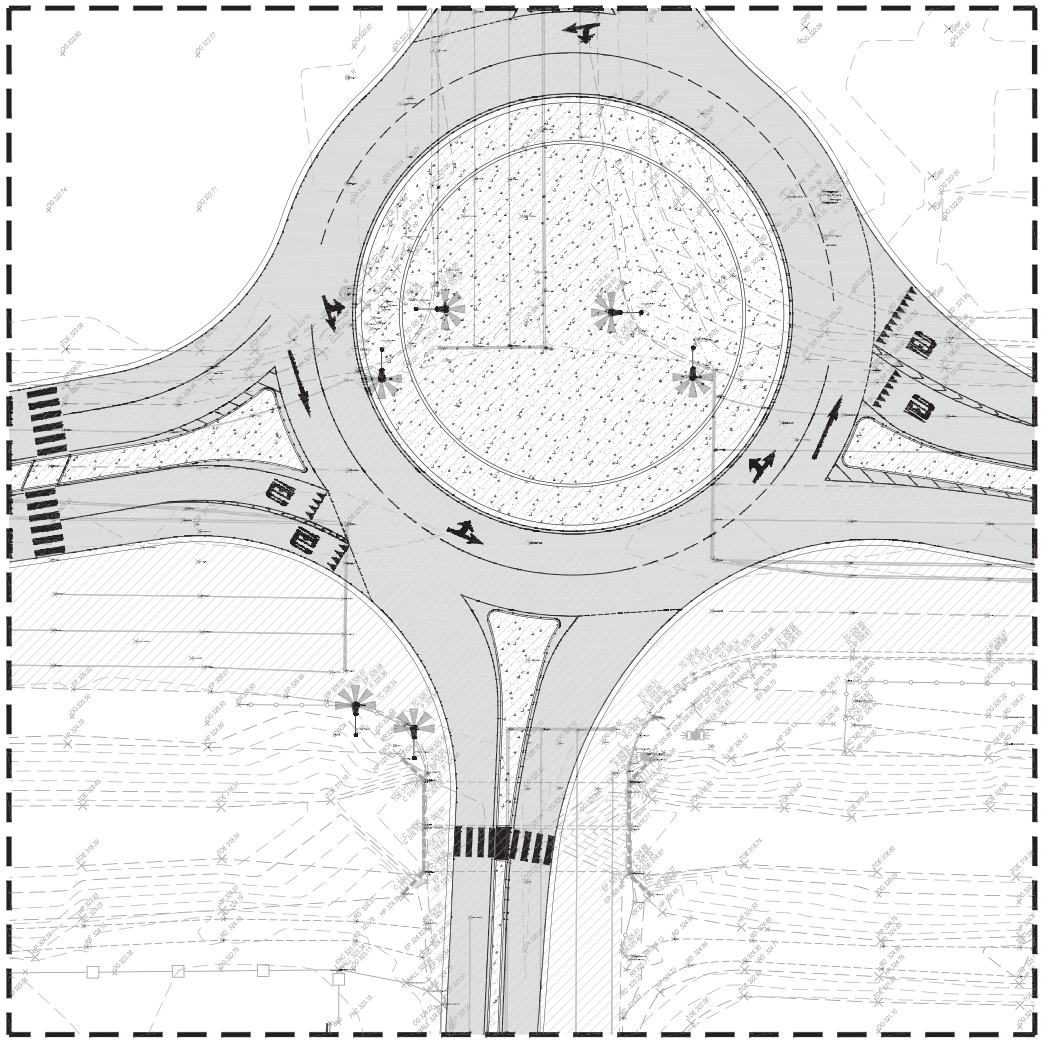
1. REFER TO COVER AND DEMO SHEETS FOR BENCHMARKS, GENERAL NOTES, & INFORMATION.
2. CROSS SLOPE AT ALL PEDESTRIAN WALKS, SIDEWALKS, AND ADA PATH SHALL NOT EXCEED 2.0%.
3. FIELD VERIFY ALL ELEVATIONS SHOWN WHERE PROPOSED IMPROVEMENTS ABUT EXISTING IMPROVEMENTS PRIOR TO CONSTRUCTION. IMMEDIATELY NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES.
4. CONTRACTOR TO DAYLIGHT TRANSITION TO EXIST. GRADE (2% MIN., 4:1 MAX.) UNLESS SHOWN OR NOTED OTHERWISE ON PLANS.
5. LANDSCAPE AREAS ARE TO BE GRADED 3" BELOW FINISH GRADE OF CONCRETE FOR SOIL FILL. SEE LANDSCAPE PLANS.
6. LANDSCAPE BERMING NOT SHOWN ON THIS SHEET, SEE LANDSCAPE PLANS.
7. CONTRACTOR TO SET RIM OF DRAINAGE INLETS 1" BELOW FLOWLINE GRADE SHOWN ON THESE PLANS.

LEGEND

- DETAIL REFERENCE
- EXIST. ASPHALT CONCRETE
- EXIST. CONCRETE
- PROPOSED CONCRETE
- PROPOSED ASPHALT CONCRETE
- PROPOSED LANDSCAPE
- ROUNDABOUT TRUCK APRON (SEE SHEET X-1 FOR CROSS SECTION)
- PROPOSED MEDIAN CURB

ROAD 56 STA: XX+00
SEE SHEET S6

EL MONTE WAY / AVE 16 STA: XX+00
SEE SHEET S5



EL MONTE WAY / AVE 16 STA XX+00
SEE SHEET S5

ROAD 56 STA: XX+00
SEE SHEET S6

REVISIONS			
DATE	BY	DESCRIPTION	

NOT FOR CONSTRUCTION

APPROVED BY:
DATE
JASON VATTIS, PE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
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TEL 559.802.3052
FAX 559.802.3053
DRW BY: AS
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
GRADING PLAN - ROUNDABOUT

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-11- GRDNG PLN-ROUNDABT
S4
SHEET NO.: 11 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

NORTH
20' 0' 20'

GENERAL CONSTRUCTION NOTES:

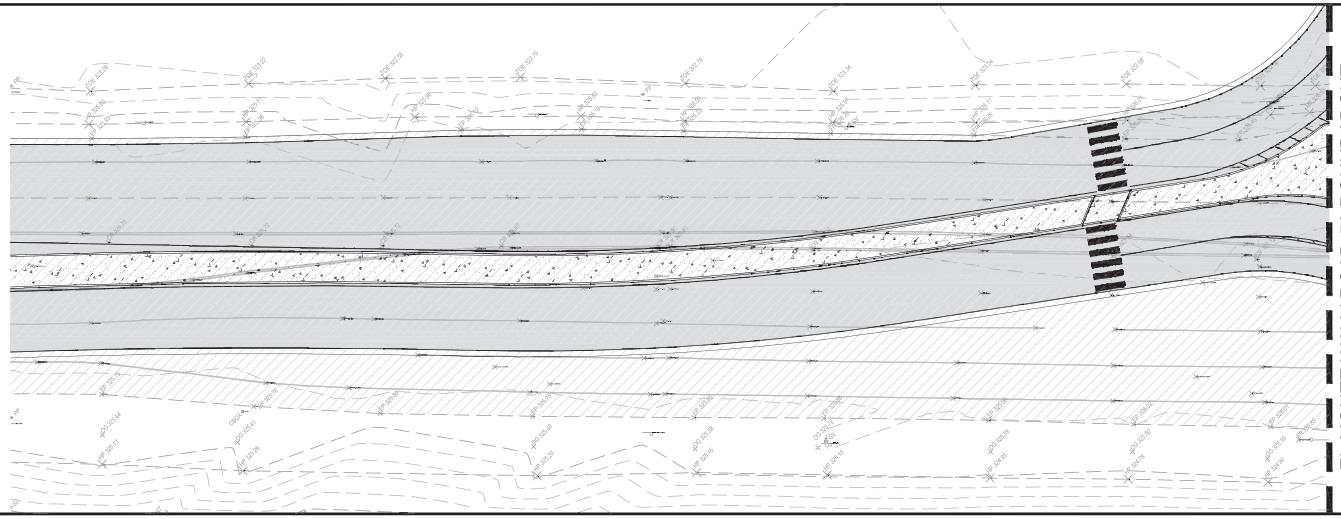
1. ALL SAWCUTS TO BE A NEAT, CLEAN, ON GRADE EDGE.
2. ALL NEW CONCRETE IMPROVEMENTS SHALL BE DOWELED INTO EXIST. CONCRETE IMPROVEMENTS PER CITY STD. C-X2, SHEET CD1.
3. SEE SEWER & WATER PLANS FOR ADDITIONAL INFORMATION.
4. DINUBA HIGH SCHOOL OFF-SITE IMPROVEMENTS SHOWN FADED IN THE BACKGROUND FOR REFERENCE.

GENERAL GRADING NOTES:

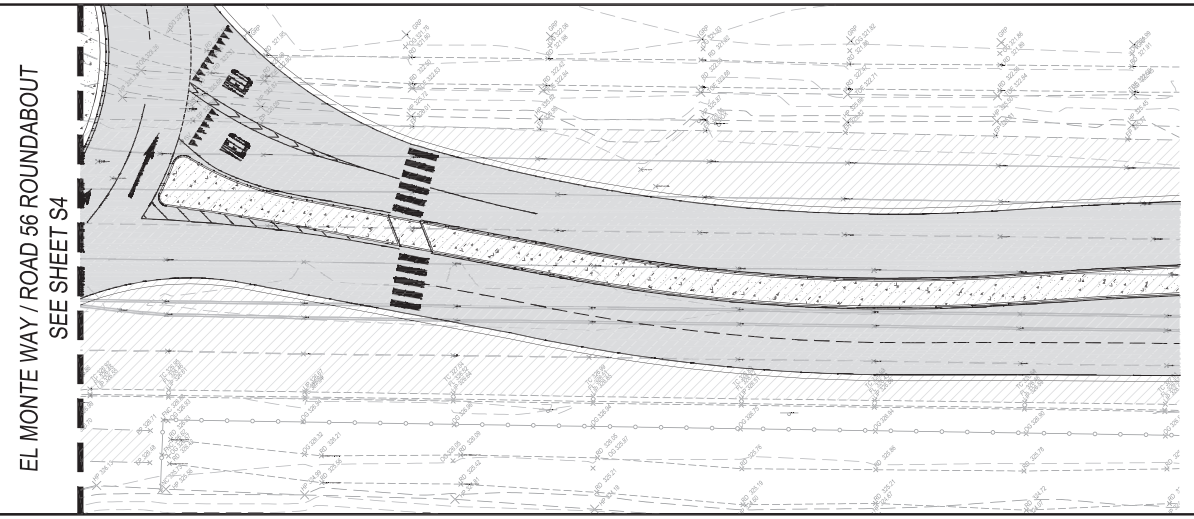
1. REFER TO COVER AND DEMO SHEETS FOR BENCHMARKS, GENERAL NOTES, & INFORMATION.
2. CROSS SLOPE AT ALL PEDESTRIAN WALKS, SIDEWALKS, AND ADA PATH SHALL NOT EXCEED 2.0%.
3. FIELD VERIFY ALL ELEVATIONS SHOWN WHERE PROPOSED IMPROVEMENTS ABUT EXISTING IMPROVEMENTS PRIOR TO CONSTRUCTION. IMMEDIATELY NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES.
4. CONTRACTOR TO DAYLIGHT TRANSITION TO EXIST. GRADE (2% MIN., 4:1 MAX.) UNLESS SHOWN OR NOTED OTHERWISE ON PLANS.
5. LANDSCAPE AREAS ARE TO BE GRADED 3" BELOW FINISH GRADE OF CONCRETE FOR SOIL FILL. SEE LANDSCAPE PLANS.
6. LANDSCAPE BERMING NOT SHOWN ON THIS SHEET. SEE LANDSCAPE PLANS.
7. CONTRACTOR TO SET RIM OF DRAINAGE INLETS 1" BELOW FLOWLINE GRADE SHOWN ON THESE PLANS.

LEGEND

- DETAIL REFERENCE
- EXIST. ASPHALT CONCRETE
- EXIST. CONCRETE
- PROPOSED CONCRETE
- PROPOSED ASPHALT CONCRETE
- PROPOSED LANDSCAPE
- ROUNDABOUT TRUCK APRON (SEE SHEET X-1 FOR CROSS SECTION)
- PROPOSED MEDIAN CURB



EL MONTE WAY / AVE 16, STA: XX+00–XX+00



EL MONTE WAY / AVE 16, STA: XX+00–END

REVISIONS			
DATE	BY	DESCRIPTION	

NOT FOR CONSTRUCTION

APPROVED BY:
DATE
JASON VETTE, PE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
4CREEKS
324 S. SANTA FE ST., STE. A
P.O. BOX 7293
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3315
DRW BY: AS
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
GRADING PLAN - EL MONTE WAY

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-12- GRDING PLN-EL MONTE WAY
S5
SHEET NO.: 12 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES
OVERHEAD

NORTH

20' 0' 20'

GENERAL CONSTRUCTION NOTES:

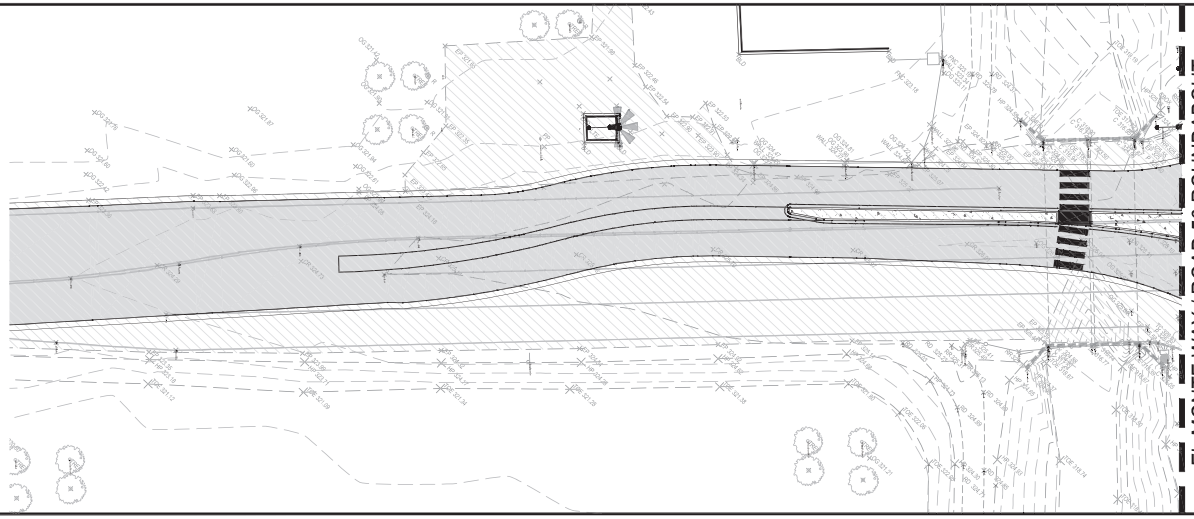
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2. ALL NEW CONCRETE IMPROVEMENTS SHALL BE DOWELED INTO EXIST. CONCRETE IMPROVEMENTS PER CITY STD, C-X2, SHEET CD1.
3. SEE SEWER & WATER PLANS FOR ADDITIONAL INFORMATION.
4. DINUBA HIGH SCHOOL OFF-SITE IMPROVEMENTS SHOWN FADED IN THE BACKGROUND FOR REFERENCE.

GENERAL GRADING NOTES:

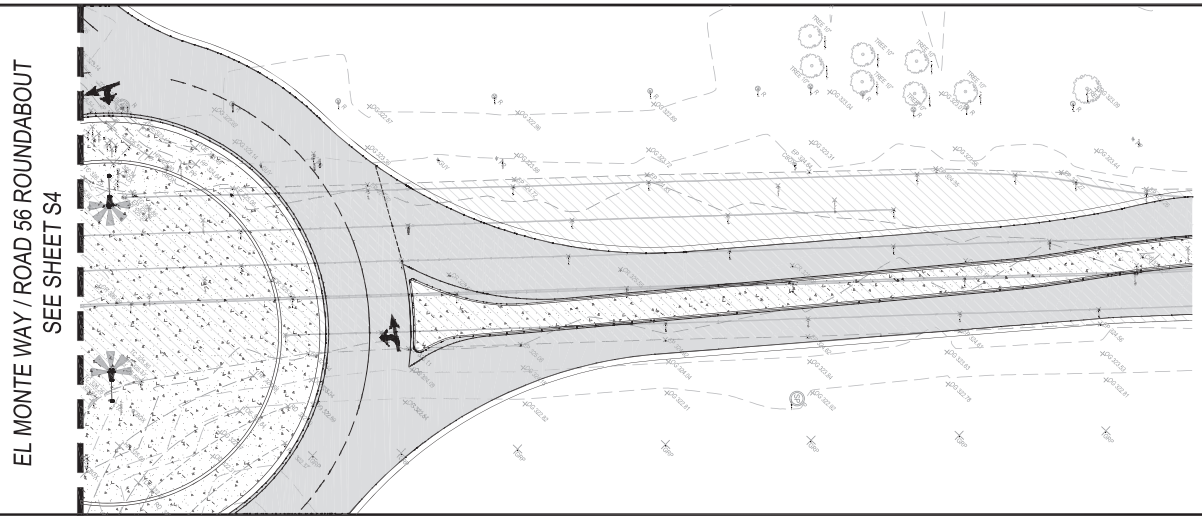
1. REFER TO COVER AND DEMO SHEETS FOR BENCHMARKS, GENERAL NOTES, & INFORMATION.
2. CROSS SLOPE AT ALL PEDESTRIAN WALKS, SIDEWALKS, AND ADA PATH SHALL NOT EXCEED 2.0%.
3. FIELD VERIFY ALL ELEVATIONS SHOWN WHERE PROPOSED IMPROVEMENTS ABUT EXISTING IMPROVEMENTS PRIOR TO CONSTRUCTION. IMMEDIATELY NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES.
4. CONTRACTOR TO DAYLIGHT TRANSITION TO EXIST. GRADE (2% MIN., 4:1 MAX.) UNLESS SHOWN OR NOTED OTHERWISE ON PLANS.
5. LANDSCAPE AREAS ARE TO BE GRADED 3" BELOW FINISH GRADE OF CONCRETE FOR SOIL FILL. SEE LANDSCAPE PLANS.
6. LANDSCAPE BERMING NOT SHOWN ON THIS SHEET, SEE LANDSCAPE PLANS.
7. CONTRACTOR TO SET RIM OF DRAINAGE INLETS 1" BELOW FLOWLINE GRADE SHOWN ON THESE PLANS.

