

**AEMETIS BIOGAS LLC DAIRY BIOGAS CLUSTER PROJECT  
SUPPLEMENTAL INITIAL STUDY WITH MITIGATED NEGATIVE  
DECLARATION (SCH 2020109027)**

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Prepared For:  
Stanislaus County

**July 2023**

## General Information about This Document

### Document Contents

The Stanislaus County Department of Public Works (County) has prepared this Draft Supplemental Initial Study/Mitigated Negative Declaration (Supplemental IS/MND), which examines the proposed changes to the proposed Aemetis Biogas LLC Dairy Biogas Cluster Project (Project) and associated potential environmental impacts caused by these changes. The County is the California Environmental Quality Act (CEQA) lead agency. This Supplemental IS/MND revises the County's 2021 IS/MND (Appendix A). The intent is for this Supplemental IS/MND to be reviewed alongside the original 2021 document. These documents describe the purpose of the proposed project, how the proposed project could potentially impact the existing environment and recommends proposed mitigation measures to reduce potential negative impacts to the surrounding environment.

### What you should do:

Please read this Draft Supplemental IS/MND. Additional copies of this document are available for review at the Stanislaus County Department of Public Works, 1010 10<sup>th</sup> Street, Modesto, CA. An electronic copy of the Draft Supplemental IS/MND may be viewed online at the following website: <https://www.stancounty.com/publicworks/projects.shtm>. The public circulation period begins July 14, 2023 and ends August 13, 2023.

The County is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Due to time limits mandated by state law, your responses must be sent at the earliest possible date, but no later than the 30-day review period ending on August 13, 2023.

Submit comments via postal mail to the County at the following address no later than August 13, 2023:

Chris Brady  
Deputy Director, Department of Public Works  
1010 10<sup>th</sup> Street  
Modesto, CA 95354

- Submit comments via email to [abakker@dokkenengineering.com](mailto:abakker@dokkenengineering.com)
- Submit comments by the deadline: August 13, 2023

### What happens next:

After comments are received from the public and reviewing agencies, the County may: (1) give environmental approval to the proposed Project, (2) undertake additional environmental studies, (3) abandon the Project, or (4) decide to modify the alternatives under consideration based on comments received. If the Project is given environmental approval and funding is appropriated, the County could design and construct all or part of the Project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Stanislaus County, Attn: Chris Brady, Deputy Director, Stanislaus County Public Works, 1010 10<sup>th</sup> Street, Modesto, CA, 95354. Phone No. (209) 525-4130

## **Executive Summary**

In January 2021, Stanislaus County (County) adopted a Final Initial Study/Mitigated Negative Declaration (IS/MND) under the California Environmental Quality Act (CEQA) for Aemetis Biogas LLC to construct approximately 32.5 miles of biogas pipeline located in unincorporated Stanislaus and Merced Counties. In August of 2021, the County issued an Addendum to the IS/MND to include improvements on 17 private dairies to connect to biogas collection facilities at each location. Since then, additional lateral pipeline extensions have been identified that will need to be constructed to service 21 additional private dairies in Stanislaus and Merced County. This Supplemental IS/MND is necessary to analyze the environmental effects of the 21 additional lateral pipeline extensions pursuant to the 2023 California Environmental Quality Act (CEQA) Guidelines section 15163. This Supplemental IS/MND describes the revised Project study area, summarizes existing CEQA documentation and what the IS/MND provides clearance for, and finds that there are no significant impacts other than those which were previously identified and can be mitigated to a less than significant level. The additional extensions from the biogas pipeline are considered minor additions to the original project and are not anticipated to result in any environmental impacts that weren't already discussed in the approved August 2021 Final IS/MND; therefore, Stanislaus County has determined that preparation of a Supplemental IS/MND under CEQA would be appropriate.

This supplemental environmental document is prepared in conformance with the requirements of the California Environmental Quality Act (CEQA) Public Resources Code 21000-21178. Stanislaus County is the Lead Agency for CEQA implementation. Merced County and the City of Modesto are both Responsible Agencies as a portion of the project would occur within each of their jurisdictional areas.

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<b>Appendix B</b> Construction Emissions Modelling Results	
<b>Appendix C</b> Special Status Species Potential Table	
<b>Appendix D</b> Species Observed Table	
<b>Appendix E</b> Avoidance, Minimization, and Mitigation Measures from the August 2021 Final IS/MND	
<b>Appendix F</b> Acronyms	

## Project Background

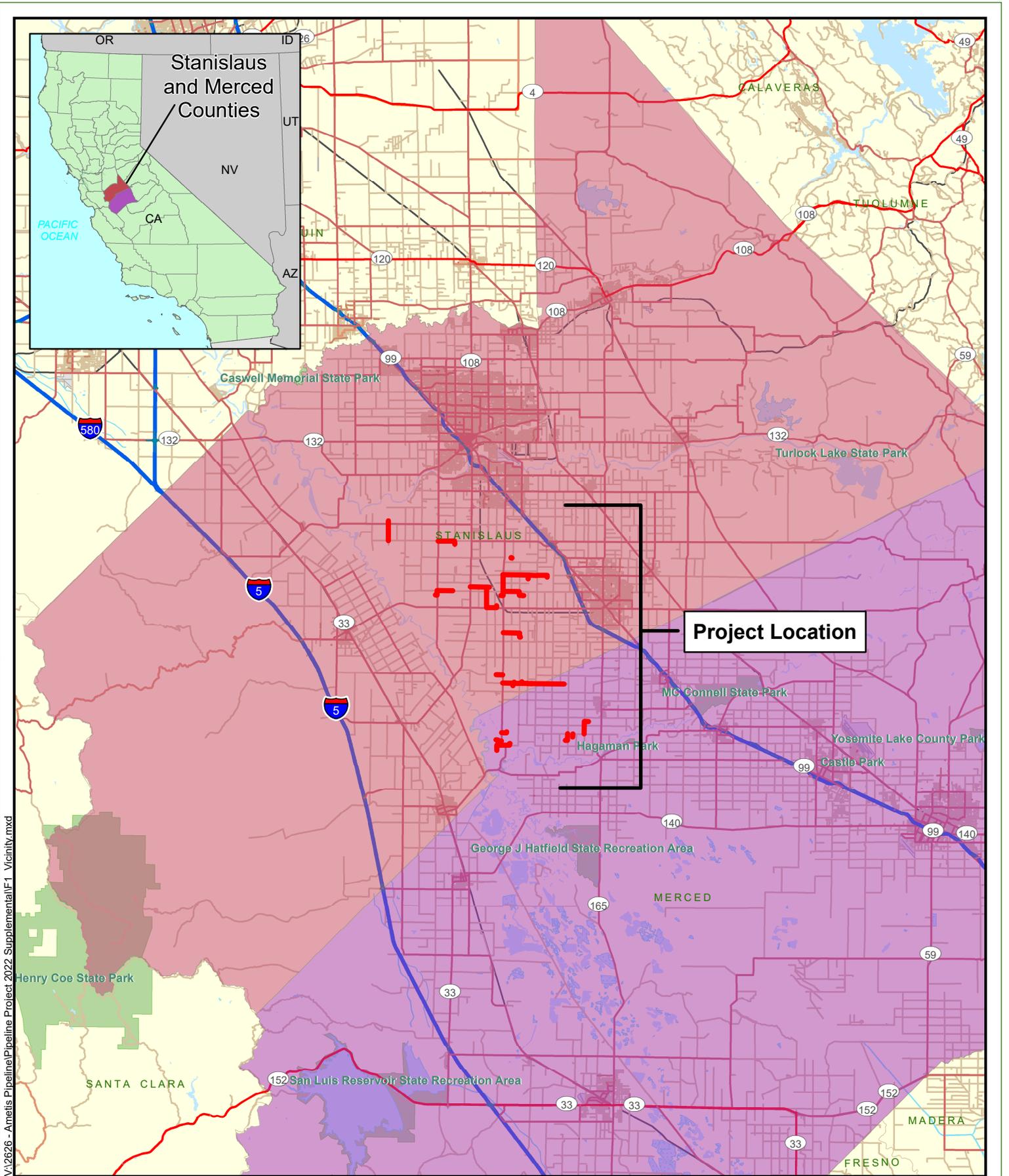
Aemetis Biogas, LLC, in coordination with Stanislaus County Public Works, proposes to construct approximately 26.6 miles of biogas pipeline located in unincorporated Stanislaus and Merced Counties (Figures 1 through 3). The pipeline will provide transmission of biogas collected from privately owned dairy farms using a covered anaerobic lagoon digester, then pressurized for transmission to a central Biogas Cleanup Plant co-located at the Aemetis Advanced Fuels Keyes ethanol production facility. The pipeline will be up to eight inches in diameter and carry pressurized methane and CO2 based biogas.

The 2021 Draft IS/MND examined the potential environmental impacts of the Project, explained the Project details, potential impacts, and proposed avoidance, minimization, and/or mitigation measures. Within the environmental documentation of the Project, it is stated, “Improvements at each of the private dairies would be necessary to connect to existing or planned manure collection and lagoon digester facilities.” However, there is no further detail about how the connection from the biogas pipeline to the lagoon digester is made. Since approval of the Final IS/MND, Aemetis has identified additional lateral pipeline extensions that will need to be constructed to service 21 additional private dairies in Stanislaus and Merced County.

### **Additional Lateral Pipeline Extensions**

The additional 21 dairies that require new lateral pipeline extensions are identified in the table below.

#	Dairy Name	Address	City	State	Zip Code	County
17	AC Viera Dairy	4100 South Mitchell Road	Turlock	CA	95380	Stanislaus
18	Alamo Alt Route	5000 W. Keyes Road	Modesto	CA	95358	Stanislaus
19	B6 Dairy	22014 Turner Ave	Hilmar	CA	95324	Merced
20	Bar Vee Dairy	3031 N Washington Road	Turlock	CA	95380	Stanislaus
21	Double D Holsteins Dairy	1441 East Monte Vista Road	Ceres	CA	95307	Stanislaus
24	Edelweis Dairy	2306 West Fulkert Rd	Crows Landing	CA	95307	Stanislaus
25	El Katrina3 Dairy	501 El Katrina Lane	Ceres	CA	95307	Stanislaus
26	Gioletti Dairy	118 N Blaker Road	Turlock	CA	95380	Stanislaus
27	GJ Silva Dairy	3107 Prairie Flower	Ceres	CA	95307	Stanislaus
28	Jordao Dairy.	6025 S. Central Ave	Turlock	CA	95380	Stanislaus
29	Ken Van Foeken Dairy	22338 Short Ave	Hilmar	CA	95324	Merced
30	Lumar Dairy	7215 S. Praire Flower Rd	Turlock	CA	95380	Stanislaus
	Machado Dairy	7488 Mitchell Rd	Turlock	CA	95380	Stanislaus
31	MB Lucky Lady	1218 W. Keyes Road	Modesto	CA	95358	Stanislaus
32	Nutcher Dairy Farm	5213 W. Grayson Road	Modesto	CA	95358	Stanislaus
33	Nyland Dairy	20710 Geer Ave	Hilmar	CA	95324	Merced
	Peterson Dairy	1431 N Central Ave	Turlock	CA	95680	Stanislaus
34	Silvas Holsteins Dairy	6706 Elaine Rd	Turlock	CA	95380	Stanislaus
	South Central Extension	6041 Central Ave	Hilmar	CA	95324	Merced
35	Soares Dairy	9201 Hilmar Rd	Turlock	CA	95380	Stanislaus
	Zylstra Dairy	2743 W Monte Vista Ave	Modesto	CA	95358	Stanislaus



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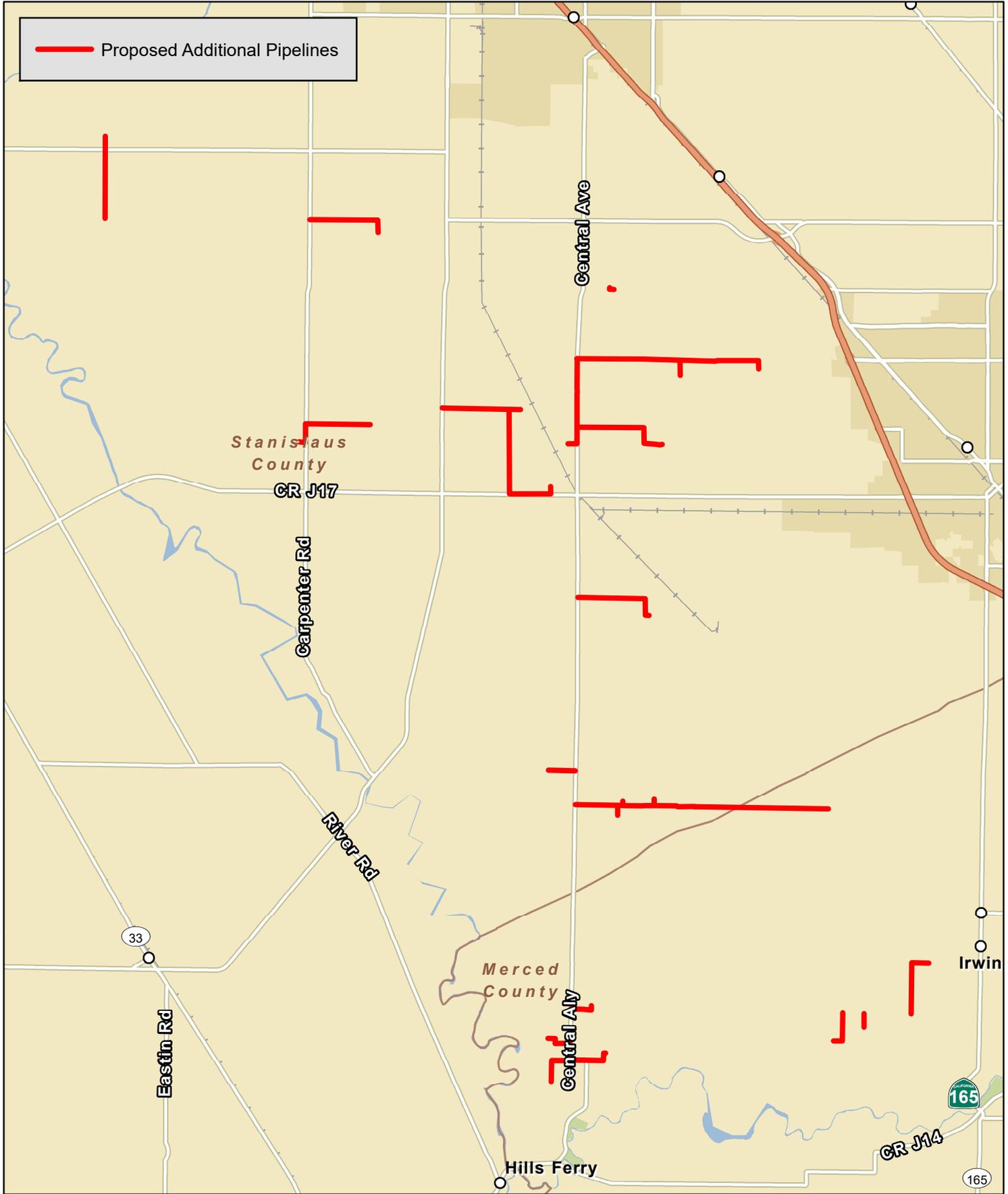


0 5 10 15 Miles

**FIGURE 1**  
**Project Vicinity**

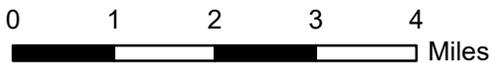
Aemetis Biogas Pipeline Project  
Stanislaus and Merced Counties, California

Proposed Additional Pipelines



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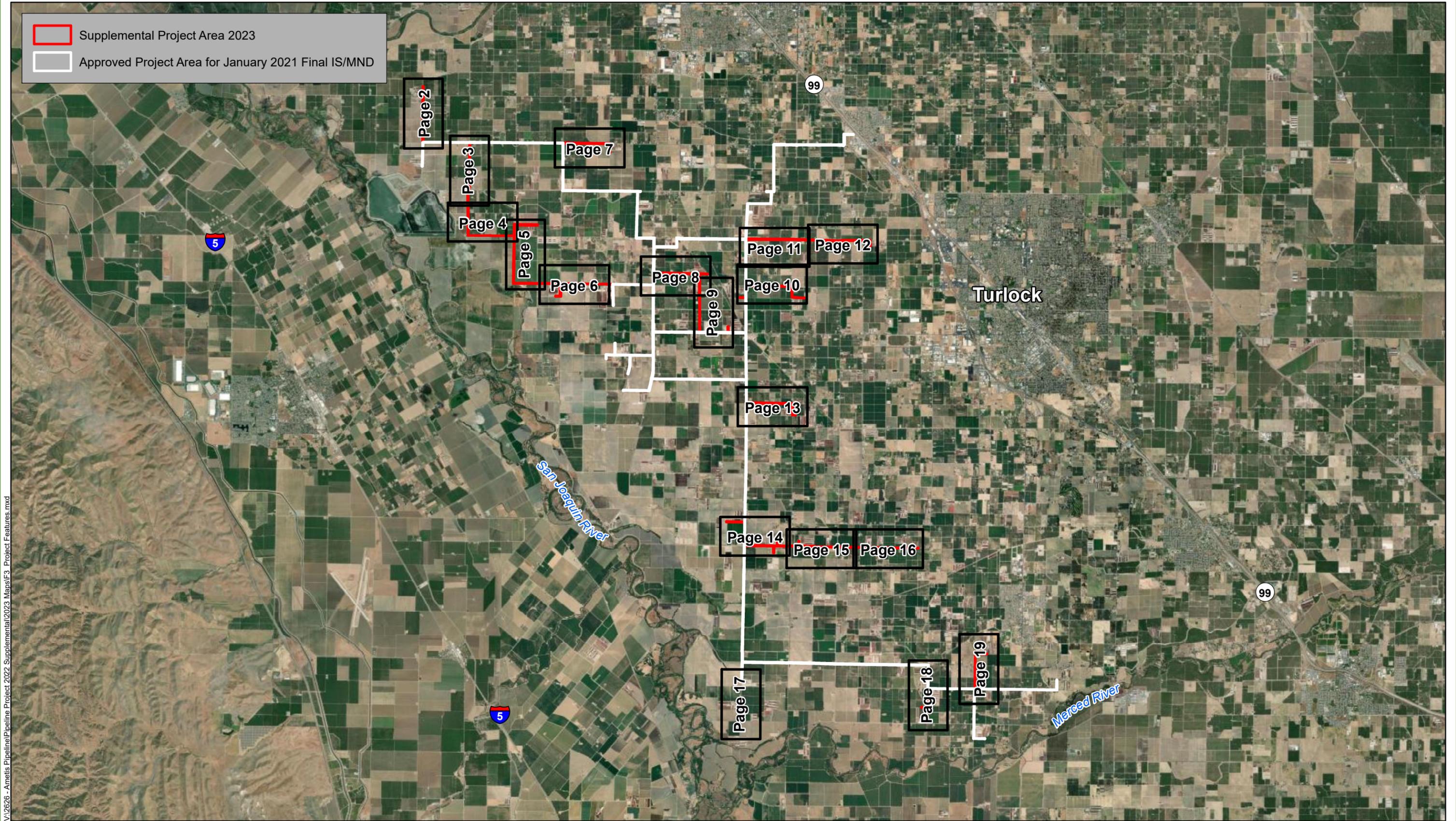


**FIGURE 2**  
**Project Locations**

Aemetis Biogas Pipeline Project  
Stanislaus and Merced Counties, California

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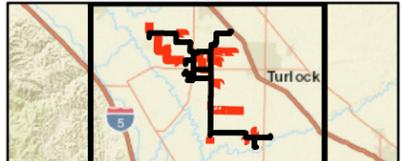
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 1 in = 10,000 ft  
 0 1.5 3 4.5 6 7.5 Miles



**Figure 3**  
**Project Features**  
**Page 1 of 19**  
 Aemetis Biogas Pipeline Project  
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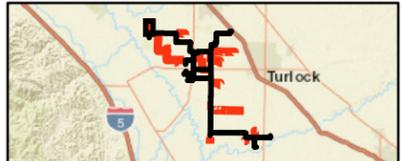
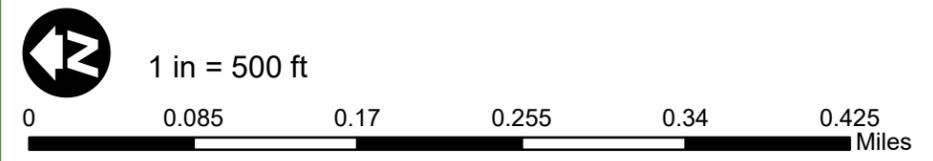


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**Figure 3**  
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 Stanislaus and Merced Counties, California



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W Keyes Rd

W Keyes Rd

W Barnhart Rd

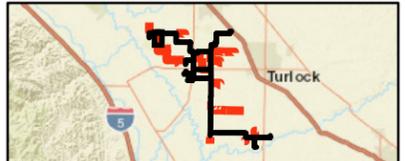
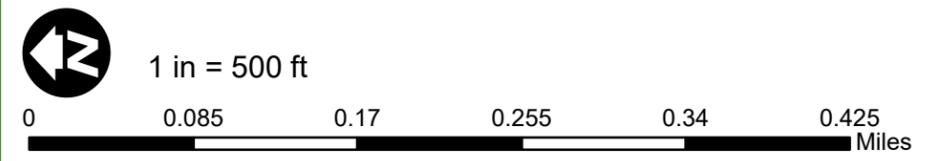
W Taylor Rd

Jennings Rd

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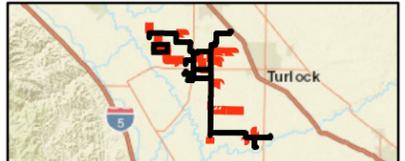
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**Project Features**  
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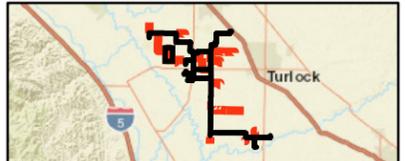
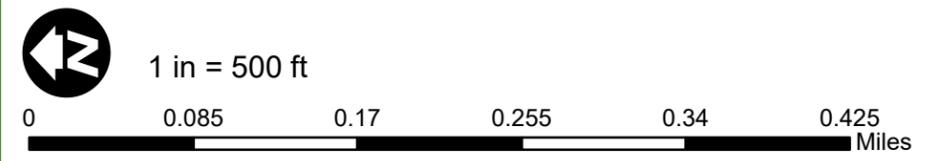


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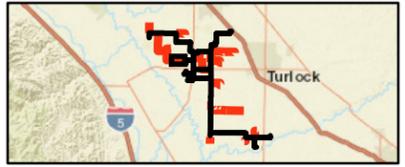
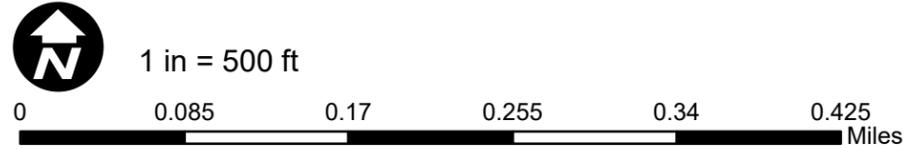
W Fulkerth Rd

S Carpenter Rd

Carpenter Rd

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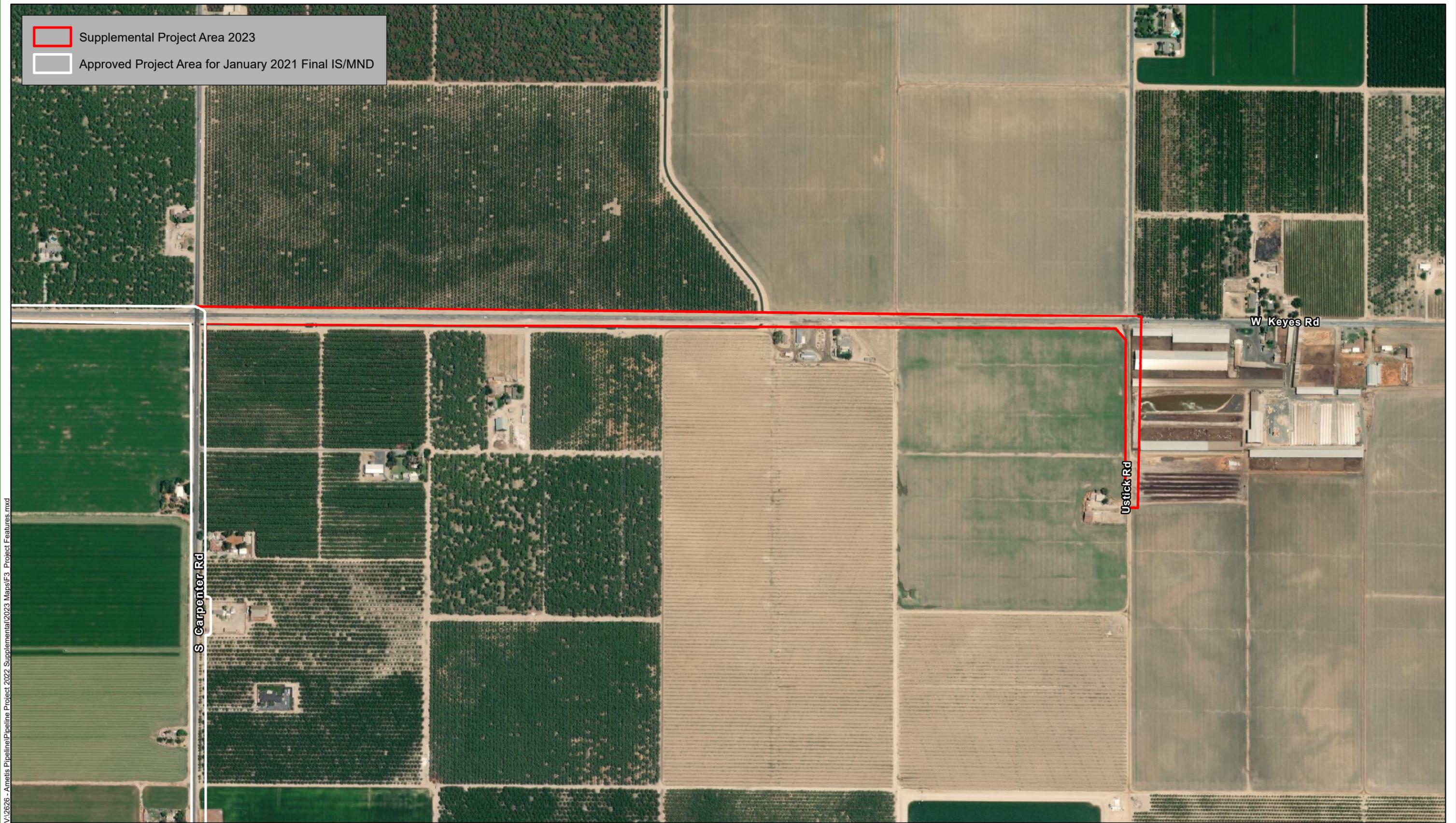


**Figure 3**  
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Aemetis Biogas Pipeline Project  
Stanislaus and Merced Counties, California

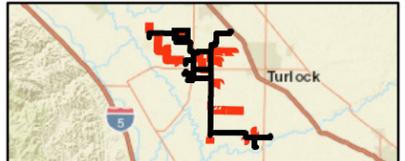
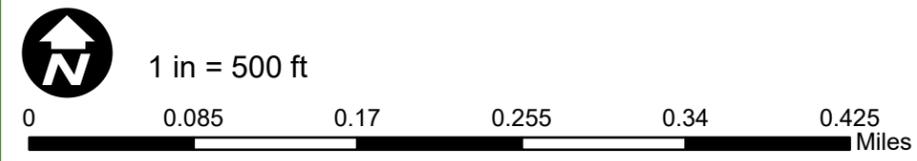


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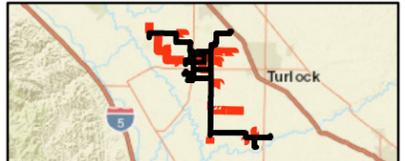
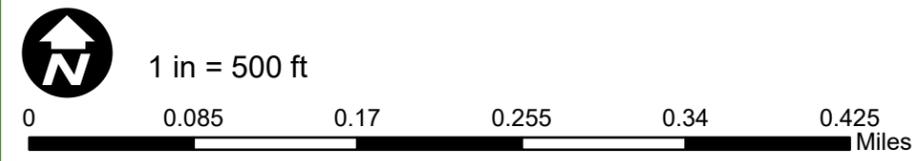