LEGEND

- DETAIL REFERENCE
- EXIST. ASPHALT CONCRETE
- EXIST. CONCRETE
- PROPOSED CONCRETE
- PROPOSED ASPHALT CONCRETE
- PROPOSED LANDSCAPE
- ROUNDABOUT TRUCK APRON (SEE SHEET X-1 FOR CROSS SECTION)
- PROPOSED MEDIAN CURB



ROAD 56, STA: XX+00–XX+00



ROAD 56, STA: XX+00–END

REVISIONS			
DATE	BY	DESCRIPTION	

NOT FOR CONSTRUCTION

APPROVED BY:
DATE
JASON MYRTLE, RCE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
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FAX: 559.802.3315
DRW BY: AS
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
GRADING PLAN - ROAD 56

PLOT DATE:	5/11/2023
JOB NO.:	22497
FILE NAME:	22497-13 - GRDNG PLN ROAD 56
	S6
SHEET NO.:	13 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

NORTH
20' 0' 20'

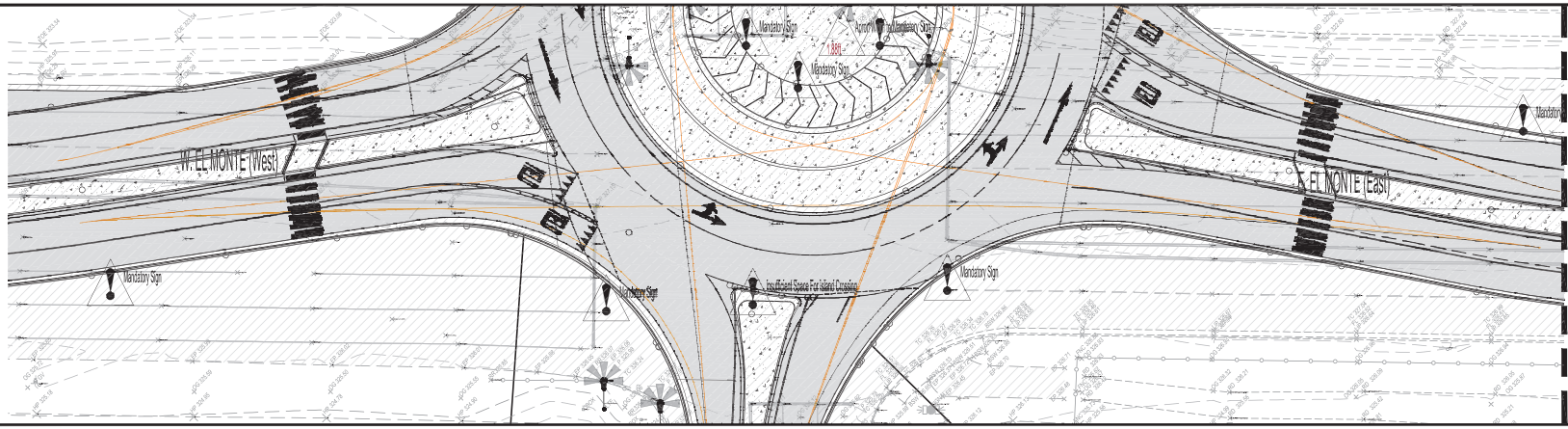
2'
0'
VERTICAL SCALE

GENERAL UTILITY NOTES:

1. CONTRACTOR SHALL PROTECT EXISTING UTILITIES THROUGHOUT DURATION OF CONSTRUCTION AND MAINTAIN OPERATION. ANY DAMAGE OF IMPACTED UTILITIES SHALL BE FIXED OR COORDINATED WITH UTILITY COMPANY AT CONTRACTOR'S SOLE EXPENSE.
2. CONTRACTOR SHALL ENSURE VERTICAL AND HORIZONTAL SEPARATION FROM PROPOSED WATER PIPING IN ACCORDANCE WITH REGULATIONS SET FORTH BY THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH.
3. EXISTING UTILITY DEPTH SHOWN IN PROFILES IS APPROXIMATE BASED ON SOME PROXIMITY POTHOLING & UTILITY CO. AS-BUILTS. WHERE NO INFORMATION HAS BEEN PROVIDED TO DATE, UTILITY DEPTHS WERE ASSUMED TO BE AROUND 3.5' DEEP.
4. NEW STREET LIGHT CONDUIT NOT SHOWN IN PROFILE FOR CLARITY.
5. DINUBA HIGH SCHOOL OFF-SITE IMPROVEMENTS SHOWN FADED IN THE BACKGROUND FOR REFERENCE.

CONSTRUCTION NOTES (SHEETS UP1-UP4)

1. INSTALL SSMH PER CITY STD. SS-3
2. INSTALL SS STUB
3. INSTALL WATER VALVE PER CITY STD. W-6
4. INSTALL WATER BLOW OFF ASSEMBLY
5. INSTALL FIRE HYDRANT PER CITY STD. W-5
6. INSTALL WATER STUB
7. INSTALL SDMH PER CITY STD. SD-5
8. INSTALL DI PER CITY STD. SD-2
9. ADJUST EXIST. MANHOLES, RAISE RIM TO FINISH GRADE



EL MONTE WAY / AVE 16, STA: XX+00–XX+00

338 334 330 326 322 318 314 310 306 302

31+00 32+00 33+00 34+00 35+00

REVISIONS			
DATE	BY	DESCRIPTION	

APPROVED BY:
DATE
JASON MUTH, RCE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
4CREEKS
324 S. SANTA FE ST., STE. A
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TEL: 559.802.3052
FAX: 559.802.3315
DRW BY: AS
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924
CITY OF DINUBA PUBLIC WORKS
EL MONTE WAY / ROAD 56 ROUNDABOUT
UTILITY PLAN - EL MONTE WAY / AVE 16

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-14- UTIL- EL MONTE WAY
UP1
SHEET NO.: 14 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

NORTH
20' 0' 20'
2'
0'
VERTICAL SCALE

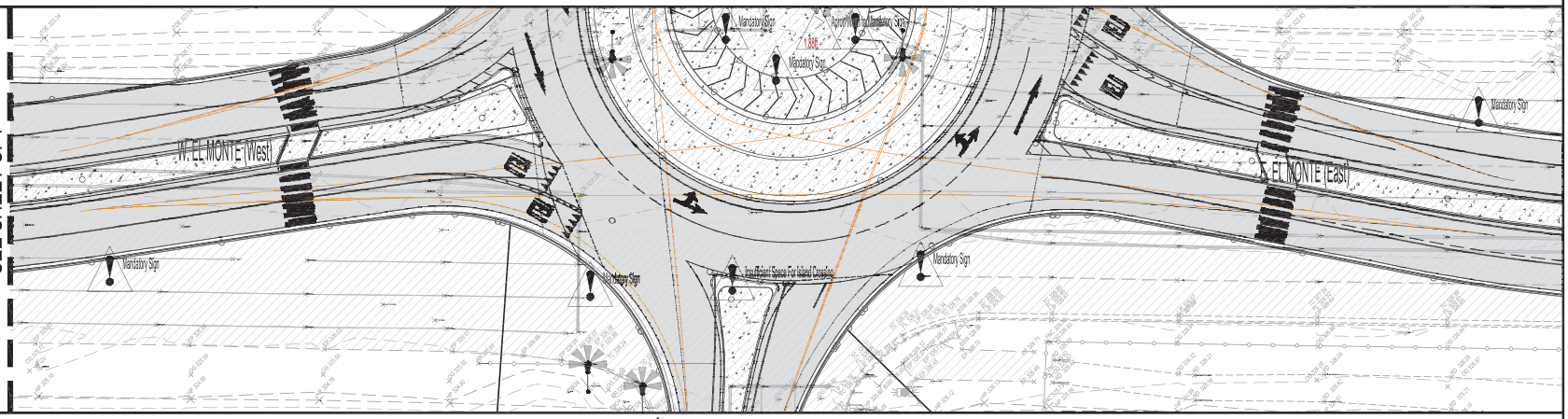
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4. NEW STREET LIGHT CONDUIT NOT SHOWN IN PROFILE FOR CLARITY.
5. DINUBA HIGH SCHOOL OFF-SITE IMPROVEMENTS SHOWN FADED IN THE BACKGROUND FOR REFERENCE.

CONSTRUCTION NOTES (SHEETS UP1-UP4)

1. INSTALL SSMH PER CITY STD. SS-3
2. INSTALL SS STUB
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5. INSTALL FIRE HYDRANT PER CITY STD. W-5
6. INSTALL WATER STUB
7. INSTALL SDMH PER CITY STD. SD-5
8. INSTALL DI PER CITY STD. SD-2
9. ADJUST EXIST. MANHOLES, RAISE RIM TO FINISH GRADE

EL MONTE WAY STA: XX+00
SEE SHEET UP1



EL MONTE WAY / AVE 16, STA: XX+00–END

338 334 330 326 322 318 314 310 306 302

37+00 38+00 39+00 40+00 41+00 42+00

REVISIONS

DESCRIPTION	BY	DATE

NOT FOR CONSTRUCTION

APPROVED BY:
DATE
JASON WITTE, PE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
4CREEKS
324 S. SANTA FE ST., STE. A
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TEL: 559.802.3052
FAX: 559.802.3053
DRW BY: AB
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
UTILITY PLAN - EL MONTE WAY / AVE 16

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-15- UTIL- EL MONTE WAY
UP2
SHEET NO.: 15 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES OVERHEAD

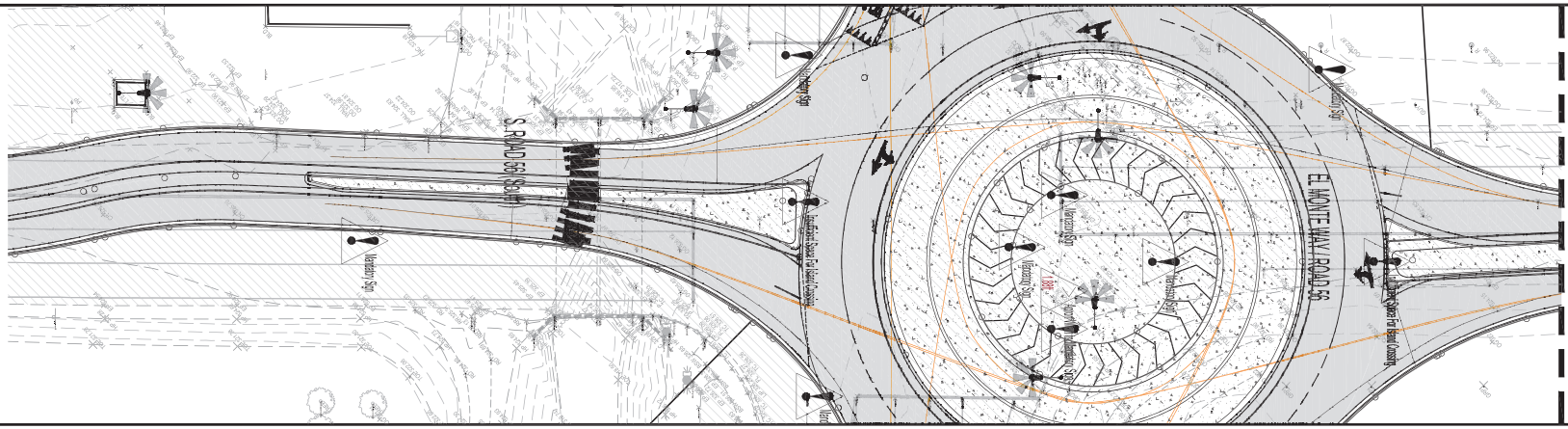
NORTH
5' 0' 5'
2'
0'
VERTICAL SCALE

GENERAL UTILITY NOTES:

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4. NEW STREET LIGHT CONDUIT NOT SHOWN IN PROFILE FOR CLARITY.
5. DINUBA HIGH SCHOOL OFF-SITE IMPROVEMENTS SHOWN FADED IN THE BACKGROUND FOR REFERENCE.

CONSTRUCTION NOTES (SHEETS UP1-UP4)

1. INSTALL SSMH PER CITY STD. SS-3
2. INSTALL SS STUB
3. INSTALL WATER VALVE PER CITY STD. W-6
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6. INSTALL WATER STUB
7. INSTALL SDMH PER CITY STD. SD-5
8. INSTALL DI PER CITY STD. SD-2
9. ADJUST EXIST. MANHOLES, RAISE RIM TO FINISH GRADE



ROAD 56, STA: XX+00–XX+00

338 334 330 326 322 318 314 310 306 302

18+00 19+00 20+00 21+00 22+00 23+00

REVISIONS			
DATE	BY	DESCRIPTION	

NOT FOR CONSTRUCTION

APPROVED BY:
DATE
JASON MITTEL, GE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
4CREEKS
324 S. SANTA FE ST., STE. A
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DRW BY: AS
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

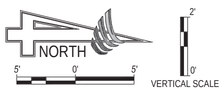
CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
UTILITY PLAN - ROAD 56

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-16 - UTIL - ALTA AVE
UP3
SHEET NO.: 16 OF 29

Know what's **below.**
Call before you dig.

WARNING
POWER LINES OVERHEAD

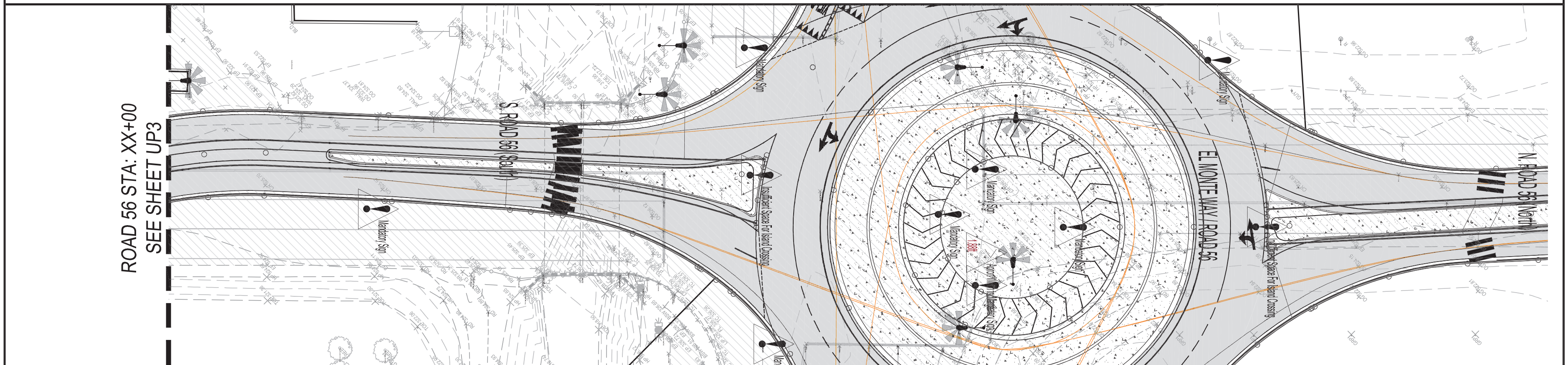


GENERAL UTILITY NOTES:

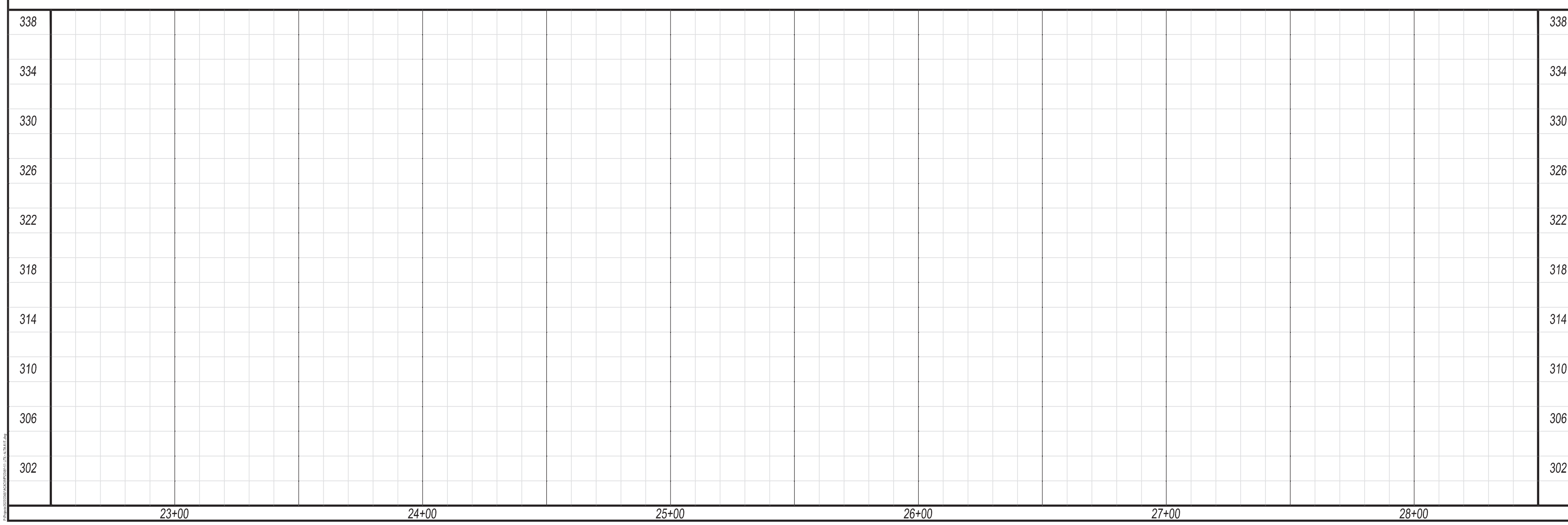
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4. NEW STREET LIGHT CONDUIT NOT SHOWN IN PROFILE FOR CLARITY.
5. DINUBA HIGH SCHOOL OFF-SITE IMPROVEMENTS SHOWN FADED IN THE BACKGROUND FOR REFERENCE.

CONSTRUCTION NOTES (SHEETS UP1-UP4)

1. INSTALL SSMH PER CITY STD. SS-3
2. INSTALL SS STUB
3. INSTALL WATER VALVE PER CITY STD. W-6
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5. INSTALL FIRE HYDRANT PER CITY STD. W-5
6. INSTALL WATER STUB
7. INSTALL SDMH PER CITY STD. SD-5
8. INSTALL DI PER CITY STD. SD-2
9. ADJUST EXIST. MANHOLES, RAISE RIM TO FINISH GRADE



ROAD 56, STA: XX+00-END



REVISIONS | DATE | BY | DESCRIPTION

APPROVED BY:
DATE
JASON WATTS, PE
PROJECT ENGINEER
RCE 85594

PREPARED BY:
4CREEKS
324 S. SANTA FE ST., STE. A
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TEL: 559.802.3052
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DRW BY: AB
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
UTILITY PLAN - ROAD 56

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-17- UTIL- ALTA AVE.
UP4
SHEET NO.: 17 OF 29

Know what's **below.**
Call before you dig.