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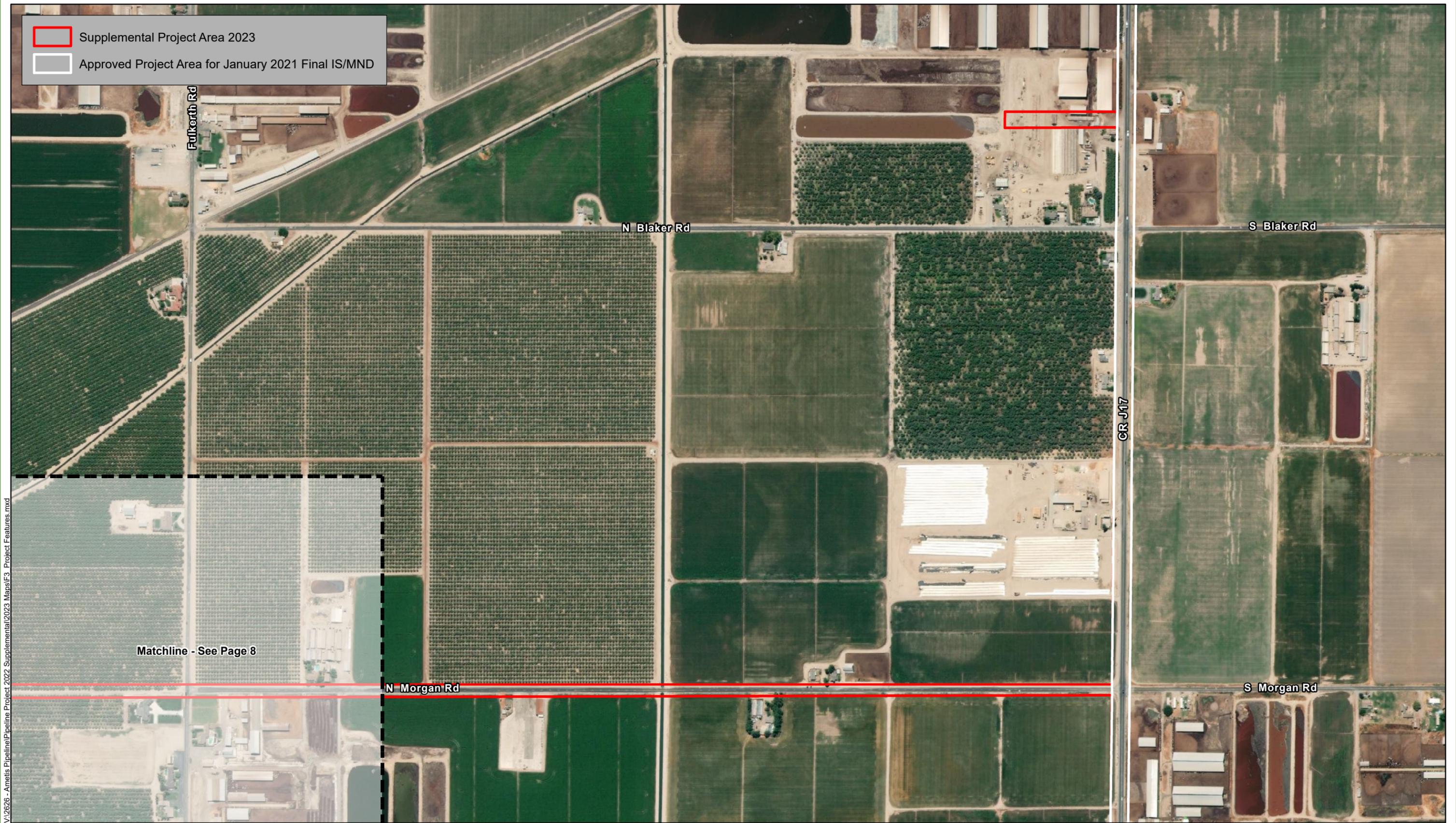
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 Aemetis Biogas Pipeline Project  
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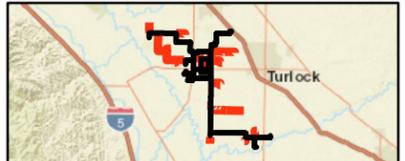
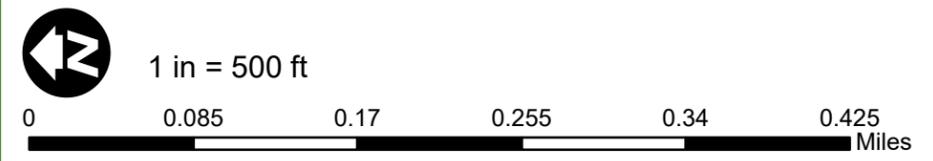


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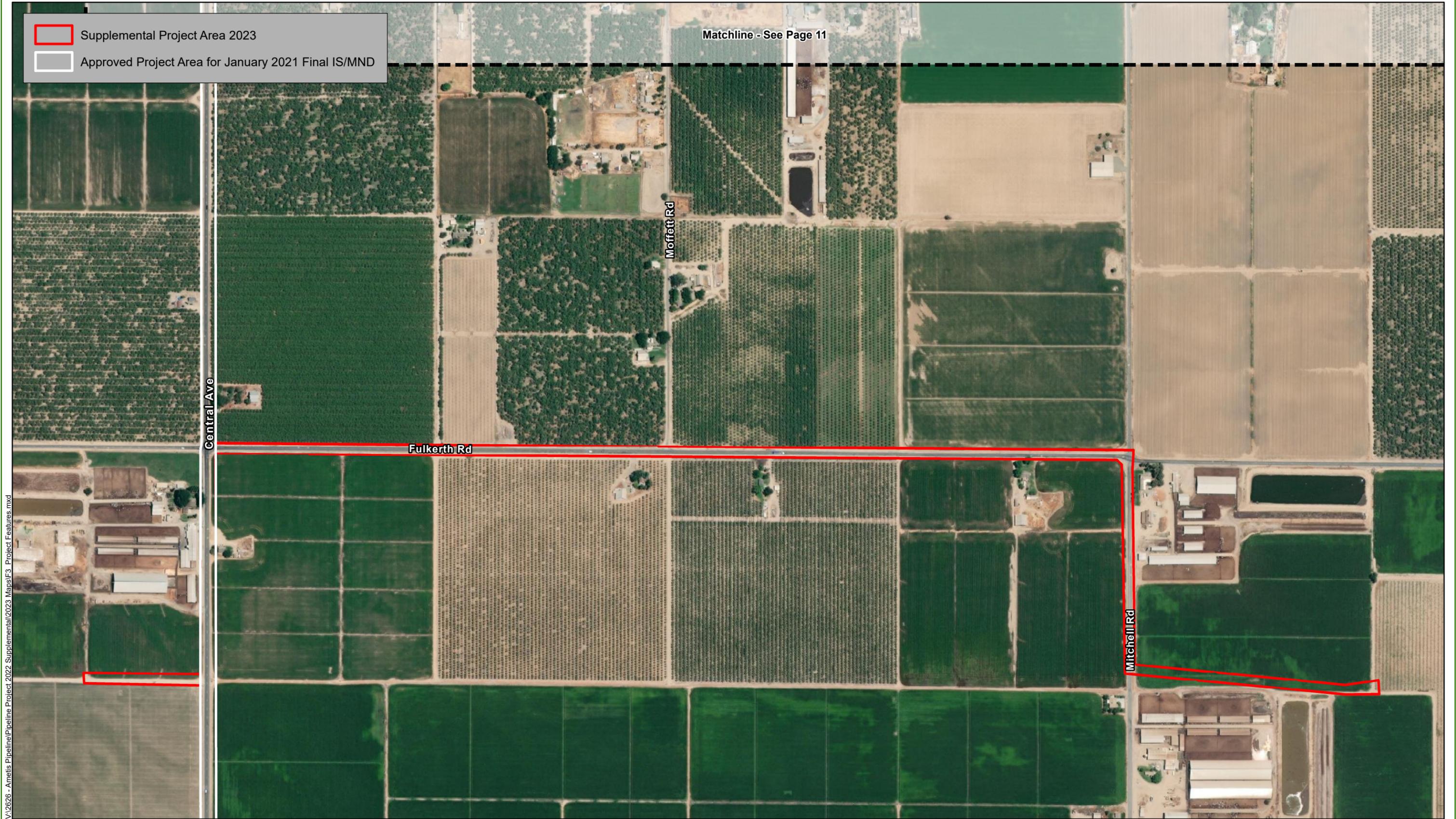


**Figure 3**  
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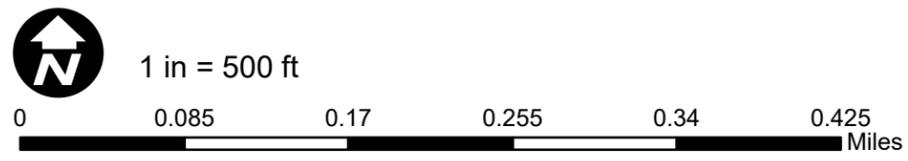
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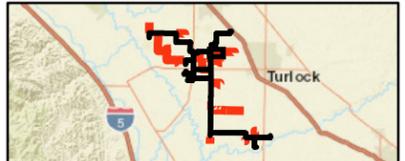
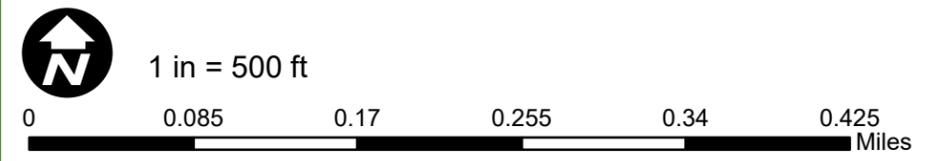


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Roberts Rd

E Monte Vista Rd

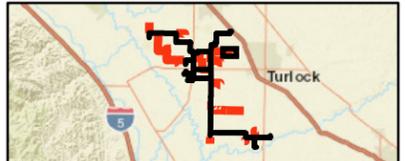
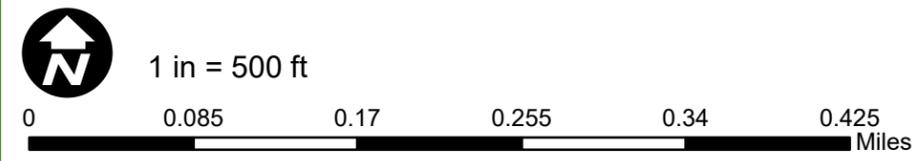
Faith Home Rd

Tuolumne Rd

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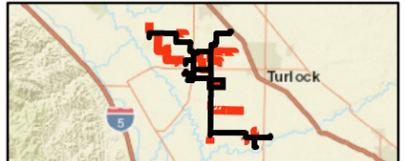
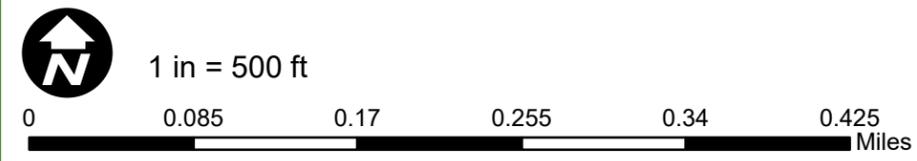


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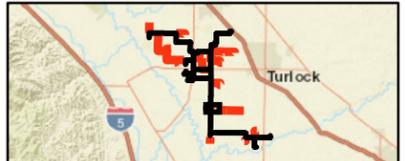
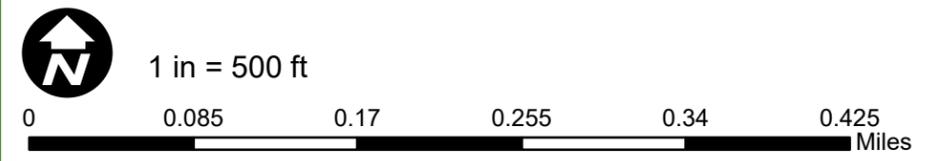


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 Stanislaus and Merced Counties, California

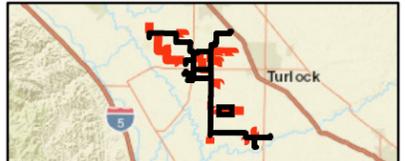
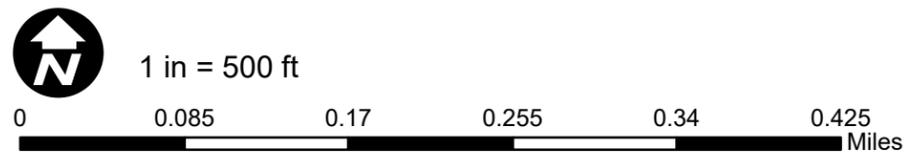


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**Figure 3**  
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 Stanislaus and Merced Counties, California

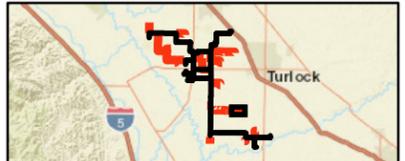
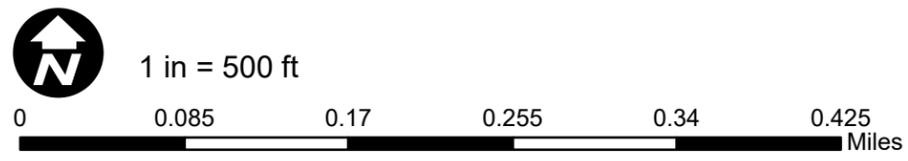


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**Figure 3**  
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 Stanislaus and Merced Counties, California

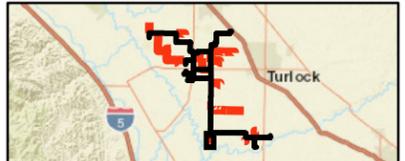
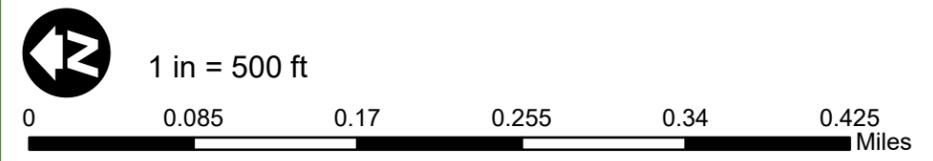


- Supplemental Project Area 2023
- Approved Project Area for January 2021 Final IS/MND