WARNING
POWER LINES OVERHEAD

NORTH
5' 0' 5'

CONSTRUCTION AND GRADING KEYNOTES

1. PROPOSED ASPHALT CONCRETE, SEE SHEET X1
2. PROPOSED CITY STANDARD CURB & GUTTER, SEE CITY STD. C-2, SHEET CD1
3. PROPOSED CONCRETE SIDEWALK. SEE CITY STD. C-3, SHEET CD1. SEE SHEETS S1-S3 FOR WIDTHS
4. GUTTER PAN SHALL BE A MIN. OF 4% & A MAX. OF 5% IN THE PATH OF TRAVEL. ASPHALT WITHIN 4' OF RAMP FLOWLINE SHALL BE LESS THAN 5% IN THE DIRECTION OF TRAVEL. ASPHALT TO BE FLUSH WITH LIP AT BOTTOM OF RAMPS.
5. PROPOSED MEDIAN CURB. SEE CITY STD. C-5, SHEET CD1
6. PROVIDE 4'x4' MIN. ADA LANDING, SLOPE SHALL NOT EXCEED 2% IN ANY DIRECTION.
7. INSTALL CONCRETE COLD JOINT PER DTL. CX.2, SHEET CD1.
8. GRADE BREAK @ BOTTOM OF RAMP. SLOPE CONCRETE 1.5% TO GUTTER FLOWLINE
9. CONSTRUCT BARRIER CURB PER DETAIL C-5, SHEET CD1.
10. PROPOSED LANDSCAPE AREA (SEE LANDSCAPE & IRRIGATION PLANS)
11. PROPOSED BARRICADE, SEE DETAIL XX SHEET XX.
12. PROPOSED STREET LIGHT LOCATION (SEE PG&E PLANS)
13. RE-GRADE LANDSCAPE AREAS TO MATCH NEW IMPROVEMENTS. ADJUST IRRIGATION & REPLACE LANDSCAPING IN-KIND.
14. REMOVE EXISTING CONCRETE IN PARK STRIP
15. INSTALL TYPE I PEDESTRIAN BARRICADE PER CALTRANS STANDARD ES-7Q
16. PROTECT IN PLACE EXISTING FIRE HYDRANT & RAISE TO FINISH GRADE
17. PROTECT IN PLACE EXISTING STREETLIGHT
18. CONSTRUCT DEPRESSED CURB WITH SMOOTH TRANSITION
19. PROPOSED CITY STANDARD CURB & GUTTER. SEE CITY STD. C-2, SHEET CD1. CONTRACTOR SHALL TRANSITION CURB & GUTTER TO MATCH EXISTING.

GENERAL NOTES

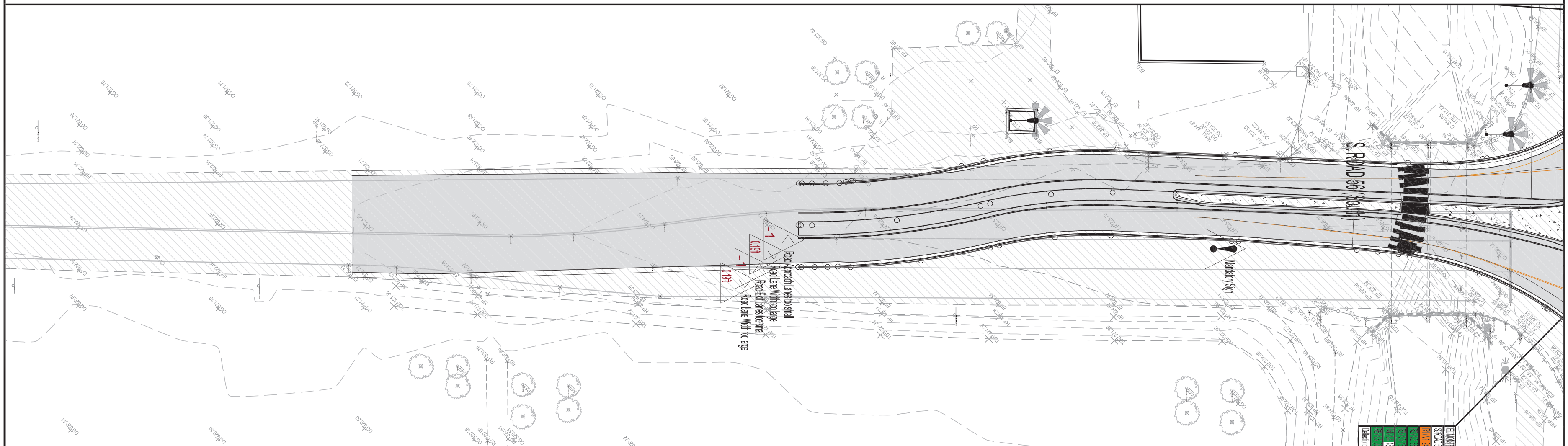
1. ALL CURBS AND CURB AND GUTTERS SHALL BE POURED PRIOR TO RAMPS AND SIDEWALKS, MONOLITHIC POURS WILL NOT BE ALLOWED.
2. CURBS AND GUTTER AT DRIVE APPROACHES SHALL BE PER CITY STD'S.
3. CROSS SLOPES PERPENDICULAR TO PATH OF TRAVEL ON ALL RAMPS AND SIDEWALKS TO BE 2.0% MAXIMUM
4. ALL SMALL FACE OF CURB RADIUS SHOWN ON DETAILS ARE TO EQUAL 0.75' UNLESS OTHERWISE STATED ON THESE PLANS.
5. RE-PAINT ALL NEW CURBS THE SAME COLORS THAT EXISTED PRIOR TO CONSTRUCTION.
6. CURBS AND GUTTER AT DRIVE APPROACHES SHALL BE 8" THICK MINIMUM OR PER CITY STD'S, WHICHEVER IS THICKER.
7. EXISTING TREES TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON THE PLANS.
8. CONTRACTOR SHALL REMOVE & DISPOSE OF ALL EXIST. CONCRETE IMPROVEMENTS NECESSARY TO INSTALL NEW IMPROVEMENTS.
9. ADJUST EXIST. UTILITY BOXES IN IMPROVEMENT AREAS TO FINISHED GRADE WHETHER SHOWN ON THE PLANS OR NOT.

LEGEND

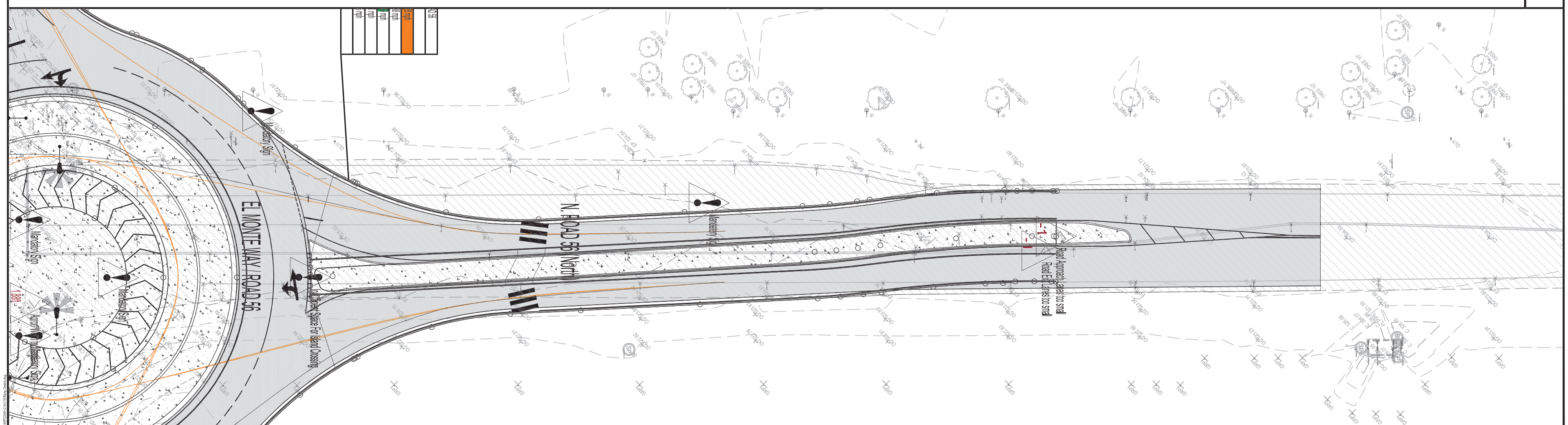
- DETECTABLE WARNING SURFACE. SEE DETAIL C-X1, SHEET CD1.
- PROPOSED ASPHALT CONCRETE
- PROPOSED CONCRETE
- PROPOSED LANDSCAPE
- EXISTING ASPHALT (HATCH NOT SHOWN FOR CLARITY)
- EXISTING CONCRETE (HATCH NOT SHOWN FOR CLARITY)
- PROPOSED MEDIAN CURB

REVISIONS

DATE	BY	DESCRIPTION



RAMP DETAIL: ROAD 56 WEST OF EL MONTE WAY: STA XX+00.00 - XX+00.00 R-1



RAMP DETAIL: ROAD 56 EAST OF EL MONTE WAY: STA XX+00.00 - XX+00.00 R-2

APPROVED BY:

DATE

JASON WATTS, PE
PROJECT ENGINEER
RCE 85594

PREPARED BY:
4CREEKS
324 S. SANTA FE ST., STE. A
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VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3215

DRW BY: AB
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
RAMP DETAIL -

PLOT DATE: 5/11/2023
JOB NO.: 22497
FILE NAME: 22497-C18-C19 Ramp Details
C1
SHEET NO.: 18 OF 29

811
Know what's below.
Call before you dig.

WARNING
POWER LINES
OVERHEAD

NORTH
5' 0' 5'

CONSTRUCTION AND GRADING KEYNOTES

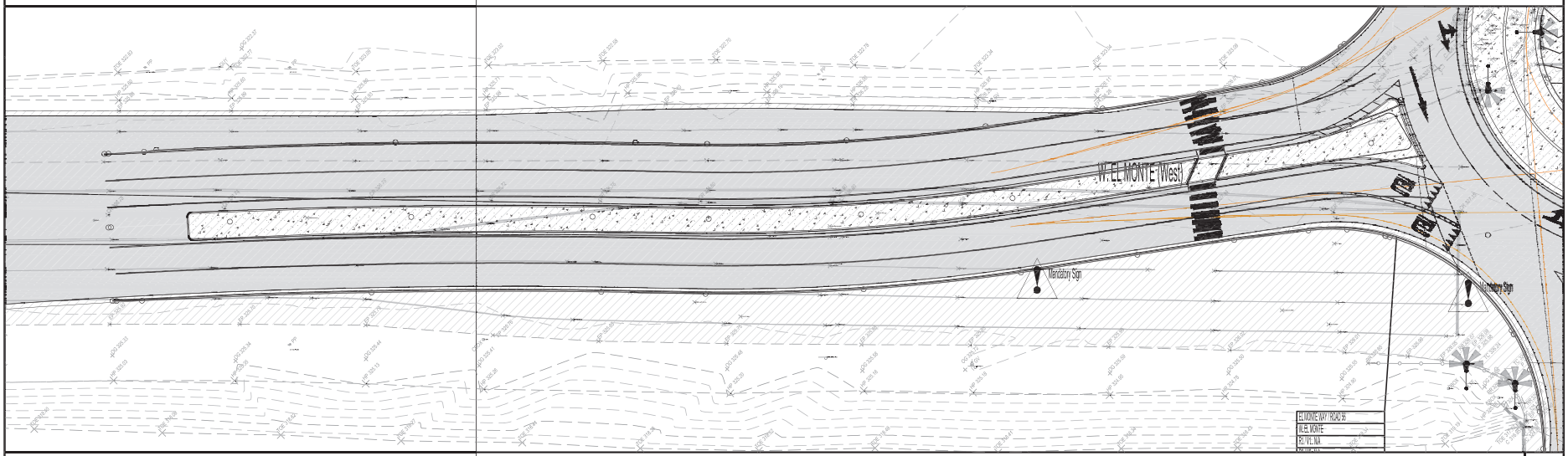
1. PROPOSED ASPHALT CONCRETE, SEE SHEET X1
2. PROPOSED CITY STANDARD CURB & GUTTER, SEE CITY STD. C-2, SHEET CD1
3. PROPOSED CONCRETE SIDEWALK. SEE CITY STD. C-3, SHEET CD1, SEE SHEETS S1-S3 FOR WIDTHS
4. GUTTER PAN SHALL BE 4 MIN, OR 4% & A MAX, OF 5% IN THE PATH OF TRAVEL. ASPHALT WITHIN 4' OF RAMP FLOWLINE SHALL BE LESS THAN 5% IN THE DIRECTION OF TRAVEL. ASPHALT TO BE FLUSH WITH LIP AT BOTTOM OF RAMPS.
5. PROPOSED MEDIAN CURB, SEE CITY STD. C-5, SHEET CD1
6. PROVIDE 4'x4' MIN. ADA LANDING. SLOPE SHALL NOT EXCEED 2% IN ANY DIRECTION.
7. INSTALL CONCRETE COLD JOINT PER DTL. CX.2, SHEET CD1.
8. GRADE BREAK @ BOTTOM OF RAMP. SLOPE CONCRETE 1.5% TO GUTTER FLOWLINE
9. CONSTRUCT BARRIER CURB PER DETAIL C-5, SHEET CD1.
10. PROPOSED LANDSCAPE AREA (SEE LANDSCAPE & IRRIGATION PLANS)
11. PROPOSED BARRICADE, SEE DETAIL XX SHEET XX.
12. PROPOSED STREET LIGHT LOCATION (SEE PG&E PLANS)
13. RE-GRADE LANDSCAPE AREAS TO MATCH NEW IMPROVEMENTS. ADJUST IRRIGATION & REPLACE LANDSCAPING IN KIND.
14. REMOVE EXISTING CONCRETE IN PARK STRIP
15. INSTALL TYPE I PEDESTRIAN BARRICADE PER CALTRANS STANDARD ES-7D
16. PROTECT IN PLACE EXISTING FIRE HYDRANT & RAISE TO FINISH GRADE
17. PROTECT IN PLACE EXISTING STREET LIGHT
18. CONSTRUCT DEPRESSED CURB WITH SMOOTH TRANSITION
19. PROPOSED CITY STANDARD CURB & GUTTER, SEE CITY STD. C-2, SHEET CD1. CONTRACTOR SHALL TRANSITION CURB & GUTTER TO MATCH EXISTING.

GENERAL NOTES

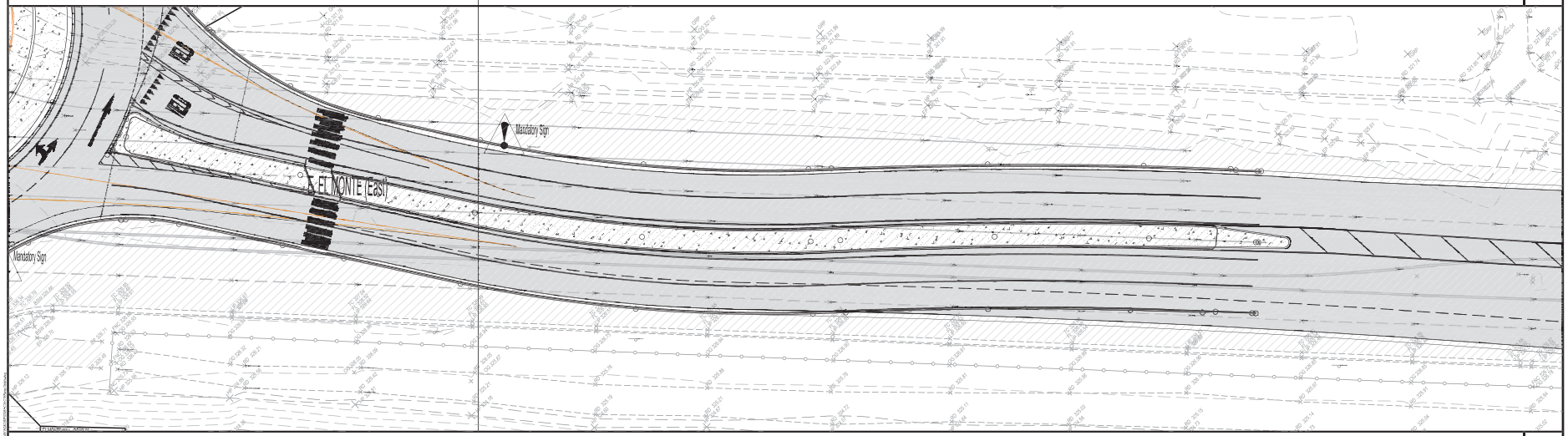
1. ALL CURBS AND CURB AND GUTTERS SHALL BE POURED PRIOR TO RAMPS AND SIDEWALKS. MONOLITHIC POURS WILL NOT BE ALLOWED.
2. CURBS AND GUTTER AT DRIVE APPROACHES SHALL BE PER CITY STD'S.
3. CROSS SLOPES PERPENDICULAR TO PATH OF TRAVEL ON ALL RAMPS AND SIDEWALKS TO BE 2.0% MAXIMUM
4. ALL SHALL FACE OF CURB RADIUS SHOWN ON DETAILS ARE TO EQUAL 0.75' UNLESS OTHERWISE STATED ON THESE PLANS.
5. RE-PAINT ALL NEW CURBS THE SAME COLORS THAT EXISTED PRIOR TO CONSTRUCTION.
6. CURBS AND GUTTER AT DRIVE APPROACHES SHALL BE 8" THICK MINIMUM OR PER CITY STD'S, WHICHEVER IS THICKER.
7. EXISTING TREES TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON THE PLANS.
8. CONTRACTOR SHALL REMOVE & DISPOSE OF ALL EXIST CONCRETE IMPROVEMENTS NECESSARY TO INSTALL NEW IMPROVEMENTS.
9. ADJUST EXIST. UTILITY BOXES IN IMPROVEMENT AREAS TO FINISHED GRADE WHETHER SHOWN ON THE PLANS OR NOT.

LEGEND

- DETECTABLE WARNING SURFACE SEE DETAIL C-X1, SHEET CD1.
- PROPOSED ASPHALT CONCRETE
- PROPOSED CONCRETE
- PROPOSED LANDSCAPE
- EXISTING ASPHALT (HATCH NOT SHOWN FOR CLARITY)
- EXISTING CONCRETE (HATCH NOT SHOWN FOR CLARITY)
- PROPOSED MEDIAN CURB



RAMP DETAIL: EL MONTE WAY NORTH OF ROAD 56: STA XX+00.00 - XX+00.00 | R-3



RAMP DETAIL: EL MONTE WAY SOUTH OF ROAD 56: STA XX+00.00 - XX+00.00 | R-4

REVISIONS

DATE	BY	DESCRIPTION

APPROVED BY:
DATE
JASON MATTE, PE
PROJECT ENGINEER
RCE 80594

PREPARED BY:
4CREEKS
324 S. SANTA FE ST., STE. A
P.O. BOX 7293
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3053
DRW BY: AS
CHK BY: JW

PRELIMINARY IMPROVEMENT PLANS FOR:
CITY OF DINUBA
EL MONTE WAY / ROAD 56 ROUNDABOUT
DINUBA, CA 93618
(559) 591-5924

CITY OF DINUBA PUBLIC WORKS

EL MONTE WAY / ROAD 56 ROUNDABOUT
- RAMP DETAIL -

PLOT DATE:	5/11/2023
JOB NO.:	22497
FILE NAME:	22497-C16-C19 Ramp Details
	C2
SHEET NO.:	19 OF 29

Appendix B

Road Construction Emissions Model Results

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> El Monte/Road 56 Roundabout

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	1.50	15.26	14.83	55.24	0.64	54.60	11.92	0.57	11.36	0.04	3,586.67	0.99	0.08	3,635.22
Grading/Excavation	7.14	64.78	71.91	57.59	2.99	54.60	14.04	2.68	11.36	0.16	15,058.29	4.51	0.19	15,228.58
Drainage/Utilities/Sub-Grade	4.95	51.18	47.07	56.59	1.99	54.60	13.18	1.83	11.36	0.11	10,261.07	2.14	0.12	10,350.34
Paving	1.85	27.04	17.66	0.90	0.90	0.00	0.79	0.79	0.00	0.04	4,278.41	1.20	0.07	4,328.37
Maximum (pounds/day)	7.14	64.78	71.91	57.59	2.99	54.60	14.04	2.68	11.36	0.16	15,058.29	4.51	0.19	15,228.58
Total (tons/construction project)	0.17	1.65	1.67	1.60	0.07	1.53	0.38	0.06	0.32	0.00	358.21	0.10	0.00	362.03

Notes:

Project Start Year ->	2024
Project Length (months) ->	3
Total Project Area (acres) ->	5
Maximum Area Disturbed/Day (acres) ->	5
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	320	80
Grading/Excavation	0	0	0	0	1,200	80
Drainage/Utilities/Sub-Grade	0	0	0	0	960	40
Paving	0	0	0	0	600	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> El Monte/Road 56 Roundabout

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.05	0.05	0.18	0.00	0.18	0.04	0.00	0.04	0.00	11.84	0.00	0.00	10.88
Grading/Excavation	0.11	0.96	1.07	0.86	0.04	0.81	0.21	0.04	0.17	0.00	223.62	0.07	0.00	205.16
Drainage/Utilities/Sub-Grade	0.05	0.51	0.47	0.56	0.02	0.54	0.13	0.02	0.11	0.00	101.58	0.02	0.00	92.96
Paving	0.01	0.13	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.18	0.01	0.00	19.44
Maximum (tons/phase)	0.11	0.96	1.07	0.86	0.04	0.81	0.21	0.04	0.17	0.00	223.62	0.07	0.00	205.16
Total (tons/construction project)	0.17	1.65	1.67	1.60	0.07	1.53	0.38	0.06	0.32	0.00	358.21	0.10	0.00	328.44

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Appendix C

USFWS IPaC Results

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.

NOT FOR CONSULTATION

Location

Tulare County, California



Local offices

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250

2177 Salk Avenue Suite 250
Carlsbad, CA 92008-7385

Reno Fish And Wildlife Office

(775) 861-6300
(775) 861-6301

1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147

Sacramento Fish And Wildlife Office

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

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

NOT FOR CONSULTATION

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).

NOT FOR CONSULTATION

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
Buena Vista Lake Ornate Shrew Sorex ornatus relictus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/1610	Endangered
Fisher Pekania pennanti There is **proposed** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/3651	Endangered
Fresno Kangaroo Rat Dipodomys nitratoides exilis Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5150	Endangered
Giant Kangaroo Rat Dipodomys ingens Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6051	Endangered
North American Wolverine Gulo gulo luscus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5123	Proposed Threatened
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

NOT FOR CONSULTATION

Sierra Nevada Bighorn Sheep Ovis canadensis sierrae — Endangered
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/3646

Sierra Nevada Red Fox Vulpes vulpes necator — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4252

Tipton Kangaroo Rat Dipodomys nitratoides nitratoides — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7247

Birds

NAME	STATUS

California Condor Gymnogyps californianus — Endangered
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/8193

California Spotted Owl Strix occidentalis occidentalis — Proposed Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7266

Least Bell's Vireo Vireo bellii pusillus — 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/5945

Southwestern Willow Flycatcher Empidonax traillii extimus — 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/6749

Western Snowy Plover Charadrius nivosus nivosus — Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8035

NOT FOR CONSULTATION

Yellow-billed Cuckoo Coccyzus americanus — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/3911

Reptiles

NAME	STATUS

Blunt-nosed Leopard Lizard Gambelia silus — Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/625

Desert Tortoise Gopherus agassizii — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/4481

Amphibians

NAME	STATUS

California Tiger Salamander Ambystoma californiense — Threatened

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Foothill Yellow-legged Frog Rana boylii — Proposed Endangered

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5133

Mountain Yellow-legged Frog Rana muscosa — Endangered

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/8037

Sierra Nevada Yellow-legged Frog Rana sierrae — 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/9529

NOT FOR CONSULTATION

Fishes

NAME	STATUS
Little Kern Golden Trout Oncorhynchus aguabonita whitei Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/5041	Threatened
Owens Pupfish Cyprinodon radiosus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4982	Endangered
Owens Tui Chub Gila bicolor ssp. snyderi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7289	Endangered

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

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp Branchinecta conservatio 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	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

NOT FOR CONSULTATION

Vernal Pool Tadpole Shrimp Lepidurus packardi — Endangered
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/2246

Flowering Plants

NAME	STATUS

California Jewelflower Caulanthus californicus — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4599

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

Hoover's Spurge Chamaesyce hooveri — Threatened
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/3019

Keck's Checker-mallow Sidalcea keckii — Endangered
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/5704

Kern Mallow Eremalche kernensis — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1731

San Joaquin Adobe Sunburst Pseudobahia peirsonii — Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2931

NOT FOR CONSULTATION

San Joaquin Valley Orcutt Grass Orcuttia inaequalis — Threatened
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/5506

Springville Clarkia Clarkia springvillensis — Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8309

Conifers and Cycads

NAME	STATUS
Whitebark Pine Pinus albicaulis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1748	Threatened

Critical habitats

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

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Condor Gymnogyps californianus https://ecos.fws.gov/ecp/species/8193#crithab	Final
California Tiger Salamander Ambystoma californiense https://ecos.fws.gov/ecp/species/2076#crithab	Final
Fisher Pekania pennanti https://ecos.fws.gov/ecp/species/3651#crithab	Proposed
Hoover's Spurge Chamaesyce hooveri https://ecos.fws.gov/ecp/species/3019#crithab	Final
Keck's Checker-mallow Sidalcea keckii https://ecos.fws.gov/ecp/species/5704#crithab	Final

NOT FOR CONSULTATION

Little Kern Golden Trout Oncorhynchus aguabonita whitei Final
https://ecos.fws.gov/ecp/species/5041#crithab

Mountain Yellow-legged Frog Rana muscosa Final
https://ecos.fws.gov/ecp/species/8037#crithab

San Joaquin Valley Orcutt Grass Orcuttia inaequalis Final
https://ecos.fws.gov/ecp/species/5506#crithab

Sierra Nevada Bighorn Sheep Ovis canadensis sierrae Final
https://ecos.fws.gov/ecp/species/3646#crithab

Vernal Pool Fairy Shrimp Branchinecta lynchi Final
https://ecos.fws.gov/ecp/species/498#crithab

Vernal Pool Tadpole Shrimp Lepidurus packardi Final
https://ecos.fws.gov/ecp/species/2246#crithab

NOT FOR CONSULTATION

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 should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- 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

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, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NOT FOR CONSULTATION

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.	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
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black Tern *Chlidonias niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20

Black-chinned Sparrow Spizella atrogularis — Breeds Apr 15 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/9447

Black-throated Gray Warbler Dendroica nigrescens — Breeds May 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Spotted Owl Strix occidentalis occidentalis — Breeds Mar 10 to Jun 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Cassin's Finch Carpodacus cassinii — Breeds May 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/9462

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

Evening Grosbeak Coccothraustes vespertinus — Breeds May 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
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/1680

Lawrence's Goldfinch Carduelis 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

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

Long-eared Owl asio otus — Breeds Mar 1 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/3631

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Mountain Plover Charadrius montanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3638

Nuttall's Woodpecker Picoides 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

NOT FOR CONSULTATION

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

Pinyon Jay Gymnorhinus cyanocephalus — Breeds Feb 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/9420

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

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

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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.

NOT FOR CONSULTATION

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 and understand the FAQ "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.

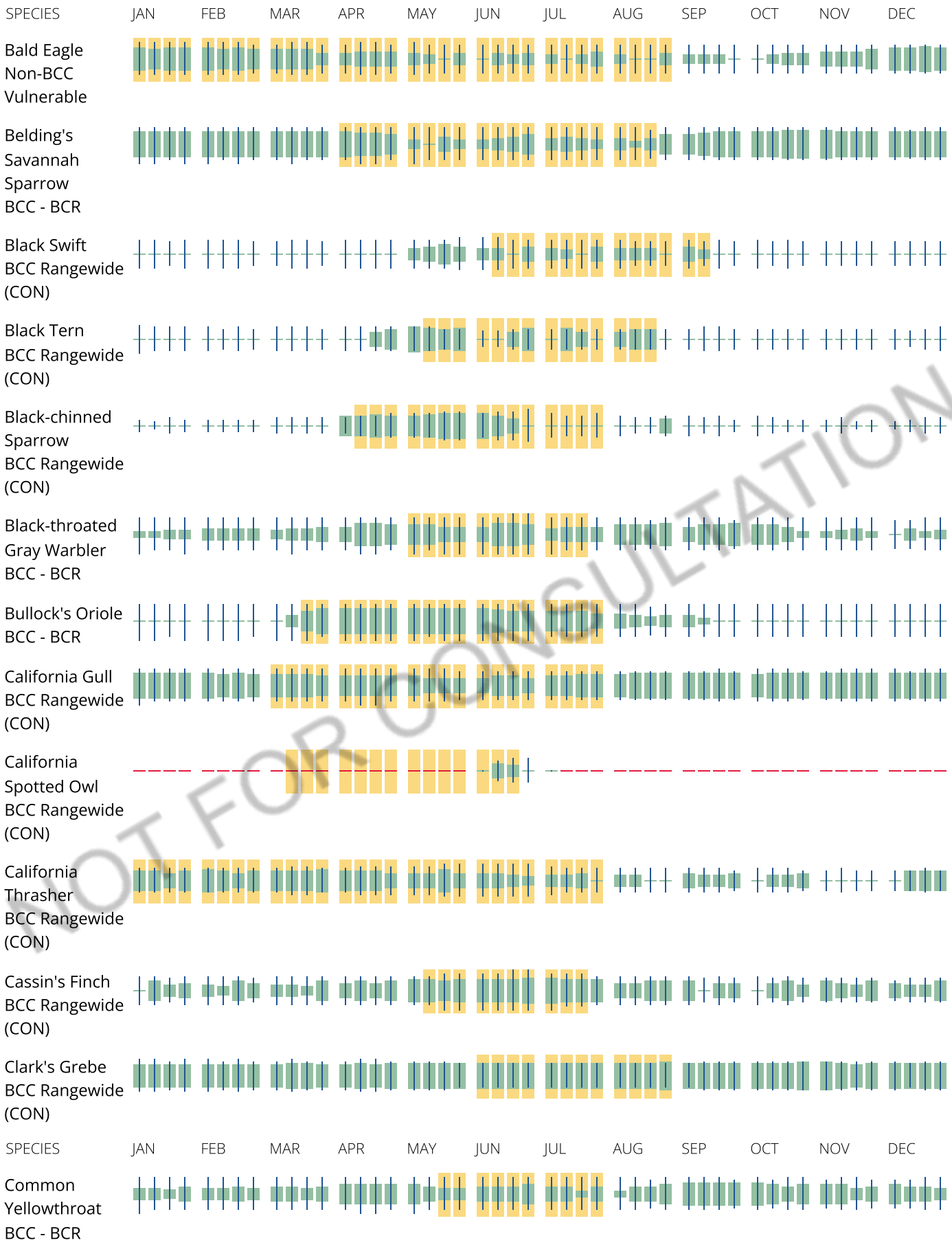
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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

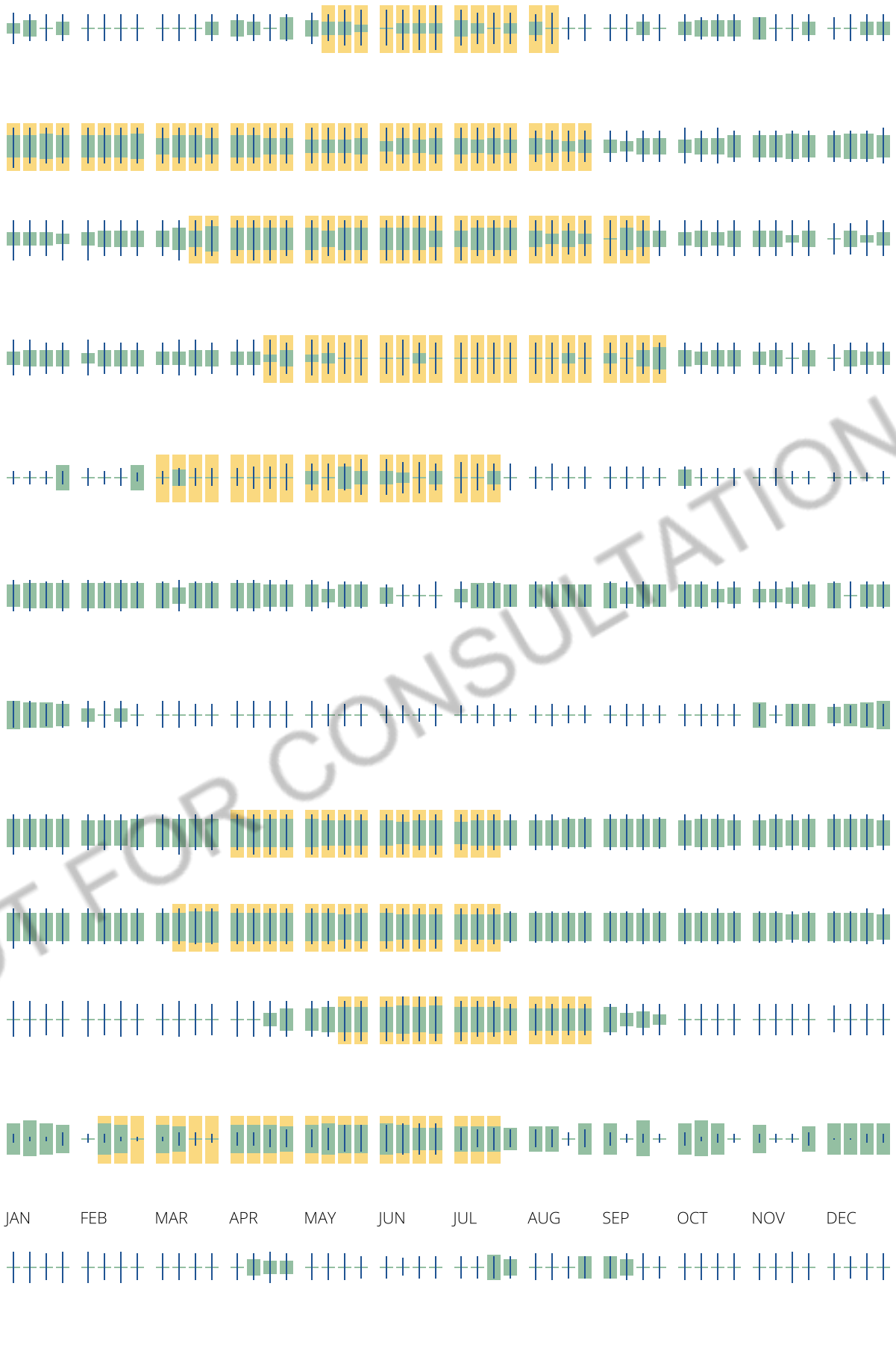
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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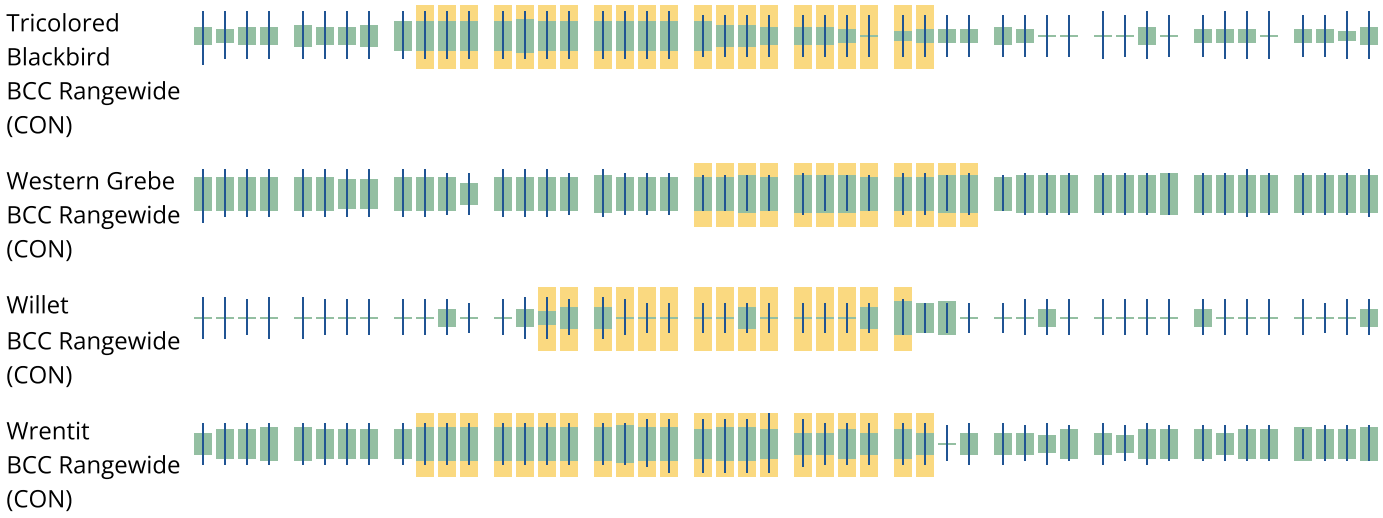
▪ probability of presence ▪ breeding season | survey effort – no data



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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.

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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.

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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.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

This location overlaps the following National Wildlife Refuge lands:

LAND	ACRES
BLUE RIDGE NATIONAL WILDLIFE REFUGE	907.66 acres
PIXLEY NATIONAL WILDLIFE REFUGE	7,417.47 acres

Fish hatcheries

There are no fish hatcheries at this location.

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.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

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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.

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Species Directory

All Species | ESA Threatened & Endangered | Marine Mammals | Sustainable Seafood

ESA Threatened & Endangered

NOAA Fisheries has jurisdiction over 163 endangered and threatened marine species (79 endangered; 84 threatened), including 65 foreign species (39 endangered; 26 threatened).

Additional species are currently under review or have been proposed for Endangered Species Act listing: 3 petitioned species awaiting a 90-day finding, 12 candidate species for ESA listing, 3 proposed species for ESA listing.

In the table below, the Region column shows if the species can be found in a NOAA Fisheries region. If the species occurs only in areas beyond the U.S. exclusive economic zone and territorial waters, the region is labeled as Foreign.