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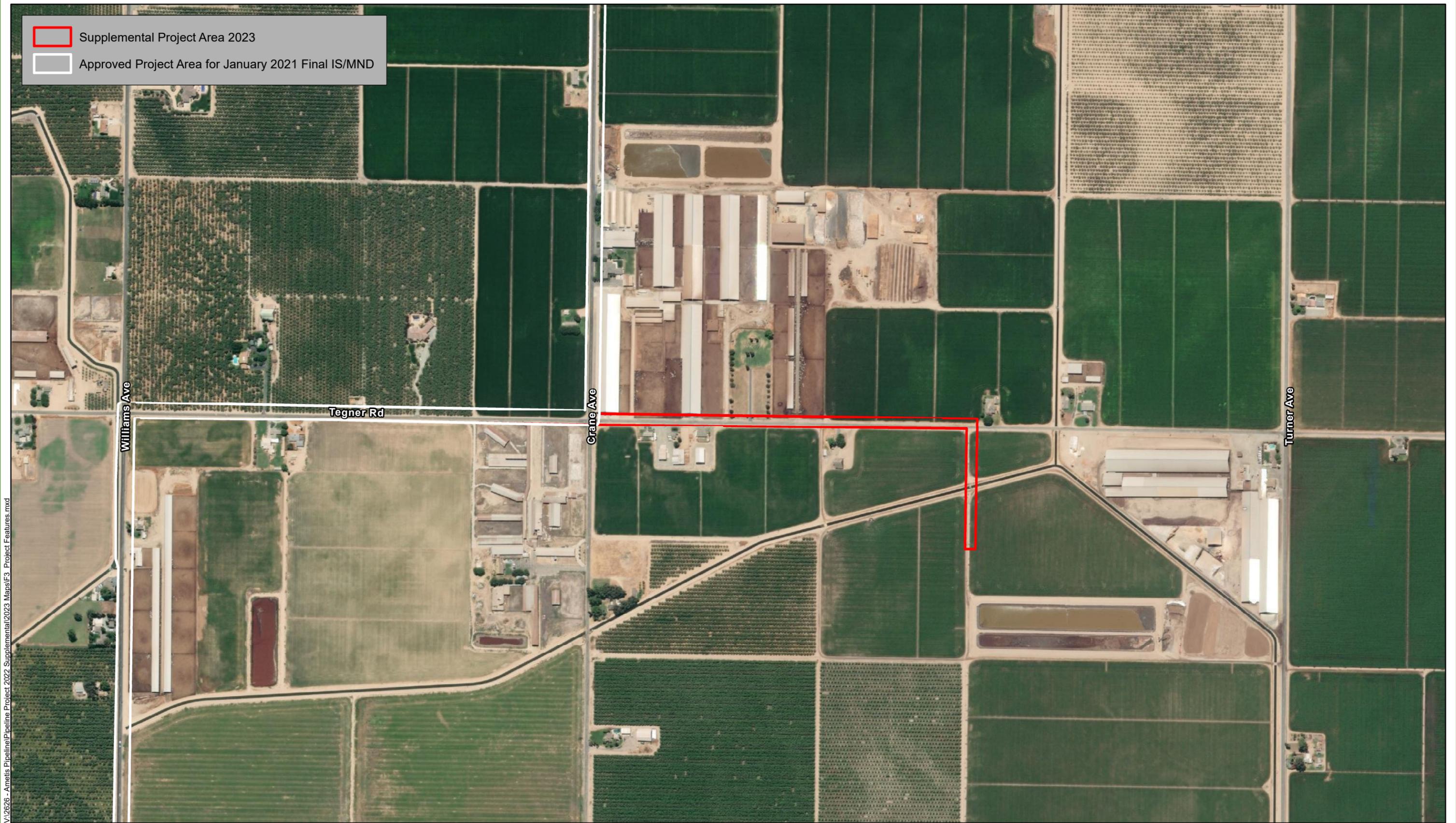
Source: ESRI Maps Online; Dokken Engineering 2/22/2023; Created By: kchen



**Figure 3**  
**Project Features**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California

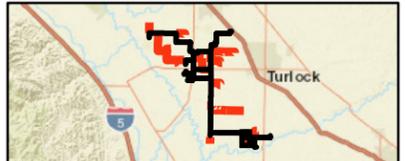
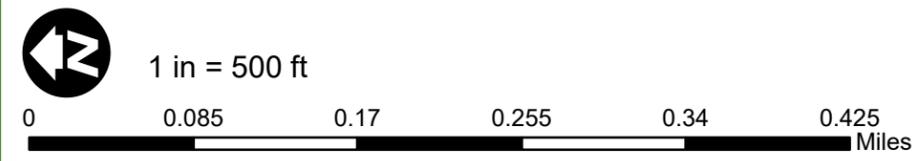


- Supplemental Project Area 2023
- Approved Project Area for January 2021 Final IS/MND



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Source: ESRI Maps Online; Dokken Engineering 2/22/2023; Created By: kchen



**Figure 3**  
**Project Features**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California

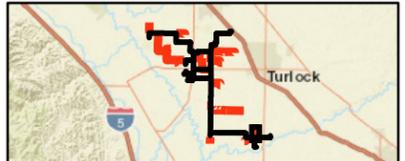
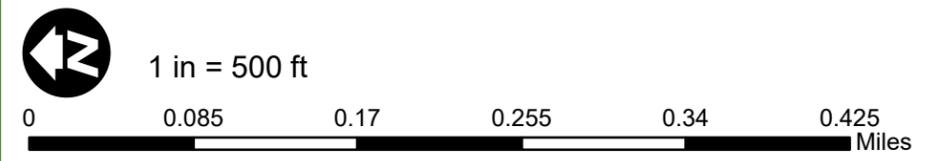


Supplemental Project Area 2023  
 Approved Project Area for January 2021 Final IS/MND



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Source: ESRI Maps Online; Dokken Engineering 2/22/2023; Created By: kchen



**Figure 3**  
**Project Features**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



The additional extensions from the biogas pipeline are considered minor additions to the original project and are not anticipated to result in any new significant environmental impacts or mitigation measures that weren't already discussed in the approved August 2021 Final IS/MND; therefore, a Supplemental IS/MND under CEQA would be appropriate.

### **Summary of Existing CEQA Documentation**

Stanislaus County (CEQA lead agency) completed a Draft IS/MND and circulated the document for public review for a period of 30 days, beginning November 1, 2020 and ending on December 1, 2020. The Final IS/MND was approved by the Stanislaus County Board of Supervisors on January 26, 2021. The IS/MND addressed potential environmental effects of the Project and found that all impacts to environmental resources as a result of this Project were less than significant through the use of incorporated mitigation measures.

In August 2021, Aemetis and associated contractors applied for construction permits to connect the pipeline to anaerobic lagoon digesters. Preparation of a CEQA Addendum was necessary to provide additional information on how the pipeline connects to the lagoon digesters in order to issue construction permits for such activities. Stanislaus County reviewed the 2021 Final IS/MND and Addendum and found that the pipeline connections to anaerobic lagoon digesters did not have any new or increased significant effects on the environment not previously disclosed and approved the CEQA Addendum. To date, the August 2021 Addendum to the Final IS/MND is the last revised version of the original January 2021 Final IS/MND.

### **Appropriate CEQA Documentation for the Proposed Revision**

#### Section 15164 – Addendums

In accordance with Section 15164(b) of the State CEQA Guidelines, “An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for preparation of a subsequent EIR or negative declaration have occurred.” Specifically, these conditions include:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
  - A. The Project will have one or more significant effects not discussed in the previous EIR or Negative Declaration;
  - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

- D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The construction of 26.6 miles of additional biogas pipeline with connections to additional dairies not previously disclosed in the 2021 IS/MND is considered a substantial change to the original project description; therefore, the County has determined that an addendum would not be appropriate and a subsequent or supplemental IS/MND must be considered.

Section 15162 – Subsequent EIRs and Negative Declarations

- a) “When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one of more of the following:”
  - 1) “Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;”
  - 2) “Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or”
  - 3) “New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
    - A) “The project will have one or more significant environmental effects not discussed in the previous EIR or Negative Declaration;”
    - B) “Significant effects previously examined will be substantially more severe than shown in the previous EIR;”
    - C) “Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or”
    - D) “Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.”
- b) “If changes to a project or its circumstances occur or new information becomes available after adoption of a Negative Declaration, the lead agency shall prepare a subsequent EIR if required under subsection (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.”

- c) “Once a project has been approved, the lead agency’s role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subsection (a) occurs, a subsequent EIR or Negative Declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent Negative Declaration adopted.”

None of the conditions listed in subsections a), b), or c) would occur due to the proposed modifications describing the lateral pipeline extensions to service 21 additional private dairies in Stanislaus and Merced County; therefore, the County has determined that preparation of a subsequent IS/MND is not necessary.

Section 15163 - Supplement to EIRs or Negative Declarations

In order to utilize a Supplemental IS/MND as the appropriate CEQA document, Stanislaus County, as the lead agency, must make a finding that changes to the Project are necessary and that the Project would not result in any new significant or more severe environmental effects than previously identified in the approved August 2021 Final IS/MND.

- a) The lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:
1. Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
  2. Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.
- b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
- c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.
- d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.
- e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

Analysis of the additional lateral pipeline extensions to service 21 private dairies is necessary; however, none of the conditions described in Section 15162 calling for preparation of a subsequent Negative Declaration would occur as a result of the proposed additions. Therefore, a Supplemental IS/MND to the adopted 2021 Final IS/MND is the appropriate CEQA document for the proposed Project Description modifications.

This document provides substantial evidence for Stanislaus County to support the decision to prepare a Supplemental IS/MND for the proposed Project Description modifications stated above. The Mitigation Monitoring and Reporting Program for the Project does not change and will be

implemented and the 2021 Final IS/MND only provides environmental clearance for construction of the lateral pipeline extensions needed to service 21 additional private dairies.

### Changes Addressed by This Document

As a Supplemental IS/MND, this document discusses sections of the 2021 IS/MND documents which have changed as a result of revisions in the project design, changes in environmental setting, changes in environmental circumstances (new laws or regulations), or changes in the anticipated environmental impacts. The following environmental sections of the 2021 IS/MND have not substantially changed in this Supplemental IS/MND: Aesthetics, Agricultural and Forest Resources, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation/Traffic, Utilities/Service Systems, Wildfire, and Mandatory Findings of Significance.

Due to a lapse in time since initial surveys in 2020, the following sections have been re-evaluated as a result of the revisions in the proposed project design and are discussed in Chapter 5.0 of this document:

- Biological Resources
- Cultural Resources
- Tribal Cultural Resources

### CEQA Environmental Checklist

Pursuant to Section 15063, CEQA Guidelines, the District has utilized an Environmental checklist to evaluate the potential environmental effects of the project. The checklist provides a determination of these potential impacts and includes the substantiation developed in support of the conclusions checked on the form.

### Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, as disclosed in the 2021 IS/MND. No additional impacts would occur as a result of the 2023 Project revisions that weren't previously disclosed. Please see the checklist beginning on the next page for additional information.

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

**I. Aesthetics:**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Regulatory Setting**

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic and historic environmental qualities (CA Public Resources Code Section 21001[b]).”

Stanislaus County and Merced County do not have specific sections or chapters regarding aesthetics or visual resources within their respective General Plans. However, each County has policies regarding the visual impacts of a project.

**Impact Discussion:**

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

**No Impact.** No designated scenic vistas are at or near the proposed additional lateral pipeline extensions. There are also no scenic byways along or near any of the roads the additional lateral pipeline extensions would run. There would be **No Impact**.

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

**No Impact.** There are no designated state scenic highways in the vicinity of the proposed additional lateral pipeline extensions. **No impacts** to any state eligible scenic highways would occur.

c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?*

**No Impact.** The proposed additional lateral pipeline extensions would be constructed underground and would not degrade the existing visual character or quality of public views. There would be **No Impact**.

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

**No Impact.** The proposed additional lateral pipeline extensions would not create a new source of substantial light or glare. There would be **No Impact**.

**Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Affected Environment**

The project stretches through areas of Unique Farmland, Prime Farmland, Farmland of Statewide Importance, Confined Animal Agriculture, and other land uses. Agriculture is the leading industry in Stanislaus County and this project would support infrastructure that meets the goals and objectives defined in the Agricultural Element of the Stanislaus County General Plan to strengthen the agricultural sector and conserve agricultural lands for agricultural uses. The pipeline and the proposed additional pipeline extensions are accessory to existing dairy operations and are a permitted use within the General Agricultural or A-2 District (Stanislaus County Zoning Ordinance). Biogas would be collected at each private dairy through manure collection and processing using a covered anaerobic lagoon digester, and then gas pressurization for transmission in the proposed pipeline. Processing and refining of the biogas will occur at the Aemetis facility in Keyes.

**Impact Discussion:**

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

**Less than Significant Impact.** To identify Prime and Unique Farmland within the project area, an examination of the Department of Conservation's California Important Farmland Finder website was utilized. Stanislaus and Merced Counties have a diversity of agricultural land and while the proposed additional lateral pipeline extensions would predominantly be constructed within existing roadway right-of-way, some portions of the proposed additional pipeline extensions would be constructed on active agricultural lands. However, no conversion of farmland would occur since the pipeline extensions would be constructed underground and would not prevent the future use of these properties from typical agricultural uses in the region. Individual easements will be negotiated with private property owners where necessary for continuing operation and maintenance of the pipeline after construction is completed.

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

**Less than Significant Impact.** The proposed additional lateral pipeline extensions would run across properties zoned for agricultural use, private properties that contain dairy farms, and parcels that are under a Williamson Act contract. The project does not conflict with existing zoning for agricultural use since the proposed additional pipeline extensions would be constructed underground. Operation and maintenance easements on private property will be necessary in order to ensure the proper functioning of the biogas pipeline but would not change the zoning or conflict with agricultural uses and operations. Impacts would be **Less than Significant**.

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

**No Impact.** There are no forests or forest resources located within the project area; therefore, the proposed additional lateral pipeline extensions will have no impacts with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. There would be **No Impact**.

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

**No Impact.** There are no forests or forest resources located within the Project Area; therefore, the proposed additional lateral pipeline extensions would not result in the loss of forest land or conversion of forest land to non-forest use. There would be **No Impact**.

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

**No Impact.** The proposed additional lateral pipeline extensions would not involve other changes in the existing environment that could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. There would be **No impact**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**III. Air Quality:**

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

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

**Regulatory Setting**

The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM), lead (Pb), and sulfur dioxide (SO<sub>2</sub>).

**State Regulations**

Responsibility for achieving California's air quality standards, which are more stringent than federal standards, is placed on the California Air Resources Board (CARB) and local air districts, and is to be achieved through district-level air quality management plans that will be incorporated into the SIP. In California, the EPA has delegated authority to prepare SIPs to the CARB, which, in turn, has delegated that authority to individual air districts.

The CARB has traditionally established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving state implementation plans.

Responsibilities of air districts include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

**Affected Environment**

The entirety of the proposed pipeline is located within the San Joaquin Valley Air Basin and is under the auspices of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

**Impact Discussion:**

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

**No Impact.** The Project falls within the San Joaquin Valley, which is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (APCD). The proposed additional lateral pipeline extensions would not substantially increase operational emissions beyond existing baseline conditions from vehicles and maintenance machinery. Therefore, the proposed additional lateral pipeline extensions would not significantly impact the implementation of SJVAB air quality plans. There would be **No Impact**.