Species Name

Species Category

All

Protected Status

All

Region

All

Display

All

Display All

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
Black Abalone *Haliotis cracherodii*	**SPECIES CATEGORY** Invertebrates - Abalone	Species	ESA Endangered	2009	Final	Final	West Coast
Blue Whale *Balaenoptera musculus*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands Southeast West Coast
Bocaccio (Protected) *Sebastes paucispinis* **Also Known As** Bocaccio, Rock Salmon, Salmon Rockfish, Pacific Red Snapper, Pacific Snapper, Oregon Red Snapper, Oregon Snapper, Longjaw, Merou, Jack, Snapper, Rock Cod, Rockfish	**SPECIES CATEGORY** Fish - Groundfish - Protected Fish	Puget Sound/Georgia Basin DPS	ESA Endangered	2010	Final	FInal	Alaska West Coast
Chinook Salmon (Protected) *Oncorhynchus tshawytscha*	**SPECIES CATEGORY** Fish - Protected Fish	Sacramento River winter-run	ESA Endangered	1994	Final	Final	Alaska West Coast
		Upper Columbia River spring-run	ESA Endangered	1999	Final	Final	Alaska West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		California coastal	ESA Threatened	1999	Final	Final	Alaska West Coast
		Central Valley spring-run	ESA Threatened	1999	Final	Final	Alaska West Coast
		Lower Columbia River	ESA Threatened	1999	Final	Final	Alaska West Coast
		Puget Sound	ESA Threatened	1999	Final	Final	Alaska West Coast
		Snake River fall-run	ESA Threatened	1992	Final	Final	Alaska West Coast
		Snake River spring/summer-run	ESA Threatened	1992	Final	Final	Alaska West Coast
		Upper Willamette River	ESA Threatened	2005	Final	Final	Alaska West Coast
		Central Valley spring-run in the San Joaquin River XN	ESA Experimental Population	---	---	---	Alaska West Coast
		Upper Columbia River spring-run in the Okanogan River subbasin XN	ESA Experimental Population	---	---	---	Alaska West Coast
		Upper Klamath-Trinity River	ESA Candidate	---	---	---	Alaska West Coast
		Oregon Coast	ESA Candidate	---	---	---	West Coast
		Southern Oregon and Northern	ESA Candidate	---	---	---	West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		California Coastal					
Chum Salmon (Protected) *Oncorhynchus keta*	**SPECIES CATEGORY** Fish - Protected Fish	Columbia River ESU	ESA Threatened	1999	Final	Final	Alaska West Coast
		Hood Canal summer-run ESU	ESA Threatened	1999	Final	Final	Alaska West Coast
Coho Salmon (Protected) *Oncorhynchus kisutch*	**SPECIES CATEGORY** Fish - Protected Fish	Central California Coast ESU	ESA Endangered	2005; 1996 (original)	Final	Final	Alaska West Coast
		Lower Columbia River ESU	ESA Threatened	2005	Final	Final	Alaska West Coast
		Oregon coast ESU	ESA Threatened	2008	Final	Final	Alaska West Coast
		Southern Oregon & Northern California coasts ESU	ESA Threatened	1997	Final	Final	Alaska West Coast
Eulachon *Thaleichthys pacificus*	**SPECIES CATEGORY** Fish - Protected Fish	Southern DPS	ESA Threatened	2010	Final	Final	Alaska West Coast
False Killer Whale *Pseudorca crassidens*	**SPECIES CATEGORY** Whales **SPECIES CATEGORY** Dolphins & Porpoises	Main Hawaiian Islands Insular DPS	ESA Endangered	2012	Final	Final	Pacific Islands
Fin Whale *Balaenoptera physalus*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
							Southeast West Coast
Gray Whale *Eschrichtius robustus*	**SPECIES CATEGORY** Whales	Western North Pacific DPS	ESA Endangered	1994; 1970 (original)	---	---	Alaska West Coast
Green Sturgeon *Acipenser medirostris*	**SPECIES CATEGORY** Fish - Protected Fish	Southern DPS	ESA Threatened	2006	Final	Final	Alaska West Coast
Green Turtle *Chelonia mydas*	**SPECIES CATEGORY** Sea Turtles	Central South Pacific DPS	ESA Endangered	2016	Final	---	Pacific Islands
		Central West Pacific DPS	ESA Endangered	2016	Final	---	Pacific Islands
		Mediterranean DPS	ESA Endangered - Foreign	2016	---	---	Foreign
		Central North Pacific DPS	ESA Threatened	2016	Final	---	Pacific Islands
		East Pacific DPS	ESA Threatened	2016	Final	---	West Coast
		North Atlantic DPS	ESA Threatened	2016	Final	Final	New England/Mid-Atlantic Southeast
		South Atlantic DPS	ESA Threatened	2016	Final	---	Southeast
		East Indian-West Pacific DPS	ESA Threatened - Foreign	2016	---	---	Foreign
		North Indian DPS	ESA Threatened - Foreign	2016	---	---	Foreign
		Southwest Indian DPS	ESA Threatened - Foreign	2016	---	---	Foreign

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		Southwest Pacific DPS	ESA Threatened - Foreign	2016	---	---	Foreign
Guadalupe Fur Seal *Arctocephalus townsendi*	**SPECIES CATEGORY** Seals & Sea Lions	Species	ESA Threatened	1985	---	---	Alaska West Coast
Humpback Whale *Megaptera novaeangliae*	**SPECIES CATEGORY** Whales	Central America DPS	ESA Endangered	2016	Final	Final	West Coast
		Western North Pacific DPS	ESA Endangered	2016	Final	Final	Alaska
		Arabian Sea DPS	ESA Endangered - Foreign	2016	Final	---	Foreign
		Cape Verde Islands/Northwest Africa DPS	ESA Endangered - Foreign	2016	Final	---	Foreign
		Mexico DPS	ESA Threatened	2016	Final	Final	Alaska West Coast
Killer Whale *Orcinus orca* **Also Known As** Orca	**SPECIES CATEGORY** Whales **SPECIES CATEGORY** Dolphins & Porpoises	Southern Resident DPS	ESA Endangered	2005	Final	Final	Alaska West Coast
Leatherback Turtle *Dermochelys coriacea*	**SPECIES CATEGORY** Sea Turtles	Species	ESA Endangered	1970	Final	Final (U.S. Caribbean) Final (U.S. West Coast)	New England/Mid-Atlantic Pacific Islands Southeast West Coast
Loggerhead Turtle *Caretta caretta*	**SPECIES CATEGORY** Sea Turtles	North Pacific Ocean DPS	ESA Endangered	2011	Final	No	Pacific Islands West Coast
		Mediterranean Sea DPS	ESA Endangered	2011	---	---	Foreign

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
			- Foreign				
		Northeast Atlantic Ocean DPS	ESA Endangered - Foreign	2011	---	---	Foreign
		North Indian Ocean DPS	ESA Endangered - Foreign	2011	---	---	Foreign
		South Pacific Ocean DPS	ESA Endangered - Foreign	2011	---	---	Foreign
		Northwest Atlantic Ocean DPS	ESA Threatened	2011	Final	Final	New England/Mid-Atlantic Southeast
		South Atlantic Ocean DPS	ESA Threatened - Foreign	2011	---	---	Foreign
		Southeast Indo-Pacific Ocean DPS	ESA Threatened - Foreign	2011	---	---	Foreign
		Southwest Indian Ocean DPS	ESA Threatened - Foreign	2011	---	---	Foreign
North Pacific Right Whale *Eubalaena japonica*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	2008; 1970 (original)	Final	Final	Alaska West Coast
Oceanic Whitetip Shark *Carcharhinus longimanus*	**SPECIES CATEGORY** Fish - Highly Migratory Fish - Protected Fish - Sharks	Species	ESA Threatened	2018	Under Development	Not Prudent	New England/Mid-Atlantic Pacific Islands Southeast West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
Olive Ridley Turtle *Lepidochelys olivacea*	**SPECIES CATEGORY** Sea Turtles	Mexico's Pacific coast breeding populations	ESA Endangered	1978	Final	---	West Coast
		All other populations	ESA Threatened	---	---	---	Pacific Islands Southeast West Coast
Scalloped Hammerhead Shark *Sphyrna lewini*	**SPECIES CATEGORY** Fish - Highly Migratory Fish - Protected Fish - Sharks	Eastern Pacific DPS	ESA Endangered	2014	---	No	West Coast
		Eastern Atlantic DPS	ESA Endangered - Foreign	2014	---	---	Foreign
		Central & Southwest Atlantic DPS	ESA Threatened	2014	---	No	Southeast
		Indo-West Pacific DPS	ESA Threatened	2014	---	No	Pacific Islands
Sei Whale *Balaenoptera borealis*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands Southeast West Coast
Sockeye Salmon (Protected) *Oncorhynchus nerka*	**SPECIES CATEGORY** Fish - Protected Fish	Snake River ESU	ESA Endangered	1991	Final	Final	Alaska West Coast
		Ozette Lake ESU	ESA Threatened	1999	Final	Final	Alaska West Coast
Sperm Whale *Physeter macrocephalus*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands Southeast West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
Steelhead Trout *Oncorhynchus mykiss*	**SPECIES CATEGORY** Fish - Protected Fish	Southern California DPS	ESA Endangered	1997	Final	Final	Alaska West Coast
		California Central Valley DPS	ESA Threatened	1998	Final	Final	Alaska West Coast
		Central California Coast DPS	ESA Threatened	1997	Final	Final	Alaska West Coast
		Lower Columbia River DPS	ESA Threatened	1998	Final	Final	Alaska West Coast
		Middle Columbia River	ESA Threatened	1999	Final	Final	Alaska West Coast
		Northern California DPS	ESA Threatened	2000	Final	Final	Alaska West Coast
		Puget Sound DPS	ESA Threatened	2007	Final	Final	Alaska West Coast
		Snake River Basin DPS	ESA Threatened	2006	Final	Final	Alaska West Coast
		South-Central California Coast DPS	ESA Threatened	1997	Final	Final	Alaska West Coast
		Upper Columbia River DPS	ESA Threatened	2006; 1997 (original)	Final	Final	Alaska West Coast
		Upper Willamette River DPS	ESA Threatened	1999	Final	Final	Alaska West Coast
		Middle Columbia River XN	ESA Experimental Population	---	---	---	Alaska West Coast
		Olympic Peninsula	ESA Candidate	---	---	---	West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		DPS					
Steller Sea Lion *Eumetopias jubatus*	**SPECIES CATEGORY** Seals & Sea Lions	Western DPS	ESA Endangered	1997; 1990 (original)	Final	Final	Alaska West Coast
White Abalone *Haliotis sorenseni*	**SPECIES CATEGORY** Invertebrates - Abalone	Species	ESA Endangered	2001	Final	Not Prudent	West Coast
Yelloweye Rockfish *Sebastes ruberrimus*	**SPECIES CATEGORY** Fish - Protected Fish	Puget Sound/ Georgia Basin DPS	ESA Threatened	2010	Final	Final	Alaska West Coast

Appendix D

Archaeological Survey Report

Phase I Archaeological Survey Report for the El Monte Way and Road 56 Roundabout Project, Dinuba, Tulare County, California

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USGS Reedley 7.5' topographic quadrangle
4.61-acre project boundary; intensive pedestrian survey
Keywords: Road 56 Bridge, Traver Canal

MANAGEMENT SUMMARY

Taylored Archaeology performed a Phase I Archaeological Survey Report for the El Monte Way and Road 56 Roundabout Project (Project) as a subconsultant to 4Creeks, Inc. The proposed Project involves converting the existing El Monte Way and Road 56 signaled intersection in Tulare County into a roundabout. The Project is funded by the Tulare County Association of Governments, a local municipal organization, and requires compliance with the California Environmental Quality Act. Additionally, the Project anticipates receiving federal funding, though the specific agency and funding source has not been identified at this point in time. Therefore, the Project was additionally assessed for effects to historic properties within the Project's Area of Potential Effects (APE) under Section 106 of the National Historic Preservation Act (NHPA).

Taylored Archaeology performed a phase I archaeological survey report of the APE to assess and determine whether historic resources are present that could be affected by the proposed Project. The archaeological investigation included: (1) a records search from the SSJVIC of the CHRIS; (2) a request of the NAHC Sacred Lands File and nongovernmental tribal outreach; (3) archival research; (4) an archaeological survey of the APE; and (5) documentation of resources identified with the APE.

The SSJVIC reported three prior cultural resources investigations conducted within the APE and no cultural resources recorded within the APE. The SSJVIC also reported that one previous cultural resources investigation was conducted, and nine historical resources were recorded within a 1-mile radius of the APE.

The NAHC's Sacred Lands File search results, outreach with the Native American representatives, and the pedestrian survey did not identify archaeological sites or tribal cultural resources in the APE. Taylored Archaeology's pedestrian survey of the APE for cultural resources revealed that a bridge and a canal both intersect the APE: Traver Canal and Road 56 bridge.

A segment of the Traver Canal within the APE was previously recorded and evaluated in 2001 by PAR Environmental Services and determined to not eligible for the National Register of Historic Places under Criterion A through D, nor to be a historical resource for the purposes of CEQA. Based on SSJVIC records, archival research, and the archaeological pedestrian survey, the Road 56 bridge over Traver Canal is a concrete bridge built in 1963. According to the Project description, no changes or alternations are being proposed to the bridge or Traver Canal within the APE.

Taylored Archaeology additionally advises the following:

In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the APE, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance. In the event of accidental discovery of unidentified archaeological remains during development or ground-moving

activities in the APE, all work shall be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.

If human remains are uncovered during construction, the Tulare County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

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1
INTRODUCTION

Taylored Archaeology performed a Phase I Archaeological Survey Report for the El Monte Way and Road 56 Roundabout Project (Project) near the city of Dinuba, California in unincorporated Tulare County, California under contract to 4Creeks, Inc. As part of development approval process, the City of Dinuba as lead agency must comply with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 [g] mandate that government agencies consider the impacts of a project on the environment, including cultural resources. The Project is funded by the Tulare County Association of Governments, a local municipal organization, and anticipates receiving federal funding as well, though the specific agency and funding source has not been identified at this point in time. Therefore, the Project was additionally assessed for effects to historic properties within the Project's Area of Potential Effects (APE) under Section 106 of the National Historic Preservation Act (NHPA).

1.1 PROJECT DESCRIPTION AND LOCATION

The existing El Monte Way (Avenue 416) and Road 56 intersection is a four-way intersection with traffic signals. The proposed Project would convert the intersection into a yield control, single lane, four-legged roundabout. Splinter islands would be installed at all four of the entrance and exit points.

The APE for the Project is defined as the area of potential ground disturbance resulting from project activities based upon the project description. The total horizontal APE is approximately 4.61 acres, and the vertical APE is approximately 8 feet below ground surface.

The Project's APE is approximately 2 miles west of the City of Dinuba on intersections El Monte Way (Avenue 416) and Road 56 intersection in Tulare County, California (Figure 1-1). The APE is on the U.S Geological Survey (USGS) 7.5-minute Reedley, California, topographic quadrangle in Section 1 of Township 16 South, Range 21 East, Mount Diablo Base and Meridian (Figure 1-2).

1.2 REGULATORY SETTING

In this report "cultural resources" are defined as prehistoric or historical archaeological sites as well as historical objects, buildings, or structures. In accordance with 30 Code of Federal Regulations (CFR) §60.4, "historical" in this report applies to cultural resources which are at least 50 years old. The significance or importance of a cultural resource is dependent upon whether the resource qualifies for inclusion at the local or state level in the California Register of Historical Resources (CRHR), or at the federal level in the National Register of Historic Places (NRHP). Cultural resources that are determined to be eligible for inclusion in the CRHR are called "historical resources" (California Code of Regulations [CCR] 15064.5[a]). Under this statue the determination of eligibility is partially based on the consideration of the criteria of significance as

defined in 14 CCR 15064.5(a)(3). Cultural resources eligible for inclusion in the NRHP are deemed "historic properties".

1.2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to CEQA, a historical resource is a resource listed in, or determined to be eligible for listing in, the CRHR. Historical resources may include, but are not limited to, "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically or archaeologically significant" (PRC §5020.1[j]). In addition, a resource included in a local register of historical resources or identified as significant in a local survey conducted in accordance with the state guidelines are also considered historic resources under California Public Resources Code (PRC) Section 5020.1.

CEQA details appropriate measures for the evaluation and protection of cultural resources in §15064.5 of the CEQA Guidelines. According to CEQA guidelines §15064.5 (a)(3), criteria for listing on the CRHR includes the following:

> *(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.*
> *(B) Is associated with the lives of persons important in our past.*
> *(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.*
> *(D) Has yielded, or may be likely to yield, information important in prehistory or history.*

According to CEQA guidelines §21074 (a)(1), criteria for tribal cultural resources includes the following:

> *(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:*
> *(A) included or determined to be eligible for inclusion in the California Register of Historical Resources.*
> *(B) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.*

Protection of cultural resources within California is additionally regulated by PRC §5097.5, which prohibits destruction, defacing, or removal of any historic or prehistoric cultural features on land under the jurisdiction of State or local authorities.

1.2.2 NATIONAL HISTORIC PRESERVATION ACT OF 1966

The National Historic Preservation Act (NHPA) (16 U.S.C. 470 ET SEQ.) was enacted in 1966 and created a national policy of historic preservation. The law established several programs, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at local, state, and federal levels. The NHPA authorized the creation and expansion of the

National Register of Historic Places (NRHP), formed the position of State Historic Preservation Officer (SHPO), allowed for the creation of State Review Boards to set up methods for local governments to enact the NHPA at a local level, assisted Native American tribes with preserving their heritage, and established the Advisory Council on Historic Preservation (ACHP).

The NHPA established criteria for determining if a historic property is eligible for inclusion in the NRHP. These criteria are set forth in 36 CFR 60.4 as follows:

> The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
>
> (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) that are associated with the lives of persons significant in our past; or
>
> (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) that have yielded, or may be likely to yield, information important in prehistory or history.

1.2.3 SECTION 106 OF NHPA

Section 106 of NHPA states that any federal agency with direct or indirect jurisdiction over federally assisted or proposed federal action will take into account the effect the action will have on any historic property that is on, or eligible to be included in, the NRHP. The NHPA provides the Advisory Council on Historic Preservation and the relevant SHPO the opportunity to provide comment on the federal action in regard to potential impacts to historic properties.

1.3 PROFESSIONAL QUALIFICATIONS

Archaeologist Consuelo Y. Sauls (M.A.), a Registered Professional Archaeologist (RPA 41591505), managed the assessment and compiled this report for the Project. Ms. Sauls also conducted the records search, literature review, requested Sacred Lands File and performed the pedestrian field survey of the Project site. Ms. Sauls meets the Secretary of the Interior's Standards for Professional Qualifications in Archaeology. Statement of Qualifications for key personnel is provided in Appendix A.



Figure 1-1 Project vicinity in Tulare County, California.

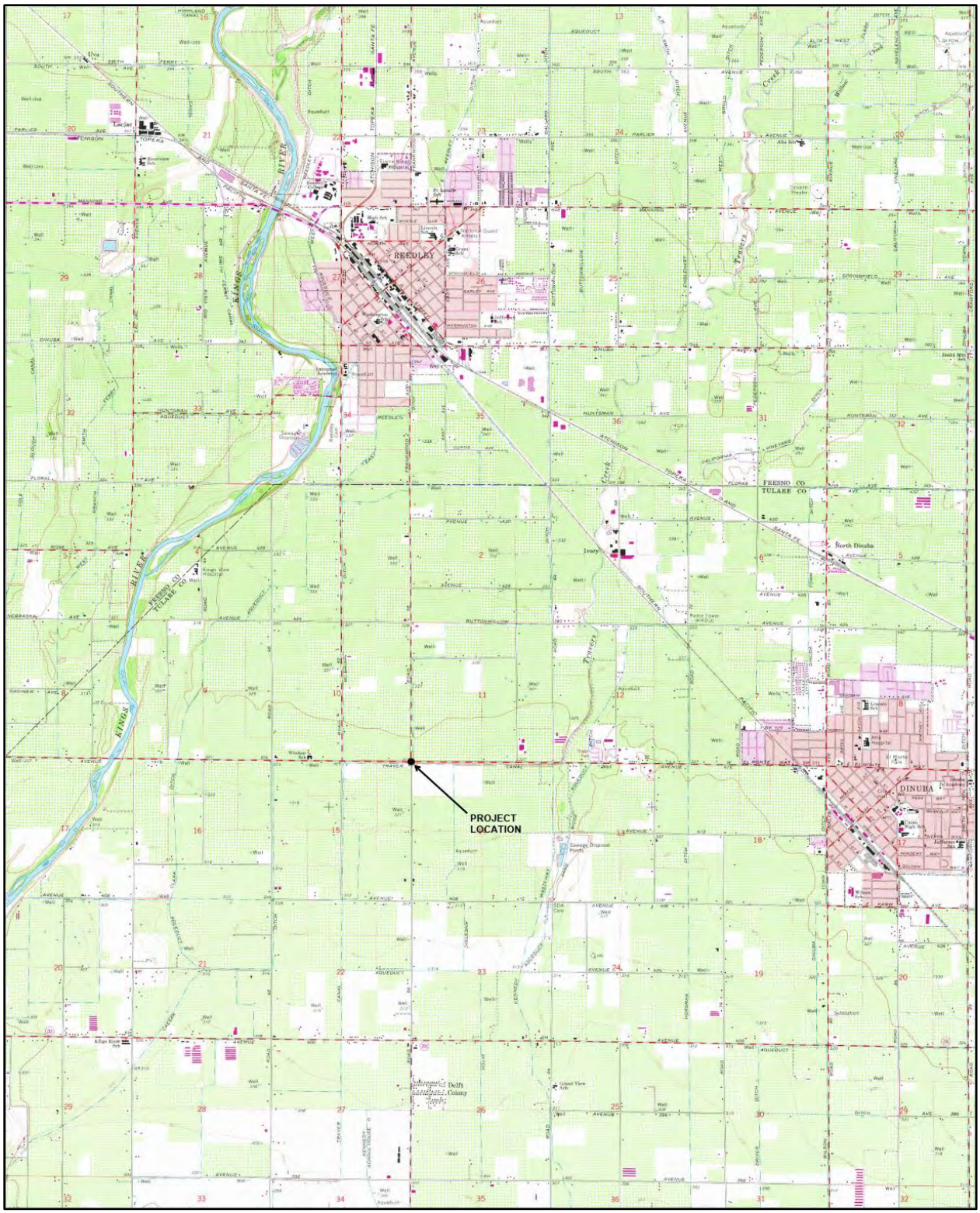


Figure 1-2 Project location on the USGS Reedley, CA 7.5-minute quadrangle.



Figure 1-3 Aerial view of the APE showing survey coverage.

1.4 REPORT STRUCTURE

This report documents the results of an archaeological survey report of the proposed Project area. In order to assess potential project impacts to archaeological and historical resources pursuant to CCR §15064.5, the following specific tasks were completed: (1) requesting a records search from the Southern San Joaquin Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), at California State University, Bakersfield; (2) requesting a Sacred Lands File Search from the Native American Heritage Commission (NAHC); (3) archival research;and (4) conducting an archaeological pedestrian survey.

Taylored Archaeology prepared this report following the California Office of Historic Preservation standards in the 1990 Archaeological Resources Management Report Recommended Contents and Format. Chapter 1 describes the introduction of the Project and its location, and identifies the key personnel involved in this report. Chapter 2 summarizes the Project setting, including the natural, prehistoric, historic, and ethnographic background for the Project area and surrounding area. Chapters 3 details the methods used for cultural records search, archival research, local Native American outreach, and archaeological pedestrian survey. Chapter 4 summarizes the results of the cultural resource investigation. Chapter 5 discusses the Project results and offers management recommendations. Chapter 6 is a bibliography of references cited within this report. The report also contains the following appendices: Qualifications of key personnel (Appendix A), the CHRIS records search results (Appendix B), the NAHC letter of the SLF results (Appendix C) and Cultural Resource Record Forms (Appendix D).

2
PROJECT SETTING

2.1 NATURAL ENVIRONMENT

The Project area lies in the Central Valley of California, which is approximately 450 miles from north to south, and ranges in width east to west from 40 to 60 miles (Prothero 2017). The Central Valley is divided into two subunits, the Sacramento Valley in the north and the San Joaquin Valley in the south, which are each named after the primary rivers within each valley (Madden 2020). The Project is located approximately 275 feet above sea level on the open flat plains of the Southern San Joaquin Valley. Climate within the San Joaquin valley is classified as a 'hot Mediterranean climate', with hot and dry summers, and cool damp winters characterized by periods of dense fog known as 'tule fog' (Prothero 2017).

The San Joaquin Valley is a comprised of a structural trough created approximately 65 million years ago and is filled with nearly six miles of sediment (Bull 1964). The San Joaquin Valley ranges from Stockton and the San Joaquin-Sacramento River Delta in the north to Wheeler Ridge to the south, ranging nearly 60 miles wide at its widest (Zack 2017). It is split by late Pleistocene alluvial fans between the San Joaquin River hydrologic area in the north and the Tulare Lake Drainage Basin in the south (Rosenthal et al 2007). The Project site is located within the latter of the two hydrologic units. The Kaweah, Tule, Kern, and Kings rivers flowed into large inland lakes with no outflow except in high flood events, in which the lakes would flow through the Fresno Slough into the San Joaquin River. The largest of these inland lakes was the Tulare Lake, which occupied a vast area of Tulare and Kings Counties and was the largest freshwater lake west of the Mississippi. These four rivers in the Tulare Lake Drainage Basin accounted for more than 95 percent of water discharged into Tulare Lake, with the remaining five percent sourced from small drainages originating in the Coast Ranges to the west (Adams et al. 2015).

The Project area is in northwestern Tulare County on the valley floor of the San Joaquin Valley within the greater Kings River Delta alluvial fan. Before the appearance of agriculture in the nineteenth century, the Project location would have been comprised of prairie grasslands with scatter oak tree savannas near the foothills, and along the various streams and drainages (Preston 1981). Riparian environments would also have been present along various waterways, including drainages and marshes. Native vegetation likely would have consisted of needle grasses and other perennial bunchgrasses before the introduction of non-native species in the 1800s.

The valley floor of the region was largely dominated by marshlands, lakes, and annual grasslands. Historically, these habitats provided a lush environment for large animals, including various migratory birds and other waterfowl, grizzly bear, tule elk, pronghorn, mule deer, black bear, and mountain lion (Preston 1981). Native trees and plants observed in the Project vicinity include various blue, live, and white oaks, cottonwood, and willow. The introduction of agriculture to the region resulted in large animals being forced out of their habitat. Common land mammals now include valley coyote, bobcat, gray fox, kit fox, and rabbits. Rivers and lakes throughout the valley

provide habitat for freshwater fish, including rainbow trout, Sacramento sucker, and Sacramento perch (Preston 1981).

2.2 PREHISTORIC SETTING

Research into San Joaquin Valley prehistory began in the early 1900s with several archaeological investigations (Rosenthal et al. 2007). The Southern San Joaquin Valley is of one of the least understood areas within California due to a lack of well-grounded chronologies for large segments of the valley (Rosenthal et al. 2007). This is largely due to the valley floor being filled with thick alluvial deposits, and from human activity largely disturbing much of the valley floor due to a century and a half of agricultural use (Dillon 2002; Siefken 1999). Mound sites may have occurred as frequently as one every two or three miles along major waterways but studying such mounded occupations sites is difficult as most surface sites have been destroyed (Schenck and Dawson 1929). Much of the early to middle Holocene archaeological sites may be buried as deep as 10 meters due to millennia of erosion and alluvial deposits from the western Sierras (Moratto 1984).

Mass agricultural development has heavily disturbed and changed the landscape of the Southern San Joaquin Valley, from the draining of marshes and the vanishing of the extensive Tulare Lake, to grading nearly the entire valley for agricultural operations (Garone 2011). These activities have impacted or scattered much of the shallow surface deposits and mounds throughout the valley (Rosenthal et al 2007). Some researchers have suggested that potentially as much as 90 percent of all Central California archaeological sites have been destroyed from these activities (Riddell 2002).

The cultural traits and chronologies which are summarized below are largely based upon information discussed in multiple sources, including Bennyhoff and Fredrickson (1973, 1974), Garfinkel (2015), McGuire and Garfinkel (1980), Moratto (1984), and Rosenthal et al. (2007). The most recent comprehensive approach to compiling a chronology of the Southern San Joaquin Valley prehistory is by Garfinkel in 2015, which builds off Rosenthal's 2007 previous work. Both Garfinkel's and Rosenthal's chronologies are calculated in years B.C. In the interest of maintaining cohesiveness with modern anthropological research, the dates of these chronologies have been adapted into years before present (B.P.).

The Paleo-Indian Period (13,500-10,600 cal B.P.) was largely represented by ephemeral lake sites which were characterized by atlatl and spear projectile points. Around 14,000 years ago, California was largely a cooler and wetter place, but with the retreat of continental Pleistocene glaciers, California largely experienced a warming and drying period. Lakes filled with glacial meltwater were located in the valley floor and used by populations of now extinct large game animals. A few prehistoric sites were discovered near the southwestern shore of Tulare Lake (Garfinkel 2015). Foragers appear to have operated in small groups which migrated on a regular basis.

During the Lower Archaic Period (10,500-7450 cal B.P.), climate change created a largely different environment which led to the creation of larger alluvial fans and flood plains. Most of the

archaeological records of the prior period wound up being buried by geological processes. During this time, cultural patterns appear to have emerged between the foothill and valley populations of the local people. The foothill sites were often categorized by dense flaked and ground stone assemblages, while the valley sites were instead characterized by a predominance of crescents and stemmed projectile points. Occupation within the area is represented mostly by isolated discoveries and along the former shoreline of Tulare Lake. Archaeological finds are typically characterized by chipped stone crescents, stemmed points, and other distinctive flakes stone artifacts (Rosenthal et al. 2007). Variations in consumption patterns emerged as well, with the valley sites more marked by consumption of waterfowl, mussels, and freshwater fish, while the foothills sites saw an increase in nuts, seeds, and a more narrowly focused diet than the valley sites.

The Middle Archaic (7450-2500 cal B.P.) saw an increase in semi-permanent villages along river and creek settings, with more permanent sites located along lakes with a more stable supply of water and wildlife. Due to the warmer and drier weather of this period, many lakes within the valley dramatically reduced in size, while some vanished completely (Garone 2011). Cultural patterns during this time saw an increase in stone tools, while a growth in shell beads, ornaments, and obsidian evidence an extensive and ever-growing long-distance trade network. Little is known of cultural patterns in the valley during the Upper Archaic (2500-850 B.P.), but large village structures appeared to be more common around local rivers. An overall reduction of projectile point size suggests changing bow and arrow technologies. Finally, the Emergent Period (850 cal B.P. - Historic Era) was generally marked by an ever-increasing specialization in tools, and the bow and arrow generally replaced the dominance of the dart and atlatl. Cultural traditions ancestral to those recorded during ethnographic research in the early 1900s are identifiable.

2.3 ETHNOGRAPHY

The APE is in the Southern Valley Yokuts ethnographic territory of the San Joaquin Valley. The Yokuts were generally divided into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts. The Yokuts are a sub-group of the Penutian language that covers much of coastal and central California and Oregon (Callaghan 1958). The Yokuts language contained multiple dialects spoken throughout the region, though many of them were mutually understandable (Merriam 1904).

The Yokuts have been extensively researched and recorded by ethnographers, including Powers (1877), Kroeber (1925), Gifford and Schenck (1926, 1929), Gayton (1930, 1945), Driver (1937), Harrington (1957), Latta (1977), and Wallace (1978). Much of the research from these ethnographers focuses on the central Yokuts tribes due to the northernmost tribes being impacted by Euro-Americans during the California Gold Rush of the mid 1800s, and by the southernmost tribes often being removed and relocated by the Spanish to various Bay Area or coastal missions. The central Yokuts tribes, and especially the western Sierra Nevada foothill tribes, were the most intact at the time of ethnographic study.

The most detailed ethnographic information gathered regarding Native American group territories in Central California is located within maps prepared by Kroeber. The information presented in Kroeber's map of Southern and Central Yokuts shows the Project area within the Wechihit Yokuts territory (1925: Plate 47). The main village for this area was *Wewayo*, which was approximately 6 miles to the north of the APE along Wahtoke Creek that branches off of Kings River (Kroeber 1925). Primary Yokuts villages were typically located along lakeshores and major stream courses, with scattered secondary or temporary camps and settlements located near gathering areas in the foothills. Yokuts were organized into local tribes, with one or more linked villages and smaller settlements within a territory (Kroeber 1925).

Each local tribe was a land-owning group that was organized around a central village and shared common territory and ancestry. Most local tribe populations ranged from 150 to 500 people (Kroeber 1925). These local tribes were often led by a chief, who was often advised by a variety of assistants including the winatum, who served as a messenger and assistant chief (Gayton 1930). Early studies by Kroeber (1925), Gifford and Schenck (1926), and Gayton (1930) concluded that social and political authority within local tribes was derived from male lineage and patriarchy. However, more recent reexaminations (Dick-Bissonnette 1998) argue that this assumption of patriarchal organization was based on male bias by early 20th century researchers, and instead Yokuts sociopolitical authority was matriarchal in nature and centered around matrilineal use-rights and women's work groups.

Prior to Euro-American contact, there was abundance of natural resources within the greater Tulare Lake area. Due to these resources, Yokuts maintained some of the largest populations in North America west of the continental divide (Cook 1955a).

2.4 HISTORIC SETTING

2.4.1 California History

European contact in modern-day California first occurred in 1542 with the arrival of a Spanish expedition lead by Juan Rodríguez Cabrillo into San Diego Bay (Engstrand 1997). Expeditions along the California coast continued throughout the sixteenth century and primarily focused on finding favorable harbors for further expansion and trade across the Pacific. However, rocky shorelines, unfavorable currents, and wind conditions made traveling north from New Spain to the upper California coast a difficult and time-consuming journey (Eifler 2017). The topography of California, with high mountains, large deserts, and few natural harbors lead to European expansion into California only starting in the 1760s. As British and Russian expansion through fur trading encroached on California from the north, Spain established a system of presidios, pueblos, and missions along the California coast to defend its claim, starting with Mission San Diego de Alcalá in 1769 (Engstrand 1997).

2.4.2 Central California History

The San Joaquin Valley did not experience contact with Europeans until the late 1700s (Starr 2007). Life at the California missions was hard and brutal for Native Americans, with many dying of disease, poor conditions, and many fleeing to areas not under direct Spanish control (Jackson and Castillo 1995). The earliest exploration of the San Joaquin Valley by Europeans was likely by the Spaniards when in the fall of 1772 a group known as the Catalonian Volunteers entered the valley through Tejon Pass in search of deserters from the Southern California Missions (Zack 2017). However, the group only made it as far north as Buena Vista Lake in modern day Kern County before turning around due to the extensive swamps. Additional excursions to the valley were for exploration such as those led by Lieutenant Bariel Moraga in 1806, but also to find sites for suitable mission sites and to track down Native Americans fleeing the coastal missions (Cook 1958).

Subsequent expeditions were also sent to pursue outlaws from the coast who would often flee to the valley for safety. One of the subsequent explorations was an expedition in 1814 to 1815 with Sargent Juan Ortega and Father Juan Cabot, who left the Mission San Miguel with a company of approximately 30 Spanish soldiers and explored the San Joaquin Valley (Smith 2004). This expedition passed through the Kaweah Delta and modern-day Visalia and made a recommendation to establish a mission near modern-day Visalia. However, with European contact also came European disease. Malaria and other new diseases were brought by Europeans, and in 1833 an epidemic of unknown origin traveled throughout the Central Valley. Some estimates place the Native American mortality of the epidemic as high as 75 percent (Cook 1955b). Combined with the rapid expansion of Americans into California in 1848 during the Gold Rush, Native American populations within the valley never fully recovered (Eifler 2017).

Initial settlement within the valley by Europeans in the 1830s was largely either by trappers or horse thieves (Clough and Secrest 1984). In fact, horse and other livestock theft was so rampant that ranching operations on the Rancho Laguna de Tache by the Kings River and Rancho del San Joaquin Rancho along the San Joaquin River could not be properly established (Cook 1962). With the end of the Mexican American War and the beginning of the gold rush in 1848, the San Joaquin Valley became more populated with ranchers and prospectors. Most prospectors traveled by sea to San Francisco and used rivers ranging from the Sacramento River to the San Joaquin River to access the California interior (Eifler 2017). Most areas south of the San Joaquin River were less settled simply because those rivers did not connect to the San Francisco Bay area except in wet flood years. By 1850, California became a state and Tulare County was established in 1853.

2.4.3 Local History

The Southern Pacific Railroad was extended from Fresno into Tulare County in the early 1870s (Small 1926). By 1874, branch railroad connections were built to agricultural communities, including the local community of Dinuba (Mitchell 1974). The construction of the rail line also brought an increase in agriculture and farms, which clashed with existing ranching operations in the local area. Escalating conflicts and livestock disputes between ranchers and farmers lead to the “No Fence Law” in 1874, which forced ranchers to pay for crop and property damage caused

by their cattle (Ludeke 1980). With the passage of this law and the expansion of irrigation systems, predominant land use in the 1870s switched from grazing to farming (Mitchell 1974). This led to the beginning of the vast change of the San Joaquin Valley from native vegetation and grasslands to irrigated crops (Varner and Stuart 1975).

Water rights within California originally arose from the 'first come first serve' policy of the Gold Rush era. Diverting surface water to farms became big business but was a convoluted mess of customs, traditions, and conflicting claims (Zack 2017). Fed up with the situation, small farmers gathered behind Modesto lawyer C.C. Wright, who was elected to the California legislature in 1887 on the platform of taking water rights from large estates and putting it in the power of community-controlled irrigation districts (Hundley 1992). To solve this mess, the Wright Act of 1887 was passed that allowed residents to petition a local county board of supervisors to create irrigation districts that had the power to issues bonds, and tax land within the district boundaries to pay for the creation and maintenance of canals and ditches for irrigation purposes.