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

**Less Than Significant with Mitigation Incorporated.** Stanislaus County is currently designated by the SJVAB as non-attainment for Ozone (1-hour) and PM 2.5, and State nonattainment for Ozone (1-hour), PM 2.5, and PM 10.

*Long Term Emissions*

The proposed project would construct additional lateral pipeline extensions to carry biogas from 21 additional local dairies in Stanislaus and Merced County to the Aemetis Keyes ethanol refinery facility. Biogas would be collected at each private dairy through manure collection and processing, biogas collection using a covered anaerobic lagoon digester, and then gas pressurization for transmission in the proposed pipeline. Processing and refining biogas at the Aemetis facility does generate some long-term emissions; however, this operation is not a part of the proposed project and has already been approved under separate environmental documentation and local agency permits authorized by Stanislaus County and the San Joaquin Valley Unified Air Pollution Control District. Prior CEQA and Permitting approvals relevant to the gas refining process are included in Appendix A. Furthermore, collection of biogas from dairies would substantially reduce carbon dioxide, nitrous oxide, hydrogen sulfide, and methane gases emissions from traditional dairy operations. This collection process has been previously determined to result in a net reduction of emissions, specifically in terms of greenhouse gases (see further discussion in Section VIII, Greenhouse Gases). As a result, no long-term emissions are expected to be generated as a result of operation of additional lateral pipeline extensions.

*Construction Emissions*

All construction impacts to air quality would be short-term and intermittent; therefore, impacts are anticipated to be less than significant. The emission of pollutants during construction would not contribute significantly to a net increase of any criteria pollutant.

All construction activities would follow the SJVAPCD rules and would implement all appropriate air quality BMPs, including minimizing equipment idling time and use of water or similar chemical palliative to control fugitive dust. The implementation of best management practices listed in **AQ-1** and **AQ-2** from the approved August 2021 Final IS/MND would continue to be required to further minimize potential impacts on air quality caused during construction. These measures provide compliance guidelines for minimizing fugitive dust to protect sensitive receptors in the vicinity. With adherence to **AQ-1** and **AQ-2** construction emissions would remain a **Less Than Significant with Mitigation Incorporated**.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less Than Significant with Mitigation Incorporated.** During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust)

generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NOX, VOCs, directly emitted PM10 and PM2.5, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Construction activities may also result in small increases in traffic congestion if lane closures on rural county-maintained roads are necessary. Additional congestion can result in an increase in vehicle hours traveled, slower vehicle speeds and therefore increased emissions. However, these additional impacts would be minor and short term during the construction and none of the affected roadways convey large volumes of traffic daily.

Construction emissions were estimated using the latest Sacramento Metropolitan Air Quality Management District’s Road Construction Model (<http://www.airquality.org/ceqa/>, Version 9.0.0, SMAQMD 2018). Construction-related emissions for the proposed project are presented in Table 3 and Appendix B and compared with the SJVAPCD’s air quality construction emissions thresholds of significance. The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that would be generated by construction of the proposed project.

**Table 1. Construction Emissions from Construction Activity.**

	CO (lbs/day)	NOx (lbs/day)	ROG (lbs/day)	SOx (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)
<b>Grubbing/Land Clearing</b>	0.00	0.00	0.00	0.00	5.00	1.04
<b>Grading/Excavation</b>	13.48	12.99	1.28	0.03	5.56	1.56
<b>Drainage/Utilities/ Sub-Grade</b>	8.37	9.82	0.94	0.02	5.40	1.41
<b>Paving</b>	4.08	3.15	0.31	0.01	0.16	0.15
<b>Maximum daily (lbs/day)</b>	13.48	12.99	1.28	0.03	5.56	1.56
<b>Project Total (tons/construction project)</b>	0.59	0.60	0.06	0.00	0.31	0.08
<b>San Joaquin Valley Air Pollution Control District Thresholds of Significance (tons per year)</b>	100	10	10	27	15	15

SMAQMD Road Construction Model (20118)

As shown in Table 3, construction of the proposed additional pipeline extensions would not result in exceedance of the SJVAPCD’s construction emissions thresholds of significance.

*Toxic Air Contaminants*

The greatest potential for toxic air contaminant (TAC) emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used during construction. These substances would comply with all applicable SJVAPCD rules for their manufacture and use. The proposed additional lateral pipeline extensions would have no permanent impact on sensitive receptors. Best management practices outlined in measures **AQ-1** and **AQ-2**, identified in the approved August 2021 Final IS/MND, would further minimize the potential for construction emissions related impacts. As no new significant impacts would occur, and no new mitigation beyond those already identified are necessary, the impact is considered to be a **Less Than Significant with Mitigation Incorporated**.

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

**Less than Significant Impact.** The Project site is located within an agricultural area and construction activities would not produce sufficient quantities of other emissions that could lead to odors during construction that would affect the surrounding rural residents. Emissions and odor produced at the dairies and the existing Keyes refinery facility may affect nearby residences or motorists traveling nearby; however, these existing facilities are previously permitted to perform agricultural and industrial uses respectively and those uses would not change as a result of this project. Therefore, the Project would have a **Less than Significant Impact** on emissions that could affect a substantial number of people.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **AQ-1** and **AQ-2** previously recommended from the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

**IV. Biological Resources:**

Would the project:

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

***REGULATORY SETTING***

This section describes the Federal, State, and local plans, policies, and laws that are relevant to biological resources within the Biological Study Area (BSA).

**Federal Regulations**

**National Environmental Policy Act**

NEPA provides an interdisciplinary framework for environmental planning by Federal agencies and contains action-forcing procedures to ensure that Federal agency decision makers take environmental factors into account. NEPA applies whenever a Federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans, under delegation from the FHWA, is the NEPA lead agency for this project.

**Federal Endangered Species Act**

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by United States Fish and Wildlife Services (USFWS) or National Marine Fisheries Service (NMFS).

### **Clean Water Act**

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the U.S. CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool. This project will require a CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Permit regulated by the EPA.

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the U. S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

### **Executive Order 13112: Prevention and Control of Invasive Species**

Executive Order (EO) 13112 (signed February 3, 1999) directs all Federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the FHWA require consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

### **Executive Order 13186: Migratory Bird Treaty Act**

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist Federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations [CFR] 10 and 21) and does not constitute

any legal authorization to take migratory birds. Take is defined under the MBTA as “the action of or attempt to pursue, hunt, shoot, capture, collect, or kill” (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

### **State Regulations**

#### **California Environmental Quality Act**

California State law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. The County of Stanislaus is the CEQA lead agency for this project.

#### **California Endangered Species Act**

The California Endangered Species Act (CESA) (California Fish and Game (CFG) Code Section 2050 et seq.) requires the CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires the CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the Project or activity for which the application was submitted may have on the environment. CDFW’s CEQA obligations include consultation with other public agencies which have jurisdiction over the Project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

#### **Section 1602: Streambed Alteration Agreement**

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

#### **Section 3503 and 3503.5: Bird and Raptors**

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the study area and could contain nesting sites.

#### **Section 3513: Migratory Birds**

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

### ***AFFECTED ENVIRONMENT***

Online databases from the USFWS, NMFS, California Natural Diversity Database (CNDDDB), and the California Rare Plant Society (CNPS) were used to generate a list of special status species with potential off occurring in the vicinity of the Project area.

The BSA was used to generate an official species list through the Information for Planning and Consultation operated by USFWS. The NMFS official species list was through the Information for Planning and Conservation operated by USFWS. All USGS 7.5-minute quadrangles that include a portion of the project area were included in the search query to generate the CNDDDB and CNPS search results.

On January 27, 2023, general biological surveys, habitat assessments, and a delineation of jurisdictional waters was conducted by Dokken Engineering biologists Hanna Sheldon and Vincent Chevreuil. General biological surveys included walking meandering transects, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat within the BSA to support sensitive plants and wildlife.

The BSA was defined by using a 50-foot buffer around all anticipated work areas, staging areas, and access routes for construction. The BSA is approximately 321.47 acres in total size.

### **Physical Conditions**

#### **Topography**

The BSA intersects six USGS 7 ½ Minute Quadrangles: Brush Lake, Ceres, Denair, Hatch, Turlock, Gustine. The Project area occurs within a single distinct topographic region of the San Joaquin Valley floor, and the elevation within the Project area ranges from approximately 50-100 feet above mean sea level. Topography in the surrounding area includes the Tuolumne River, the San Joaquin River, the Merced River, and the Jennings Secondary Treatment Facility.

#### **Soils**

The Natural Resource Conservation Service (NRCS) Custom Soil Resource Report for the Project (NRCS 2023) identifies the major soil types within the BSA as:

- Delhi sand, 0 to 3 percent slopes, MLRA 17 (3.4%)
- Dinuba sandy loam, 0 to 1 percent slopes (12.6%)
- Dinuba sandy loam, shallow, 0 to 1 percent slopes (1.1%)
- Dinuba sandy loam, slightly saline-alkali, 0 to 1 percent slopes (35.1%)
- Dinuba sandy loam, shallow, slightly saline-alkali, 0 to 1 percent slopes (4.0%)
- Fresno sandy loam, moderately saline-alkali, 0 to 1 percent slopes (1.0%)
- Hanford sandy loam, 0 to 3 percent slopes (2.3%)
- Hilmar sand, 0 to 3 percent slopes (3.0%)
- Hilmar loamy sand, 0 to 1 percent (12.7%)
- Hilmar loamy sand, 0 to 3 percent slopes (3.9%)
- Hilmar loamy sand, slightly saline-alkali, 0 to 1 percent slopes (8.1%)
- Tujunga loamy sand, 0 to 3 percent slopes (1.1%)
- Waukena fine sandy loam, strongly saline-alkali, 0 to 1 percent slopes (2.8%)
- Waukena fine sandy loam, slightly saline-alkali, 0 to 1 percent slopes (1.2%)

The following soil types exist within the BSA as less than 1% of the total soil cover:

- Delhi loamy sand, 0 to 3 percent slopes, MLRA 17 (0.4%)
- Dinuba fine sandy loam, 0 to 1 percent slopes, MLRA 17 (0.5%)
- Dinuba fine sandy loam, slightly saline-alkali, 0 to 1 percent slopes (0.6%)
- Dinuba sandy loam, slightly saline-alkali, 0 to 1 percent slope (0.5%)
- Fresno fine sandy loam, slightly saline-alkali, 0 to 1 percent slopes (0.9%)
- Fresno fine sandy loam, strongly saline-alkali, 0 to 1 percent slopes (0.4%)
- Fresno sandy loam, slightly saline-alkali, 0 to 1 percent slopes (0.9%)
- Hanford fine sandy loam, 0 to 3 percent slopes (0.2%)
- Hanford fine sandy loam, moderately deep over silt, 0 to 1 percent slopes (0.7%)

- Hilmar sand, 0 to 3 percent slopes (0.7%)
- Waukena fine sandy loam, moderately saline-alkali, 0 to 1 percent slopes (0.1%)

### **Hydrological Resources**

The BSA includes three concrete lined irrigation canals: Lower Lateral Number Two and One-Half Canal (off W Keyes Rd.), Lateral Number Five ½ Canal (off Short Ave.), and Stevinson Upper Lateral Canal (off Tegner rd.). The surface water features within the BSA have connectivity to the Tuolumne River, the San Joaquin River, and the Merced River, which do not intersect the BSA but are within the Project vicinity. Most of the Project area is within Federal Emergency Management Agency (FEMA) Zone X, designated as an area of minimal flood hazard. The southernmost part of the Project area is within FEMA Zone A, subject to inundation by the 1% annual chance flood event due to proximity to the Merced River (FEMA 2020).

### **Land Cover Types**

The BSA is dominated by developed agricultural land. Land use within the BSA is mostly agricultural, intermixed with some rural residential centers and irrigation canals. Dominant land cover and vegetative communities within the BSA consist of urban/barren, agricultural, irrigation canal, and tree stands (Figure 4. Vegetation Communities).

#### Urban/Barren

The urban/barren land cover type includes man-made infrastructure and is defined by the absence of any vegetation. Urban/barren habitat within the Project area consists of paved roadways, residential properties and associated human structures, and adjacent unvegetated areas. This community encompasses approximately 154.62 acres (48%) of the BSA.

#### Agricultural

The agricultural field land cover type includes actively maintained agricultural land that is planted and irrigated to grow food crops. It also includes tilled dirt farmland which is expected to have crops grown during the growing season, as well as agricultural grasslands. The primary crops identified within this land cover type in the BSA include almonds (*Prunus dulcis*) and English walnuts (*Juglans regia*). This community encompasses approximately 165.53 acres (52%) of the BSA.

#### Irrigation/Drainage Canal

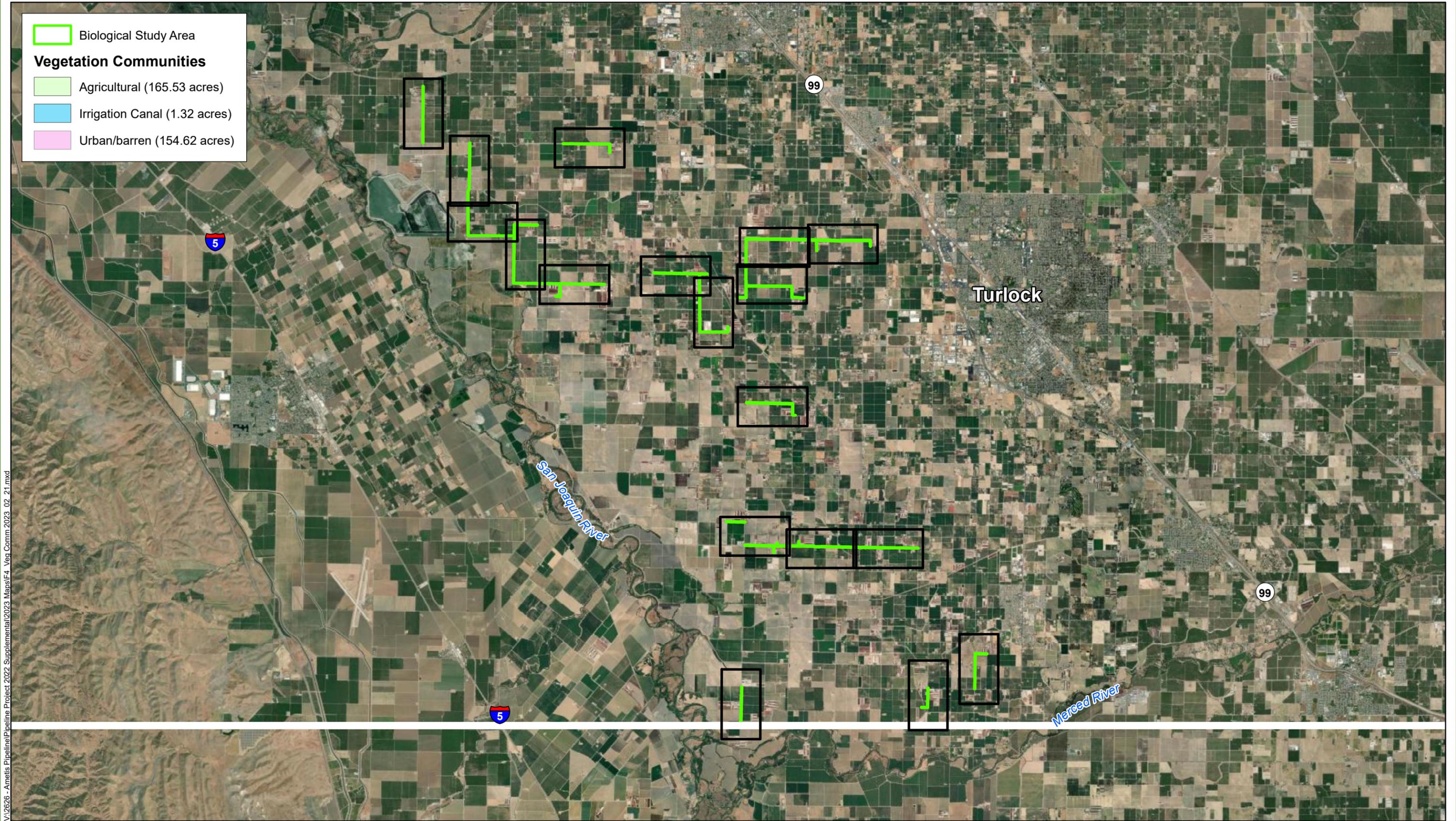
The irrigation/drainage canal land cover type includes the human excavated and concrete lined canals which cross the Project impact area at several places within the BSA. Canals encompass approximately 1.32 acres (<1%) of the BSA.

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**Biological Study Area**

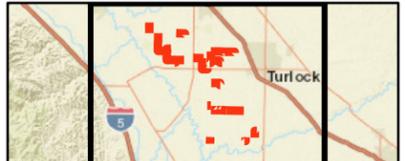
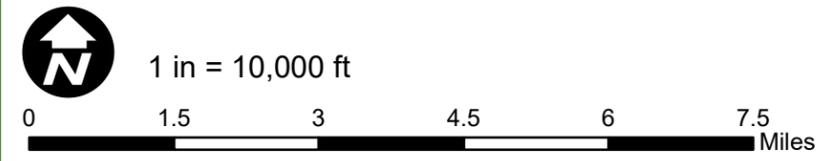
**Vegetation Communities**

- Agricultural (165.53 acres)
- Irrigation Canal (1.32 acres)
- Urban/barren (154.62 acres)



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Source: ESRI Maps Online; Dokken Engineering 2/22/2023; Created By: kchen



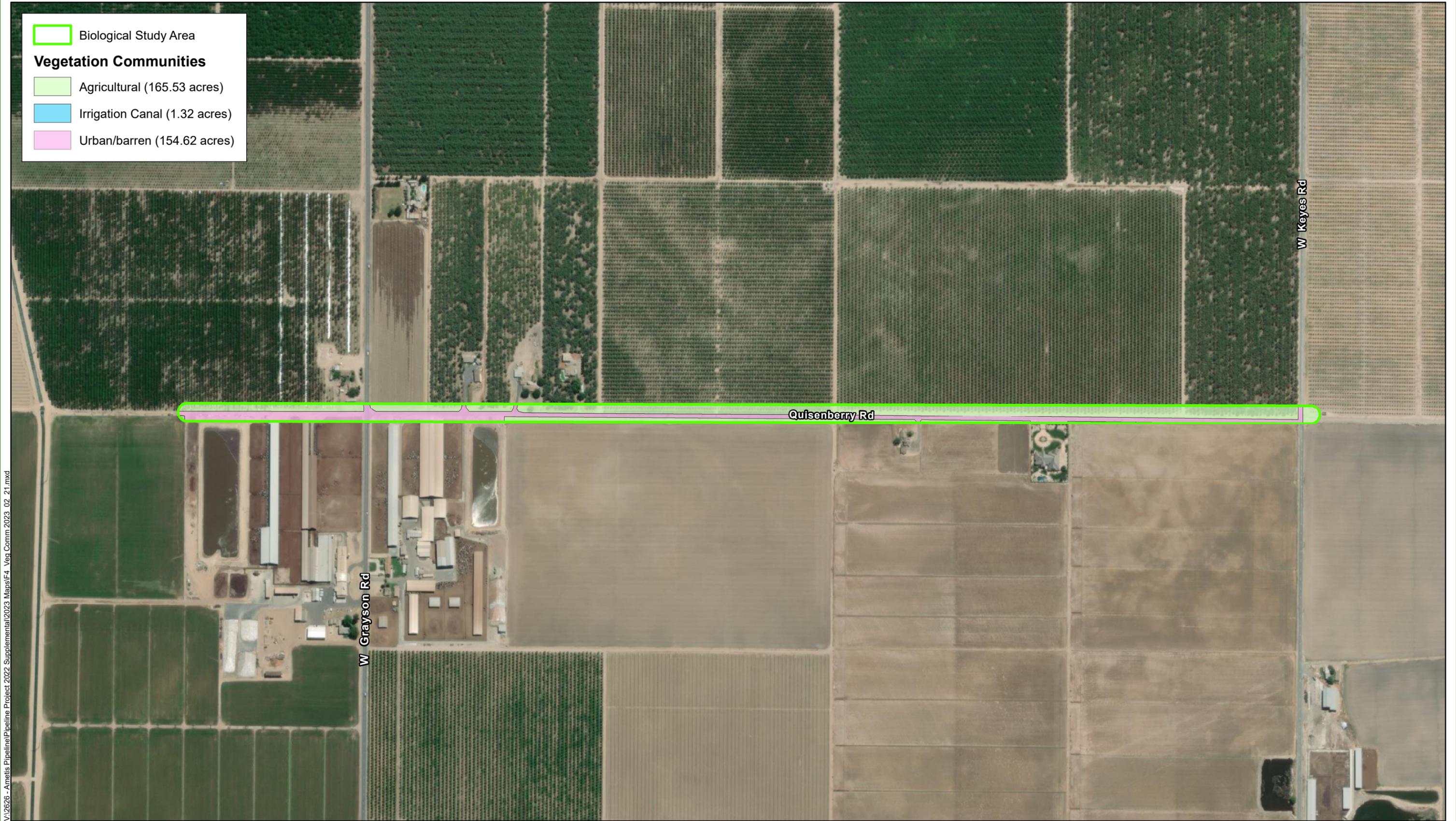
**Figure 4**  
**Vegetation Communities**  
 Page 1 of 19  
 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

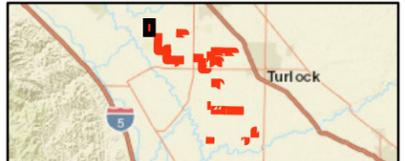
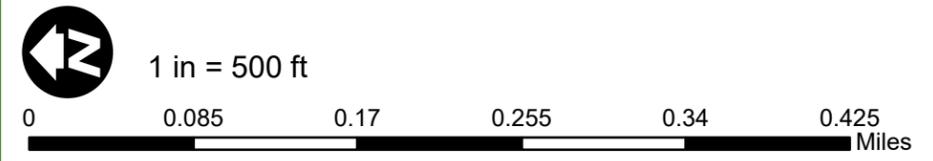
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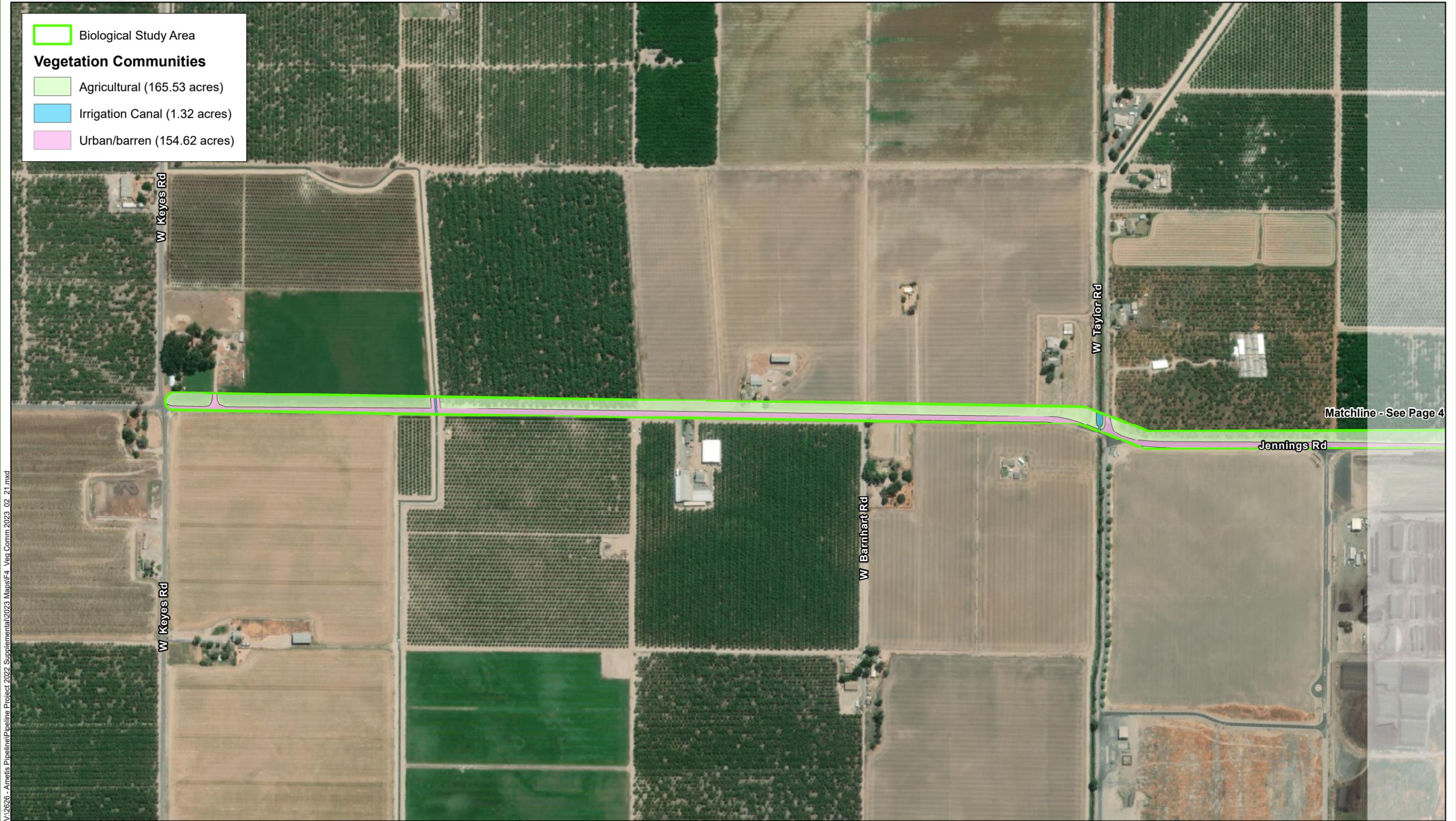
**Figure 4**  
**Vegetation Communities**  
 Page 2 of 19  
 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

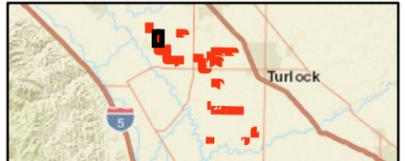
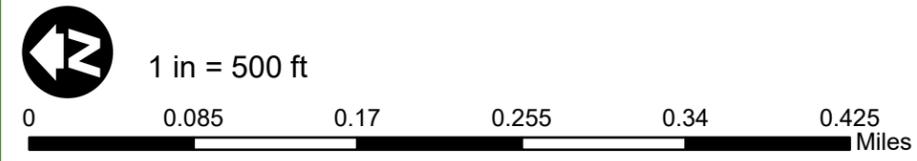
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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

**Vegetation Communities**

- Agricultural (165.53 acres)
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- Urban/barren (154.62 acres)

Matchline - See Page 3

W Zeering Rd

Vivian Rd

Jennings Rd

Matchline - See Page 5

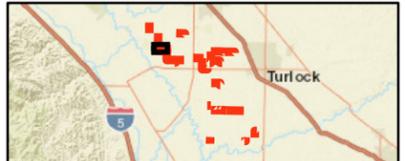
W Monte Vista Ave

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Source: ESRI Maps Online; Dokken Engineering 2/22/2023; Created By: kchen

0 0.085 0.17 0.255 0.34 0.425 Miles

1 in = 500 ft



**Figure 4**  
**Vegetation Communities**  
 Page 4 of 19  
 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

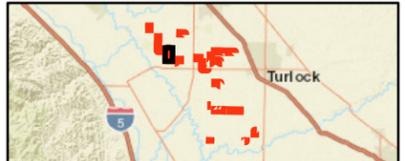
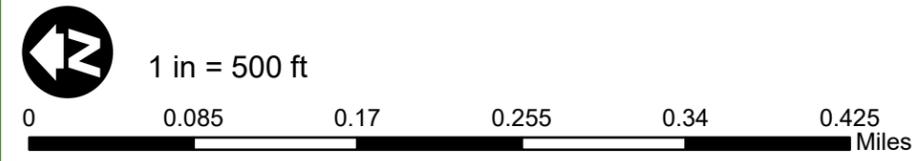
**Vegetation Communities**

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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



 Biological Study Area

**Vegetation Communities**

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-  Urban/barren (154.62 acres)