At the same time as the Wright Act, an important step forward was made in ditch-digging technology that allowed irrigation systems to be built at a faster pace. From the 1840s to 1890s, farm ditches and canals were largely constructed through the use of buckboards and slip-scoops, which involved the use of a board pulled by horses in an uprights position in order to level ground (Bulls 2010). Between 1883 and 1885, Scottish immigrant James Porteous had moved to Fresno and made significant improvements to the buckboard style scraper that allowed the new scraper to be pulled by two horses and scrape and move soil while dumping it at a controlled depth. This new design was patented and sold as the "Fresno Scraper", which lead to an explosion of ditch digging efforts within the San Joaquin Valley (Zack 2017).

One of the first irrigation canals within the region was the Traver Canal, with was completed in 1883 by the '76 Land a Water Company. The canal was named after Charles Traver, one of the original shareholders, and was later sold to the Alta Irrigation District in 1890 (Morrison 1988).

3
METHODS

3.1 RECORDS SEARCH

On April 18, 2023, Taylored Archaeology requested a cultural resource records search from the SSJVIC of the CHRIS at California State University in Bakersfield, California. The purpose of this request was to identify and review prior cultural resource investigations completed in or near the APE and identify any prehistoric or historical resources that had been previously recorded within the APE and a 1-mile radius of the surrounding area. SSJVIC staff researched historical USGS topographic maps, reports of previous cultural resource investigations, archaeological site and survey base maps, cultural resource records (DPR forms) as well as listings of the Historic Properties Directory of the Office of Historic Preservation, General Land Office Maps, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources (Appendix B).

3.2 ARCHIVAL RESEARCH

Archival research was conducted to investigate the historical background for any potential archaeological deposits, historical deposits or built environment properties that may exist in the APE. Historical maps, historical aerial photographs, historical US Geological Survey (USGS) topographic maps, Google Street View photos, books, scholarly articles, and other records were used to better understand the prehistory and history of the APE and surrounding area. Research data was used to identify potential areas within the APE where archaeological deposits may exist, or historical buildings, structures or objects may exist. The results of this research are presented in Chapter 4.

3.3 NATIVE AMERICAN OUTREACH

Taylored Archaeology sent a request to the NAHC as part of this archaeological survey report for a Sacred Lands File (SLF) search on April 18, 2023. The objective of the SLF search was to identify any known places of religious, sacred activity or traditional use or gathering areas are present in or near the APE. The NAHC responded via email on May 25, 2023, with a letter including contact information for local Native American tribal representatives who may have knowledge or interest in sharing information about the APE and surrounding area. Each Native American representative listed was sent a nongovernmental outreach letter via certified mail and a map notifying them of the APE and asking if they had any knowledge of the Project area or surrounding vicinity. Follow-up communication was performed via email or phone call as appropriate. The SLF results are in Chapter 4.

3.4 ARCHAEOLOGICAL PEDESTRIAN SURVEY

A pedestrian survey was conducted by archaeologist Consuelo Sauls on May 5, 2023, along the entire length of the APE. Ms. Sauls walked a 7 meter transect on both sides of all roadways within

the APE. The survey started at the southeast end of the APE on Road 56 walking north to where Road 56 joins El Monte Avenue. Ms. Sauls walked on the side of the road along Road 56 towards El Monte Way then proceeded east along El Monte Way within the APE. She walked west along the north side of El Monte Way back toward the intersection of Road 56 and El Monte Way and continued north on Road 56 within the APE. Ms. Sauls walked west along El Monte way and then walked east on the road towards the intersection and south on the side of Road 56. The APE was checked for both prehistoric deposits and historical features, structures, and artifacts more than 50 years old that may be present on the ground surface. The entire APE was accessible. Ms. Sauls photographed the survey area using an iPhone 11 Pro digital camera.

4
RESULTS

4.1 RECORDS SEARCH

The SSJVIC provided the records search results in a letter dated May 1, 2023 (Records Search File No. 23-143; Appendix B). The results of this search indicated that there are three previous cultural resources investigation reports conducted within the APE (Table 4-1), and one cultural resources investigation report done within the 1.0-mile surrounding area (Table 4-2).

The SSJVIC records search letter stated nine previous cultural resources were recorded within a 1.0-mile radius of the APE (Table 4-3), and none previously recorded within the APE. Further review of the SSJVIC records revealed one previously recorded resource, P-54-002171, overlaps the APE. P-54-002171 is an earthen and trough-shaped segment of the Traver Canal originally completed in 1883 (Bakic 2002). This resource was previously evaluated in 2001 by Tracy Bakic of PAR Environmental Services. This segment of the Traver Canal was evaluated for potential eligibility for the National Register of Historical Places under Criterion A through D. It was not found to be eligible under the Criteria B, C or D. The canal segment had potential under Criterion A but was found to be not eligible due to major modifications, including culvert and bank replacements, having significantly diminished its integrity (Bakic 2002). Bakic therefore concluded that this segment of the Traver Canal does not appear to be eligible for the National Register of Historic Places, nor does it appear to be a historical resource for the purposes of CEQA. Bakic additionally documented the Road 56 bridge over the Traver Canal, noting that it was built in 1963.

Table 4-1 Previous Cultural Resources Investigation Reports within the APE

Report Number	Author(s)	Date	Report Title	Study
TU-00183	Cantwell, R.J.	1977	Archaeological and Historical Survey Report for Signalization at Avenue 416 and Road 56	Archaeological, Architectural/ Historical Field Study
TU-01189	Latta, Frank F.	1929	San Joaquin Primeval - Uncle Jeff's Story: A Tale of a San Joaquin Valley Pioneer and His Life with the Yokuts Indians	Historical Narrative (Book)
TU-01190	Mitchell, Annie R.	1957	Jim Savage and the Tulareño Indians	Historical Narrative (Book)

Table 4-2 Previous Cultural Resources Investigation Reports within 1.0-mile radius of the APE

Report Number	Author(s)	Date	Report Title	Study
TU-00103	Wickstrom, Brian and Anderson, Emily	1997	Cultural Resource Survey for the Selma to Bakersfield Fiberoptic Line, Southern San Joaquin Valley, California	Archaeological Field Survey

Table 4-3 Previous Recorded Cultural Resources within 1.0-mile radius of the APE

Resource Number	Age Association	Resource Type	Resource Description	Resource Within APE
P-54-002171	Historic	Structure	A segment of Traver Canal and bridge	Yes
P-54-004902	Historic	Structure	A segment of E- Cesar Ditch	No
P-54-004910	Historic	Building	Single family house, and a barn	No
P-54-004911	Historic	Building	Single family house with detached garage and ancillary building- a shed	No
P-54-004913	Historic	Building	Ancillary buildings- Shed and garage	No
P-54-004914	Historic	Building, Structure	Single family house, detached garage and ancillary buildings- two storage buildings	No
P-54-004915	Historic	Building, Structure	Single family house and ancillary building-garage	No
P-54-004943	Historic	Building	School building, a house, and storage building	No
P-54-004944	Historic	Building	Single family home and ancillary buildings-a garage and two storage buildings	No

4.2 ARCHIVAL RESEARCH

Historic map coverage of the APE began in 1885. A review of an 1885 irrigation map of Fresno to Porterville shows the APE at the intersection of Sections 10, 11, 15, and 14 (Figure 4-1), with the Travel Canal running along its current alignment. (Hammond 1885). Section 10 is shown as owned by a "Curtis & Shoemaker", the southwest quarter of Section 11 as owned by a "Dopkins", and the northeast quarter of Section 15 and all of Section 14 as owned by the 76 Land and Water Company, which built the 76 Canal.

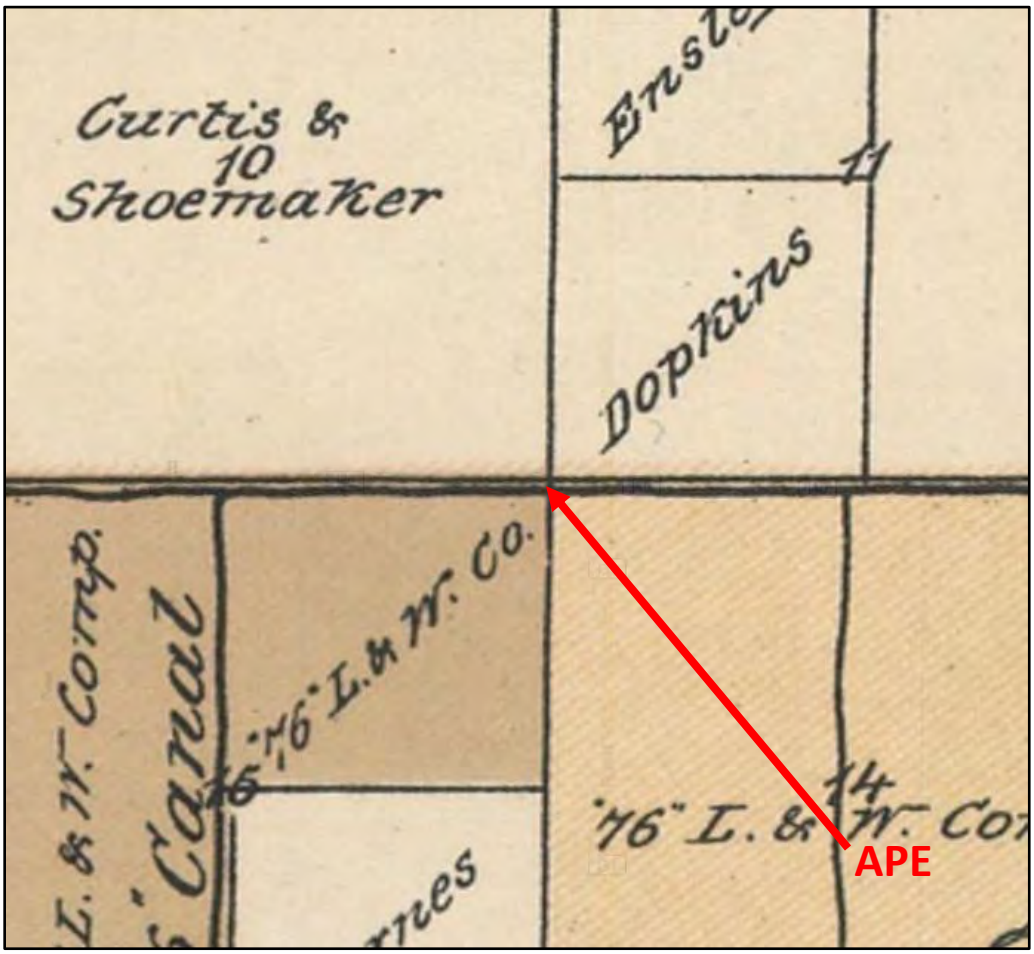


Figure 4-1 APE at Sections 10, 11, 14, and 15 along Traver Canal (Hammond 1885)

Available topographic map coverage of the APE begins in 1924. The USGS topographic map of the APE in 1926 depicts the Traver Canal within its current east to west alignment, and two unnamed roads corresponding with the present-day alignment of El Monte Way and Road 56 (USGS 1924). USGS topo maps between 1924 to 2018 depict no significant changes within the APE. Historic aerial photograph coverage of the APE begins in 1956, which depicts the area similar to present day with paved roads corresponding with the present-day alignment of El Monte Way and Road 56, and Traver Canal depicted in the same alignment as present day (NETROnline 2023). Additionally, a narrow bridge along Road 56 crosses over Traver Canal within

the APE. Historic aerial photos show no significant changes in 1957 and 1962, but the 1963 historic aerial photograph shows the Road 56 bridge over the Traver Canal replaced with a wider bridge corresponding to the present-day bridge (NETROnline 2023). Historical aerial photographs from 1969 to 2020 show no significant change within the APE.

4.3 NATIVE AMERICAN OUTREACH

The NAHC responded on May 25, 2023, via letter regarding Taylored Archaeology's request. The letter stated a search of the SLF was negative. The NAHC supplied a list of Native American representatives to contact for information or knowledge of cultural resources in the Project area (Appendix C).

The following Native American organizations/individuals were contacted from the list provided by NAHC below:

- Tribal Administrator Tom Zizzo of Big Sandy Rancheria of Western Mono Indians;
- Vice Chairperson Joel Marvin of Big Sandy Rancheria of Western Mono Indians;
- Chairperson Elizabeth Kipp of Big Sandy Rancheria of Western Mono Indians;
- Chairperson Leo Sisco of the Santa Rosa Rancheria Tachi Yokut Tribe;
- Chairperson Neil Peyron of the Tule River Indian Tribe;
- Environmental Department Kerri Vera of the Tule River Tribe;
- Tribal Archaeologist Joey Garfield of the Tule River Indian Tribe; and
- Chairperson Kenneth Woodrow of the Wuksache Indian Tribe/Eshom Valley Band.

The nongovernmental outreach letters were sent via certified mail on May 26, 2023, to all the Native American representatives on the contact list (Appendix C). The letters included a description of the proposed Project and a location map. Follow-up by email was completed on June 6, 2023. As of the date of this report, no responses were received by the Native American representatives, nor was any information shared regarding tribal cultural resources pertaining to the Project area.

4.4 ARCHAEOLOGICAL PEDESTRIAN SURVEY RESULTS

On May 5, 2023, Taylored Archaeology conducted an archaeological pedestrian survey within the APE. Within the APE, El Monte Way Avenue and Road 56 consisted of a paved asphalt two lane road with no sidewalks, gutters, curbs, or other improvements (Figured 4-2 and 4-3). The unlined Traver Canal was observed running east to west along the southern boundary of the APE at the intersection of El Monte Way Avenue and Road 56 (Figure 4-4). The Traver Canal was located on the southern edge of El Monte Way Avenue and a small portion of the canal that goes under the Road 56 bridge within the APE (Figure 4-5). A concrete retaining wall showed a stamp of 1963, which coincides with the year of the bridge's construction as discussed in Section 4.2.

The natural topography of the area within the APE was altered by asphalt roads. The surrounding land uses included stone fruit orchards, a vineyard, and a rural residence. The ground visibility was 0 to 100 percent due to asphalt paving and dense ruderal vegetation along El Monte Way.

No archaeological sites, isolated artifacts, or features were identified within the Project's APE during the survey.



Figure 4-2 Intersection of El Monte Way (Ave 416) and Road 56, facing north.



Figure 4-3 Western portion of APE on south side of El Monte Way, facing east. Intersection in background.



Figure 4-4 Traver Canal, facing east.



Figure 4-5 Road 56 bridge over Travel Canal.

5
CONCLUSIONS AND RECOMMENDATION

Taylored Archaeology performed an Archaeological Survey Report for the El Monte Way and Road 56 Roundabout Project. The project involves converting an existing intersection into a roundabout. The Project is funded by the Tulare County Association of Governments, a local municipal organization, and requires compliance with CEQA.

Taylored Archaeology conducted a phase I archaeological survey report of the APE to assess and determine whether historic resources are present that could be affected by the proposed Project. The archaeological investigation included: (1) a records search from the SSJVIC of the CHRIS; (2) a request of the NAHC Sacred Lands File and nongovernmental tribal outreach; (3) archival research; (4) an archaeological survey of the APE; and (5) documentation of resources identified with the APE.

The SSJVIC reported three prior cultural resources investigations conducted within the APE and no cultural resources recorded within the APE. The SSJVIC also reported that one previous cultural resources investigation was conducted, and nine historical resources were recorded within a 1-mile radius of the APE.

The NAHC's Sacred Lands File search results, outreach with the Native American representatives, and the pedestrian survey did not identify archaeological sites or tribal cultural resources in the APE. Taylored Archaeology's pedestrian survey of the APE for cultural resources revealed that a bridge and a canal both intersect the APE: Traver Canal and Road 56 bridge.

A segment of the Traver Canal within the APE was previously recorded and evaluated in 2001 by PAR Environmental Services and determined to not eligible for the National Register of Historic Places under Criterion A through D, nor to be a historical resource for the purposes of CEQA. Based on SSJVIC records, archival research, and the archaeological pedestrian survey, the Road 56 bridge over Traver Canal is a concrete bridge built in 1963. According to the Project description, no changes or alternations are being proposed to the bridge or Traver Canal within the APE.

Taylored Archaeology additionally advises the following:

In the event that previously unidentified archaeological remains are encountered during development or ground-moving activities in the APE, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance. In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the APE, all work shall be halted in the immediate vicinity (within a 100-foot radius) until a qualified archaeologist can identify the discovery and assess its significance.

If human remains are uncovered during construction, the Tulare County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are

identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

6
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APPENDIX A

Personnel Qualifications

Consuelo Sauls, M.A., RPA 41591505
Archaeologist
csaulsarchaeo@gmail.com
559.797.1572

Areas of Expertise

- Cultural Resource Management
- CEQA and Federal regulations
- Prehistoric Archaeology
- Laboratory Management
- Technical Writing
- Phase I Assessments

Years of Experience

- 14

Education

- M.A., Archaeology, University of Durham, 2014
- B.A., Anthropology, California State University, Fresno, 2009

Registrations/Certifications

- Registered Professional Archaeologist 41591505

Professional Affiliations

- Coalition for Diversity in California Archaeology
- Society for American Archaeology
- Society for California Archaeology
- Society of Black Archaeologists

Professional Experience

2019 –Present Principal Investigator, Taylored Archaeology, Fresno, California

2018 – 2019 Staff Archaeologist, Applied EarthWorks, Inc., Fresno, California

2016 – 2018 Principal Investigator, Soar Environmental Consulting, Inc., Fresno, California

2015 Archivist/Database Technician, Development and Conservation Management, Inc., Laguna Beach, California

2013 Laboratory Research Assistant, Durham University Archaeology Department and Archaeology Museum, Durham, England, UK

2011 – 2012 Laboratory Technician, University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, Pennsylvania

2008 – 2009 Laboratory Technician, California State University, Fresno

2008 Field School, California State University, Fresno

Technical Qualifications

Ms. Sauls meets the Secretary of the Interior's Professional Qualification Standards as an archaeologist. She has conducted pedestrian surveys, supervised Extended Phase I survey, authored technical reports, and completed the Section 106 process with the State Historic Preservation Officer and Tribal Historic Preservation Officer. Her experience includes data recovery excavation at Western Mono sites and processing recovered artifacts in the laboratory as well as conducting archival research about prehistory and ethnography of Central California. Ms. Sauls has authored and contributed to technical and letter reports in compliance with of the National Historical Preservation Act (NHPA) Section 106 and the California Environmental Quality Act (CEQA). She also has supported NHPA tribal consultation and responded to Assembly Bill 52 tribal comments. Ms. Sauls also has an extensive background supervising laboratory processing, cataloging, and conservation of prehistoric and historical archaeological collections. In addition, she worked with the Rock Art Heritage Group in the management, preservation, and presentation of rock art in museums throughout England, including a thorough analysis of the British Museum's rock art collections. At Durham University Archaeology Museum, Ms. Sauls processed the excavated skeletal remains of 30 individuals from the seventeenth century.