Matchline - See Page 5

W Fulkerth Rd

S Carpenter Rd

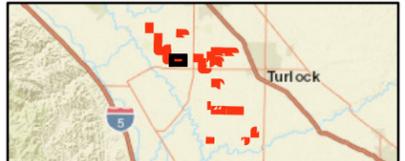
Carpenter Rd

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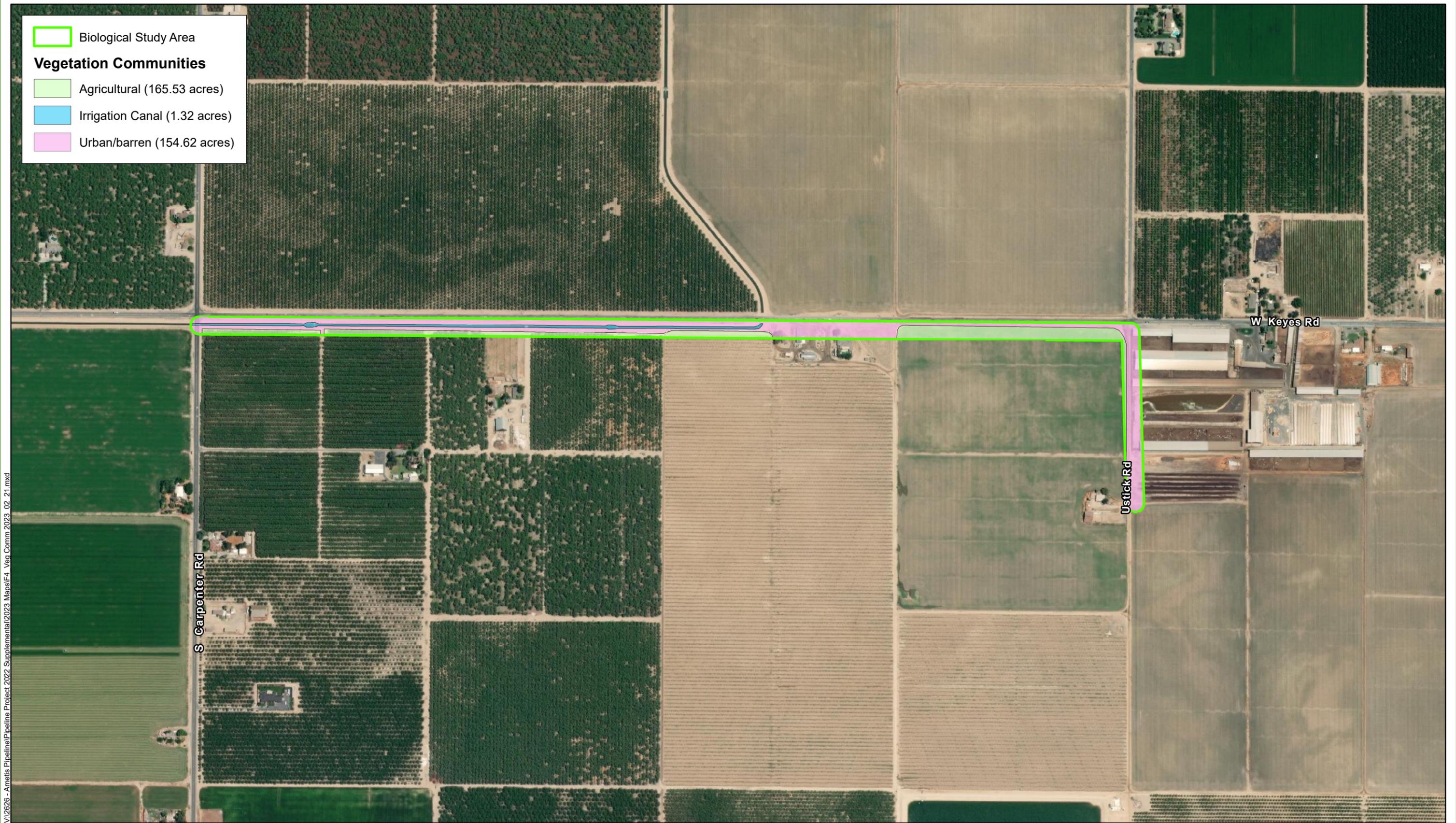
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0    0.085    0.17    0.255    0.34    0.425  
Miles



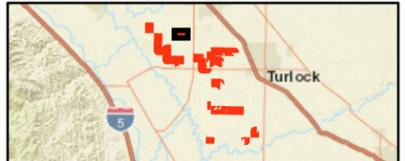
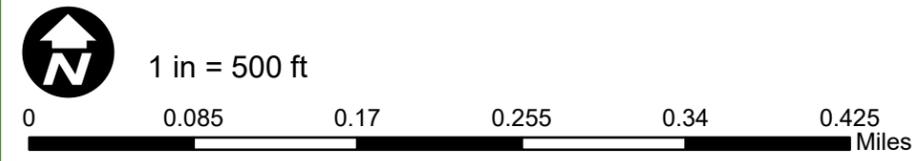


- Biological Study Area
- Vegetation Communities**
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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



 Biological Study Area

**Vegetation Communities**

 Agricultural (165.53 acres)

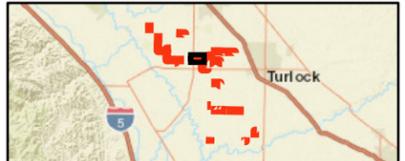
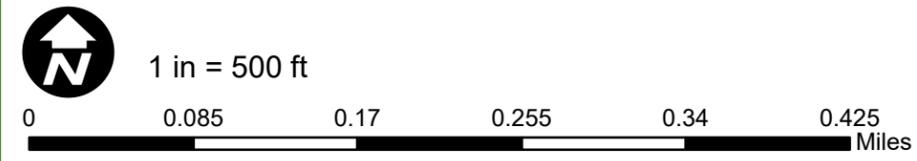
 Irrigation Canal (1.32 acres)

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**Figure 4**  
**Vegetation Communities**  
**Page 8 of 19**  
 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

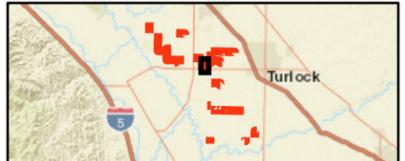
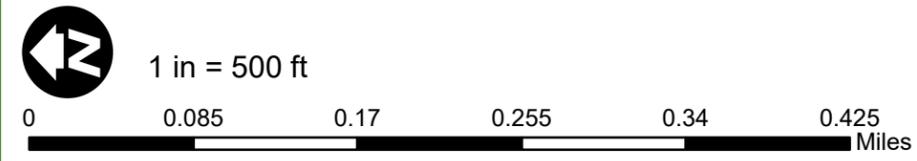
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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

**Vegetation Communities**

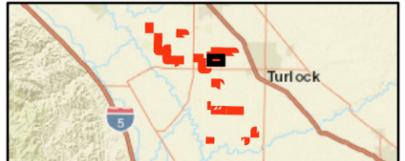
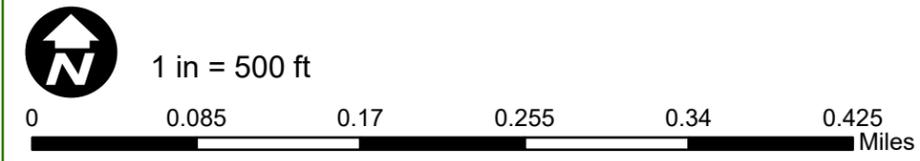
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Matchline - See Page 11



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**Figure 4**  
**Vegetation Communities**  
 Page 10 of 19  
 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

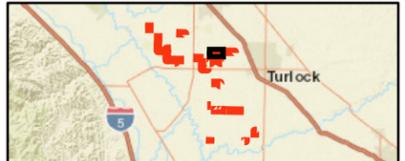
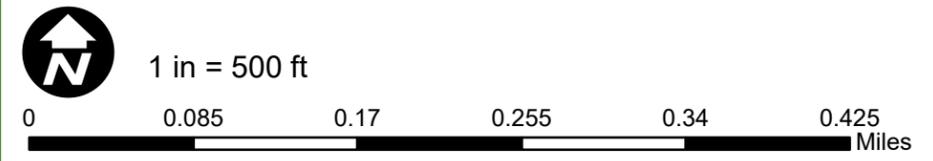
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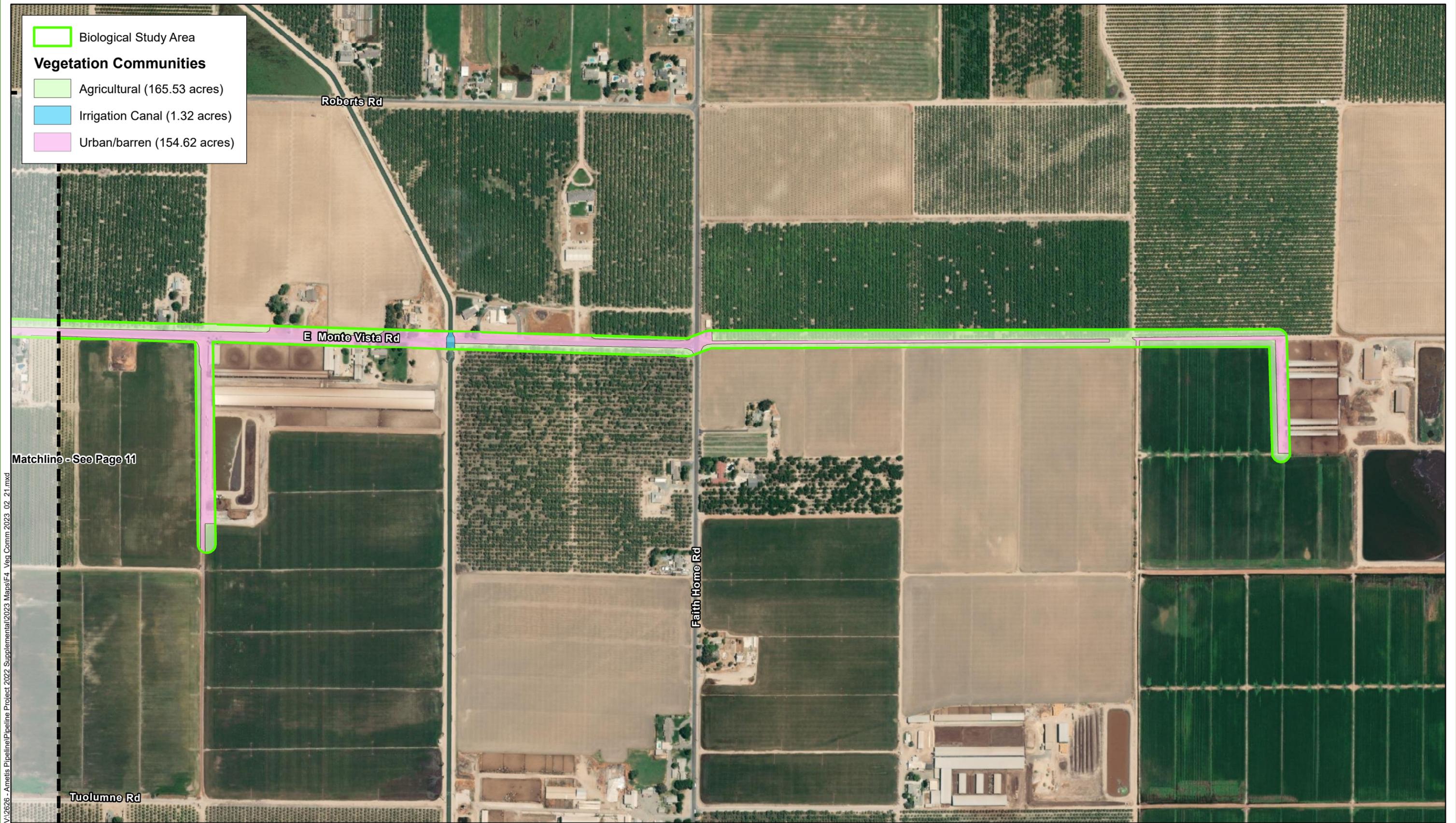
**Figure 4**  
**Vegetation Communities**  
 Page 11 of 19  
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 Stanislaus and Merced Counties, California



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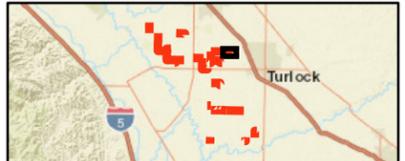
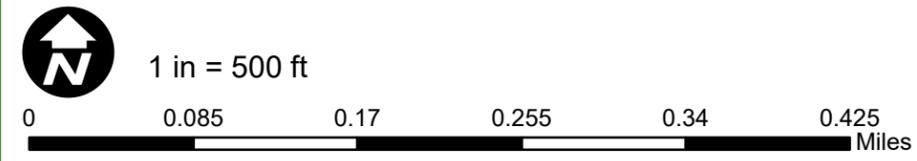
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**Figure 4**  
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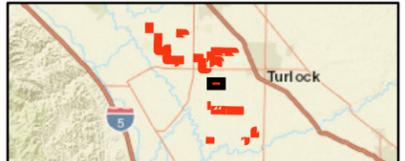
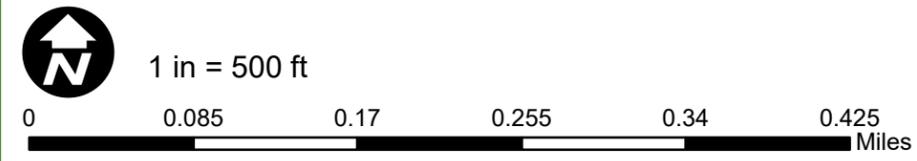
**Vegetation Communities**

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-  Irrigation Canal (1.32 acres)
-  Urban/barren (154.62 acres)



V:\2626 - Ametis Pipeline\Pipeline Project 2022 Supplemental\2023 Maps\F4 Veg Comm 2023\_02\_21.mxd

Source: ESRI Maps Online; Dokken Engineering 2/22/2023; Created By: kchen



**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

**Vegetation Communities**

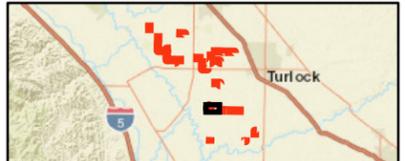
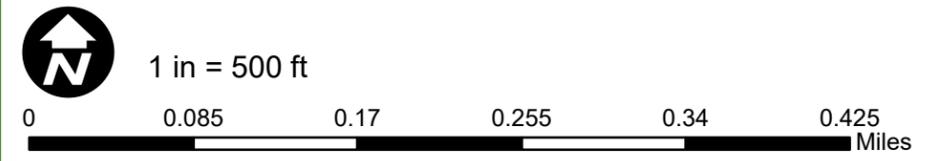
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Matchline - See Page 15

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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
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**Biological Study Area**

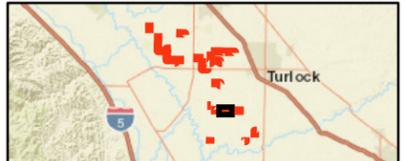
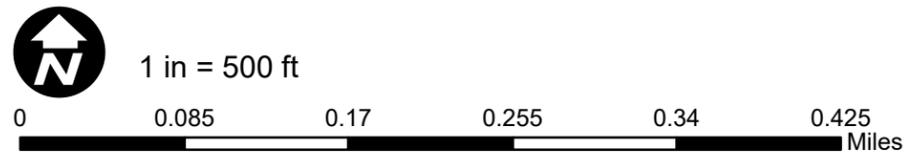
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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