APPENDIX B

Records Search Results

California Historical Resources Information System



Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

5/1/2023

Consuelo Sauls
Taylored Archaeology
6083 N. Figarden Dr. Ste. 616
Fresno, CA 93722

Re: El Monte Way/ Road 56 Roundabout
Records Search File No.: 23-143

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Reedley USGS 7.5' quads. The following reflects the results of the records search for the project area and the 1 mile radius:

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

Resources within project area:	None
Resources within 1 mile radius:	P-54-002171, 004902, 004910, 004911, 004913, 004914, 004915, 004943, 004944
Reports within project area:	TU-00183, 01189, 01190
Reports within 1 mile radius:	TU-00103

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

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

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

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

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Jeremy E David
Assistant Coordinator

APPENDIX C

Native American Outreach

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Raymond C.
Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
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(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 25, 2023

Consuelo Sauls
Taylored Archaeology

Via Email to: csaulsarchaeo@gmail.com

Re: El Monte Way-Road 56 Roundabout Project, Tulare County

Dear Mr. Sauls:

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

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

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Tulare County
5/25/2023

Big Sandy Rancheria of Western Mono Indians
Tom Zizzo, Tribal Administrator
P.O. Box 337 37387 Auberry Mission Road
Auberry, CA, 93602
Phone: (559) 374 - 0066
Tzizzo@bsrnation.com
Western Mono

Big Sandy Rancheria of Western Mono Indians
Joel Marvin, Vice Chairperson
P.O. Box 337 37387 Auberry Mission Road
Auberry, CA, 93602
Phone: (559) 374 - 0066
Jmarvin@bsrnation.com
Western Mono

Big Sandy Rancheria of Western Mono Indians
Elizabeth Kipp, Chairperson
P.O. Box 337 37387 Auberry Mission Road
Auberry, CA, 93602
Phone: (559) 374 - 0066
Fax: (559) 374-0055
Lkipp@bsrnation.com
Western Mono

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore, CA, 93245
Phone: (559) 924 - 1278
Fax: (559) 924-3583
Southern Valley Yokut

Tule River Indian Tribe
Kerri Vera, Environmental Department
P. O. Box 589
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov
Yokut

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov
Yokut

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov
Yokut

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA, 93906
Phone: (831) 443 - 9702
kwood8934@aol.com
Foothill Yokut Mono

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed El Monte Way-Road 56 Roundabout Project, Tulare County.

Native American Outreach Contact/Response Log

El Monte Way-Road 56 Roundabout Project, Tulare County, California

Organization/ Tribal Affiliation	Name	Position	Address	Phone Number	Email Address	Letter	E-Mail	Contact Summary
Native American Heritage Commission	Cameron Vela	Cultural Resources Analyst	1550 Harbor Boulevard Suite 100 West Sacramento, CA 95691	916-373-3710	nahc@nahc.ca.gov.		4/18/2023	NAHC responded and sent a letter dated May 25, 2023, and provided a list of local Native American representatives contacts.
Big Sandy Rancheria of Western Mono Indians	Tom Zizzo	Tribal Administrator	P.O. Box 337 37387 Auberry Mission Road Auberry, CA 93602	559-374-0066	Tzizzo@bsrnation.com	5/26/2023	6/6/2023	No response
Big Sandy Rancheria of Western Mono Indians	Joel Marvin	Vice Chairperson	P.O. Box 337 37387 Auberry Mission Road Auberry, CA 93602	559-374-0066	Jmarvin@bsrnation.com	5/26/2023	6/6/2023	No response
Big Sandy Rancheria of Western Mono Indians	Elizabeth Kipp	Chairperson	P.O. Box 337 37387 Auberry Mission Road Auberry, CA 93602	559-374-0066	lkipp@bsrnation.com	5/26/2023	6/6/2023	No response
Santa Rosa Rancheria Tachi Yokut Tribe	Leo Sisco	Chairperson	P.O. Box 8 Lemoore, CA 93245	559-924-1278	no email address	5/26/2023		No response.
Santa Rosa Rancheria Tachi Yokut Tribe	Samantha McCarty	Cultural Specialist	P.O. Box 8 Lemoore, CA 93245	559-924-1278	SMcCarty@tachi-yokut-nsn.gov	5/26/2023	6/6/2023	No response.
Tule River Indian Tribe	Neil Peyron	Chairperson	P.O. Box 589 Porterville, CA 93258	559-781-4271	neil.peyron@tulrivertribe-nsn.gov	5/26/2023	6/6/2023	No response
Tule River Indian Tribe	Kerri Vera	Environmental Department	P.O. Box 589 Porterville, CA 93258	559-783-8892	kerri.vera@tulerivertribe-nsn.gov	5/26/2023	6/6/2023	No response
Tule River Indian Tribe	Joey Garfield	Tribal Archaeologist	P.O. Box 589 Porterville, CA 93258	559-783-8932	joey.garfield@tulerivertribe-nsn.gov	5/26/2023	6/6/2023	No response
Wuksache Indian Tribe/Eshom Valley Band	Kenneth Woodrow	Chairperson	1179 Rock Haven Ct. Salinas, CA 93906	831-443-9702	kwood8934@aol.com	5/26/2023	6/6/2023	No response

APPENDIX D

Cultural Resource Record Forms

(UNRESTRICTED)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

 ***Resource Name or #:** Road 56 Bridge

P1. Other Identifier: Road 56 Bridge over Traver Canal (P-54-002171)

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** Tulare

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Reedley **Date:** 1966 (Photorevised 1981) **T** 16S; **R** 23E; NE corner **of Sec** 15 **;** M.D. **B.M.**

c. Address: Road 56 City: Dinuba Zip: 93654

d. UTM: Zone: 11S; 280825 mE/ 4047352 mN (G.P.S. Google Earth WGS 1984 Web Mercator)

e. Other Locational Data: N/A

***P3a. Description:**

The resource is the Road 56 Bridge that crosses one of the segments of the Traver Canal. The bridge was constructed in 1963 and was made of poured concrete with metal railings with additional wooden supports, and runs north to south, allowing Road 56 to cross the canal. It is approximately 45 feet long and 70 feet wide and is supported by concrete supports that sit on the canal bed.

The bridge is surrounded by agricultural land on all sides, and sits immediately south of the intersection of Avenue 416 and Road 56 approximately three miles west of the City of Dinuba. Surrounding agricultural uses include stonefruit orchards and vineyards. A rural residence with the address of 41577 Road 56 is located immediately southwest of the bridge.

***P3b. Resource Attributes:** (List attributes and codes) HP19 (Bridge) and HP20 (Canal/Aqueduct)

***P4. Resources Present:** ☐Building ☒Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: Photo 1, Road 56 Bridge over Traver Canal, Traver Canal on the right, Facing North, May 5, 2023.

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Tulare County
5961 S. Mooney Blvd.
Visalia, CA 93277

***P8. Recorded by:**
Consuelo Sauls, Taylored Archaeology,
6083 N. Figarden Dr., Ste.616
Fresno, CA 93722

***P9. Date Recorded:** 6/6/2023

***P10. Survey Type:**
Pedestrian Survey

***P11. Report Citation:**

Consuelo Sauls 2023 *El Monte Way And Road 56 Roundabout Project, Dinuba, Tulare County, California.* Taylored Archaeology, Fresno, California. Submitted to 4 Creeks, Inc., Visalia, California.

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☒Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**: 7

***Resource Name or #:** Road 56 Bridge

B1. Historic Name: Road 56 Bridge
B2. Common Name: Road 56 Bridge
B3. Original Use: Bridge
B4. Present Use: Bridge
***B5. Architectural Style:** Unknown
***B6. Construction History:**

A date mark on the bridge indicates it was constructed in 1963, which is consistent with historic aerial photographs. The asphalt pavement on the bridge is in good condition and has been replaced numerous times since the bridge's original construction. Additionally, routine maintenance has likely been performed on the bridge since the early 1960s.

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:** The Traver Canal

B9a. Architect: Unknown b. Builder: Unknown

***B10. Significance: Theme:** Transportation **Area:** Tulare County
Period of Significance: 20th Century **Property Type:** Bridge **Applicable Criteria:** D (may yield information important to history.)

The Road 56 bridge is a short, concrete bridge, similar to numerous others throughout the region. The bridge is in a state of good condition. Other than the date of construction, the history of the bridge is unknown. Without this history, it is not possible to assess the significance of the Road 56 bridge.

B11. Additional Resource Attributes: (List attributes and codes)
HP20 (canal/aqueduct)

***B12. References:** None

B13. Remarks: None

***B14. Evaluator:** Consuelo Sauls, Taylored Archaeology, 6083 N. Figarden Dr., Ste. 616 Fresno, CA 93722.

***Date of Evaluation:** Not evaluated. Recorded 6/6/2023.

(This space reserved for official comments.)

LINEAR FEATURE RECORD

L1. Historic and/or Common Name: Road 56 Bridge
L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**
b. Location of point or segment: WGS 84; Zone 11S; UTM : 280824.72 mE/ 4047324.58 mN

L3. Description:
The resource (Road 56 Bridge) is a concrete automobile bridge that crosses the Traver Canal at Road 56.

L4. Dimensions:

L4e. Sketch of Cross-Section ☒ None

a. Top Width: 70 feet
b. Bottom Width: 70 feet
c. Height or Depth: Unknown (obscured by water)
d. Length of Segment: Approximately 45 feet

L5. Associated Resources: The Traver Canal

L6. Setting: The bridge crosses a channelized creek along a roadway and is located within a rural agricultural area approximately 3 miles west of the City of Dinuba West of Dinuba Tulare County. The bridge is surrounded by farms (primarily orchards) and a residential house.

L7. Integrity Considerations: The Road 56 Bridge is built of concrete with metal and wood guard rails. The rails show few signs of weathering with no visible rust or sun-damaged wood.

L8b. Description of Photo, Map, or Drawing: View of Road 56 Bridge over Traver Canal, facing Northwest. Traver Canal in foreground. Road 56 and El Monte Way intersection in background.

L8a. Photograph, Map or Drawing



L9. Remarks: None
L10. Form Prepared by:
Consuelo Sauls, M.A., RPA
41591505
Taylored Archaeology
6083 N. Figarden Dr., Ste. 616
Fresno, CA 93722
L11. Date: 6/6/2023

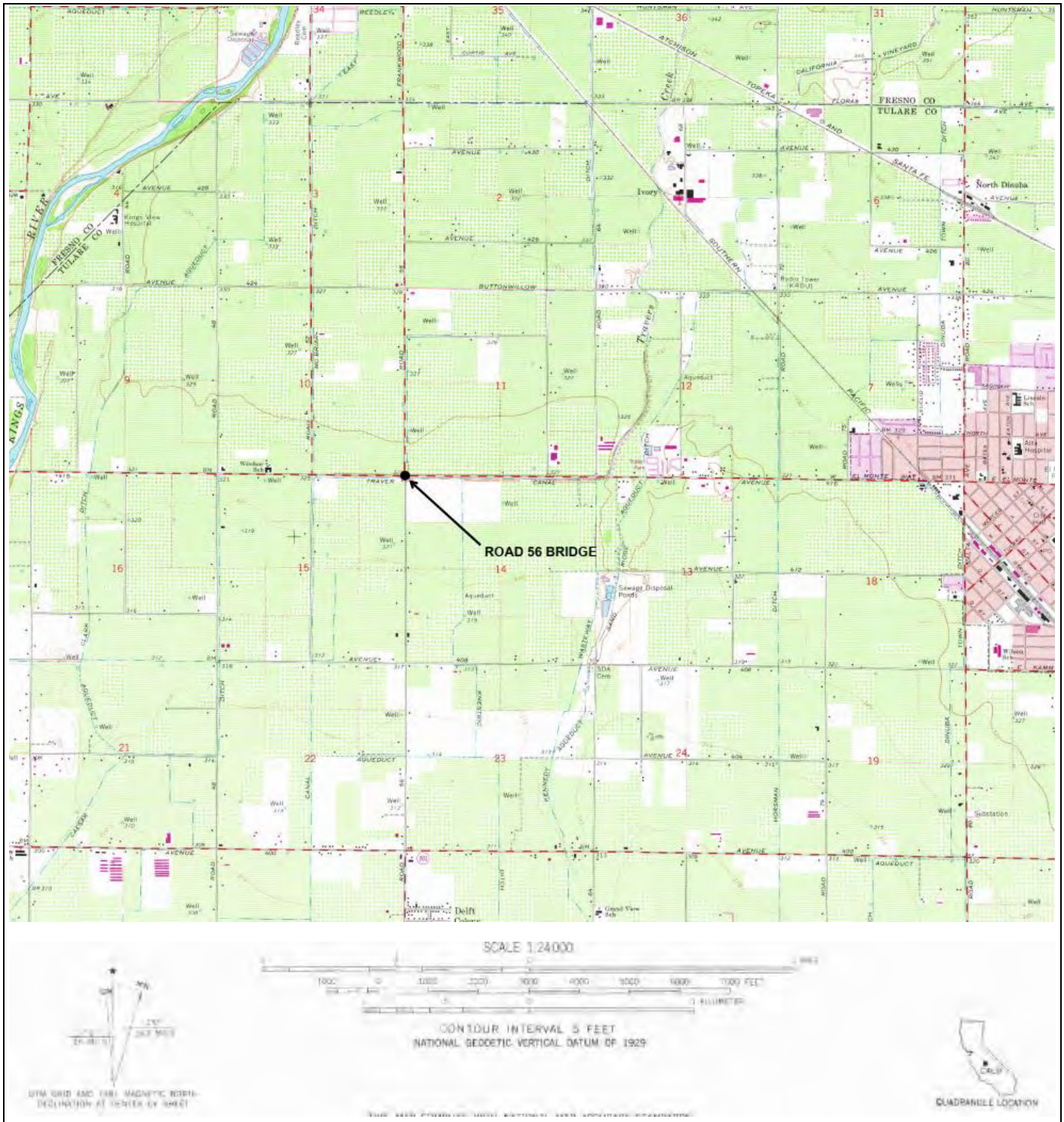
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #:** Road 56 Bridge

***Map Name:** USGS 7.5′ Reedley, CA ***Scale:** 1:24,000 ***Date of Map:** 1966 (Photorevised 1981)



Appendix E

Energy Calculations

Construction Equipment Energy Use

Phase Name	Off Road Equipment Type	Off Road Equipment Unit Amount[1]	Usage Hours Per Day[1]	Horse Power (lbs/sec)[1]	Load Factor[5]	Total Operational Hours	BSFC[2]	Fuel Used (gallons)[3]	MBTU[4]
Grubbing/Land Clearing	Excavators	3	8	158	0.38	168	0.367	520.72	72.380623
Grubbing/Land Clearing	Crawler Tractors	2	8	212	0.43	112	0.367	527.08	73.264685
Grading/Excavation	Cranes	1	8	231	0.29	240	0.367	830.00	115.37018
Grading/Excavation	Crawler Tractos	2	8	212	0.43	480	0.367	2258.93	313.99151
Grading/Excavation	Excavators	4	8	158	0.38	960	0.367	2975.57	413.60356
Grading/Excavation	Graders	3	8	187	0.41	720	0.367	2849.81	396.12323
Grading/Excavation	Rollers	3	8	80	0.38	720	0.408	1256.20	174.61137
Grading/Excavation	Rubber Tired Loaders	2	8	97	0.37	480	0.408	988.70	137.42987
Grading/Excavation	Scrapers	3	8	367	0.48	720	0.367	6547.83	910.14827
Grading/Excavation	Tractors/Loaders/Backhoes	5	8	97	0.37	1200	0.408	2471.76	343.57468
Drainage/Utilities/Subgrade	Air Compressors	2	8	78	0.48	320	0.408	687.60	95.576752
Drainage/Utilities/Subgrade	Generator Sets	2	8	84	0.74	320	0.408	1141.60	158.68192
Drainage/Utilities/Subgrade	Graders	2	8	187	0.41	320	0.367	1266.58	176.05477
Drainage/Utilities/Subgrade	Plate Compactors	2	8	8	0.43	320	0.408	63.18	8.7816246
Drainage/Utilities/Subgrade	Pumps	2	8	84	0.74	320	0.408	1141.60	158.68192
Drainage/Utilities/Subgrade	Rough Terrain Forklifts	2	8	100	0.4	320	0.367	660.80	91.850668
Drainage/Utilities/Subgrade	Scrapers	2	8	367	0.48	320	0.367	2910.15	404.51034
Drainage/Utilities/Subgrade	Tractors/Loaders/Backhoes	4	8	97	0.37	640	0.408	1318.27	183.23983
Paving	Pavers	2	8	130	0.48	160	0.367	515.42	71.643521
Paving	Paving Equipment	2	8	132	0.36	160	0.367	392.51	54.559297
Paving	Rollers	3	8	80	0.38	240	0.408	418.73	58.203791
Paving	Tractors/Loaders/Backhoes	4	8	97	0.37	320	0.408	659.14	91.619915
Total								**32402.18**	**4503.9**

Construction Phases

PhaseNumber	Phase Name	Phase Start Date	Phase End Date	Num Days Week	Total Number of Days
1	Grubbing/Land Clearing	1/1/2024	1/10/2024	5	7
2	Grading/Excavation	1/11/2024	2/21/2024	5	30
3	Drainage/Utilities/Subgrade	2/22/2024	3/21/2024	5	20
4	Paving	3/22/2024	4/5/2024	5	10

Notes

1. Roadway Construction Emissions Model Default Values Used
2. BSFC - Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367
3. Fuel Used = Load Factor x Horsepower x Total Operational Hours x BSFC / Unit Conversion
4. MBTU calculated for comparison purposes. Assumed 1 gallon of diesel = 0.139 MBTU
5. CalEEMod Default Values Used

Mobile Energy Use (Construction)

Worker Trips

	Daily Worker Trips[1]	Worker Trip Length[1]	VMT/Day	MPG Factor[3]	Gallons of Gas/Day	# of Days[1]	Total Gallons of Gas	MBTU
Grubbing/Land Clearing	16	20	320	29.23	10.9	10	109	13
Grading/Excavation	60	20	1200	29.23	41.1	30	1232	143
Drainage/Utilities/Subgrade	48	20	960	29.23	32.8	300	9853	1144
Paving	30	20	600	29.23	20.5	20	411	48
Total	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**360**	**11605**	**1347**

Water Truck

	Daily Vendor Trips[1]	Vendor Trip Length[1]	VMT/Day	MPG Factor[3]	Gallons of Diesel/Day	# of Days[1]	Total Gallons of Diesel	MBTU
Grubbing/Land Clearing	10	8	80	7.12	11.2	10	112	16
Grading/Excavation	10	8	80	7.12	11.2	50	562	78
Drainage/Utilities/Subgrade	5	8	40	7.12	5.6	35	197	27
Paving	5	8	40	7.12	5.6	17	96	13
Total							966	134

Fleet Characteristics

	Vehicle Class	Fleet Mix	2024 MPG Factor (EMFAC2017)	Average MPG Factor
Assumed Vehicle Fleet for Workers	LDA	33%	33.24	29.23
	LDT1	33%	28.07	
	LDT2	33%	26.38	

Notes
1. Road Construction Emissions Model Default values used
2. MBTU calculated for comparison purposes. Assumed 1 gallon of gasoline = 0.11609 MBTU
3. MPG Factor Based on EMFAC2017