**Biological Study Area**

**Vegetation Communities**

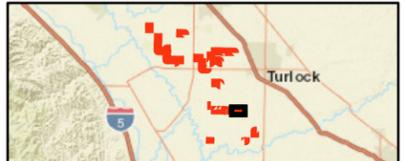
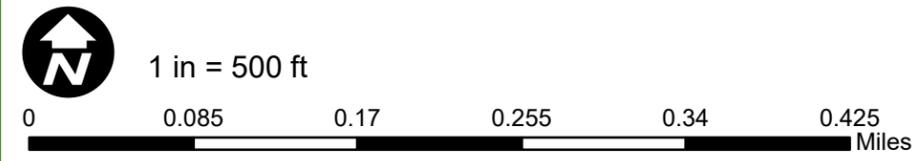
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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California



 Biological Study Area

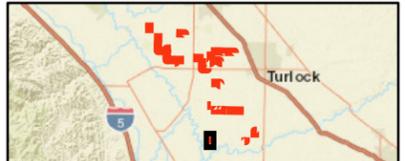
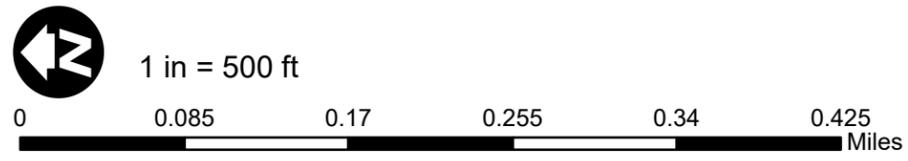
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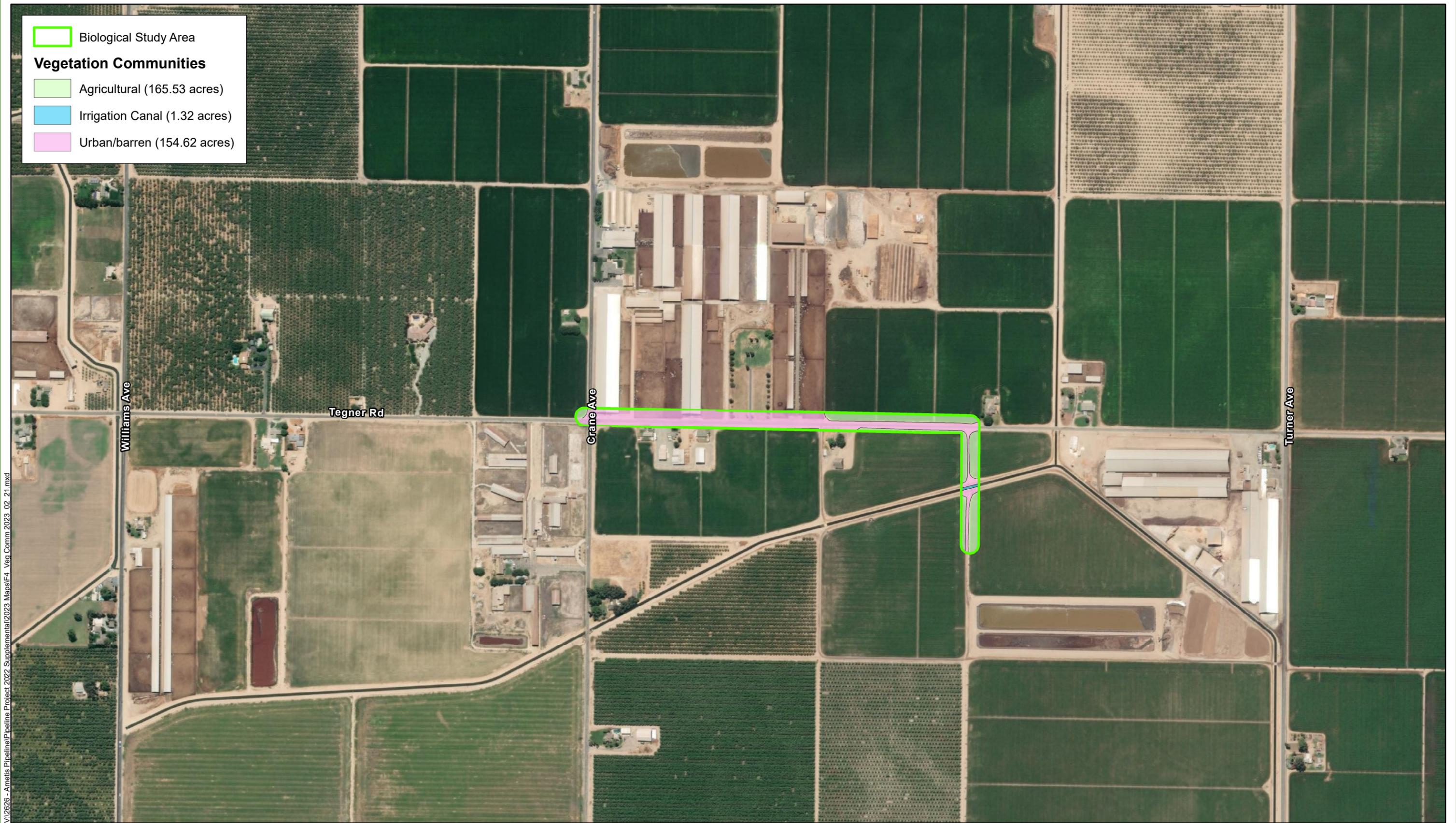
**Figure 4**  
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 Aemetis Biogas Pipeline Project  
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**Biological Study Area**

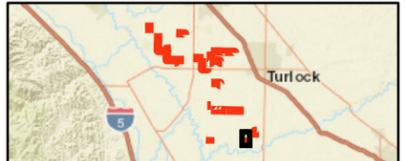
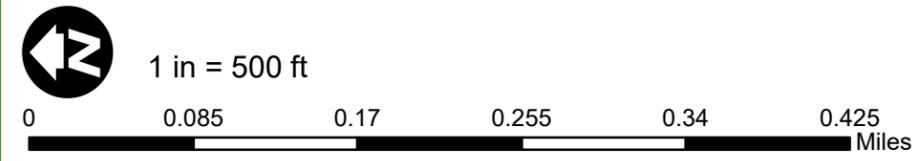
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**Figure 4**  
**Vegetation Communities**  
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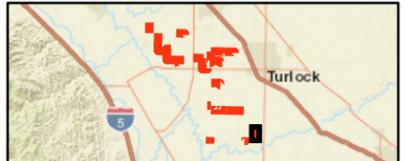
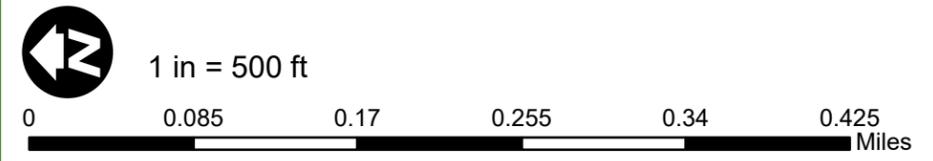
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**Figure 4**  
**Vegetation Communities**  
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 Aemetis Biogas Pipeline Project  
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## Impact Discussion:

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

**Less Than Significant with Mitigation Incorporated.** The following is a discussion on special status plant and animal species that were determined have potential of occurring with the Project area, potential impacts, and avoidance, minimization, and mitigation measures that when incorporated will reduce impacts to a less than significant impact.

### ***Special-Status Plants***

Preliminary literature research was conducted to determine the special status plant species with the potential to occur in the vicinity of the Project. A review of USFWS, CNDDDB, and CNPS online databases concluded that 17 special status plant species had the potential to occur within the Project vicinity. Analysis of specific habitat requirements and current and historical occurrences determined that none of the special status plant species identified in the initial research were likely to occur within the BSA. No special status plant species were identified during general biological surveys conducted on January 27, 2023. The Project is not anticipated to impact special status plant species.

### ***Special-Status Animals***

Preliminary literature research was conducted to determine the special status wildlife species with the potential to occur in the vicinity of the Project. A review of CNDDDB, USFWS, and NOAA Fisheries online databases concluded that 28 special status wildlife species had the potential to occur within the Project vicinity. Analysis of specific habitat requirements and current and historical occurrences determined the BSA includes potentially suitable habitat for Swainson's hawk (*Buteo swainsoni*).

Field surveys conducted January 27, 2023 by Dokken Engineering biologists Hanna Sheldon and Vincent Chevreuil included a habitat assessment, and focused surveys for special status wildlife species. No special status species were observed during the field surveys, but they are still considered to have potential of occurring within the BSA based on presence of potentially suitable habitat and recently documented regional occurrences.

### **Swainson's Hawk**

Swainson's hawk is State listed as threatened. Swainson's hawk migrates annually from wintering areas in South America to breeding locations in northwestern Canada, the western U.S., and Mexico. In California, Swainson's hawks nest throughout the Sacramento Valley in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields. The breeding season extends from late March through late August, with peak activity from late May through July (England et al. 1997). In the Sacramento Valley, Swainson's hawks forage in large, open agricultural habitats, including alfalfa and hay fields (CDFW 1994). The breeding population in California has declined by an estimated 91% since 1900; this decline is attributed to the loss of riparian nesting habitats and the conversion of native grassland and woodland habitats to agriculture and urban development (CDFW 1994).

### *Swainson's Hawk Survey Results*

The BSA does contain some potentially suitable large nesting trees within and directly adjacent to the BSA such as blue gum eucalyptus (*Eucalyptus globulus*). Additionally, the BSA contains an abundance of agricultural lands which could provide suitable foraging habitat for members of this species. However, the agricultural land within the BSA is largely composed of almond orchards and various crop fields, which is not ideal for the species. This species prefers to forage in low-lying croplands where prey is more visible, such as alfalfa fields. During the biological surveys, large diameter potential nesting trees within the BSA were surveyed for existing raptor nest structures and no nesting structures were identified. The most recent (2018) CNDDDB occurrence of nesting Swainson's hawk is located approximately 5 miles south of the BSA, and the nearest CNDDDB occurrence of nesting Swainson's hawk falls within the west of the BSA (2007). The species is considered to have a low to moderate potential of nesting within the BSA, or within ¼ mile of the BSA, based on biological survey results, the presence of potentially suitable habitat, and recent local occurrences.

### *Project Impacts to Swainson's Hawk*

The majority of the pipeline would be installed along existing paved roadways and farm access roads that have been previously disturbed by human development, so Project impacts to suitable Swainson's hawk foraging or nesting habitat is not anticipated. According to documented CNDDDB occurrences, nesting sites have been known to occur within ¼ mile of the Project area; however, no current or historic nesting locations are known to occur within the BSA. Additionally, the Project is not anticipated to result in the removal of any potentially suitable nesting trees. Therefore, the Project does not anticipate direct impacts to Swainson's hawk nesting sites or known Swainson's hawk nesting trees. In the case that vegetation removal becomes necessary for Project activities, including the removal of any large diameter trees that could serve as nesting sites, measures **BIO-3** through **BIO-5** below would be used to avoid impacts to the Swainson's hawk.

Project construction would require equipment and the presence of the human form, which may have the potential to disturb any nesting Swainson's hawk within the vicinity of the Project. To prevent disturbance of any nesting Swainson's hawk, the Project would adhere to local noise ordinances, avoiding excess noise that could disturb the species. In addition, in the case that nesting Swainson's hawks move into the BSA, measure **BIO-5** would be implemented. With the implementation of Project avoidance and minimization measures, use of standard BMPs, the Project would not result in take of Swainson's hawk. With the avoidance of take, the Project does not anticipate that a CDFW Section 2081 ITP for Swainson's hawk would be necessary.

With regards to the Project's effects on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW and USFWS, the implementation of Measures **BIO-3** through **BIO-9** will ensure impacts remain **Less Than Significant with Mitigation Incorporated**.

### *Swainson's Hawk Avoidance and Minimization Efforts*

Measures **BIO-3** through **BIO-5** shall be implemented to avoid and minimize the potential for impacting Swainson's Hawk.

### *Compensatory Mitigation for Swainson's Hawk*

With the scale of foraging habitat available to the species within the Project vicinity and the Project's anticipated footprint within close proximity to existing roadways, the Project is not anticipated to directly impact the Swainson's hawk. Indirect impacts would be minimized through the use of measures **BIO-3** through **BIO-5** from the approved August 2021 Final IS/MND; therefore compensatory mitigation is not proposed.

- 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 Wildlife or U.S. Fish and Wildlife Service?*

**Less Than Significant with Mitigation Incorporated.** The Project is not anticipated to impact jurisdictional WoUS, WoS, and CDFW jurisdictional habitats. The proposed additional pipeline extensions are planned to cross underneath jurisdictional waters in seven different locations; however, impacts to these waters would be avoided by utilizing horizontal directional drilling. The proposed additional pipeline extensions would be installed approximately 20 feet below any waters, thus avoiding impacts to these features. By installing the proposed additional pipeline extensions via directional drilling, especially under sensitive resources such as jurisdictional waters, the Project footprint would be minimized, and temporary or permanent alteration of jurisdictional waters would not occur. Measures **BIO-1** and **BIO-2** from the approved August 2021 Final IS/MND would further minimize impacts to water features and water quality by providing best management practices during construction associated with stormwater quality. Therefore, impacts would remain **Less Than Significant with Mitigation Incorporated.**

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

**Less Than Significant with Mitigation Incorporated.** The Project is not anticipated to impact any state or federally protected wetland features. No wetlands were observed within or directly adjacent to the Project's BSA during the biological survey conducted on January 27, 2023. In addition, the proposed additional pipeline extensions would be installed via directional drilling, avoiding impacts to any surface waters present within the work area. As such, temporary or permanent alteration of state or federally protected wetlands would not occur. Measures **BIO-1** and **BIO-2** from the approved August 2021 Final IS/MND are included to protect water quality during construction and would also apply to ensure impacts remain **Less Than Significant with Mitigation Incorporated.**

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Less than Significant.** The project area is predominantly agricultural uses. While this land use can be used for wildlife migration, it is already separated by County-maintained roadways. Construction of the proposed additional lateral pipeline extensions would have a **Less than Significant** impact on the project area in terms of its potential for use as migratory wildlife corridors.

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

**No Impact.** There are no local policies or ordinances that protect biological resources in Stanislaus County; therefore, the Project will have **No Impact** with regards to conflict with any local policies or ordinances.

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**No Impact.** There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans within the Project area; therefore, the Project will have **No Impact** or conflict with any habitat conservation plan.

**Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **BIO-1** through **BIO-9** previously recommended from the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

<b>V. Cultural Resources:</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**REGULATORY SETTING**

CEQA established statutory requirements for establishing the significance of historical resources in Public Resources Code (PRC) Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential Project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a Project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (California Register); 2) cultural resources included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a Project may have a significant effect on the environment if the Project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(i) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect state-owned resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

**AFFECTED ENVIRONMENT**

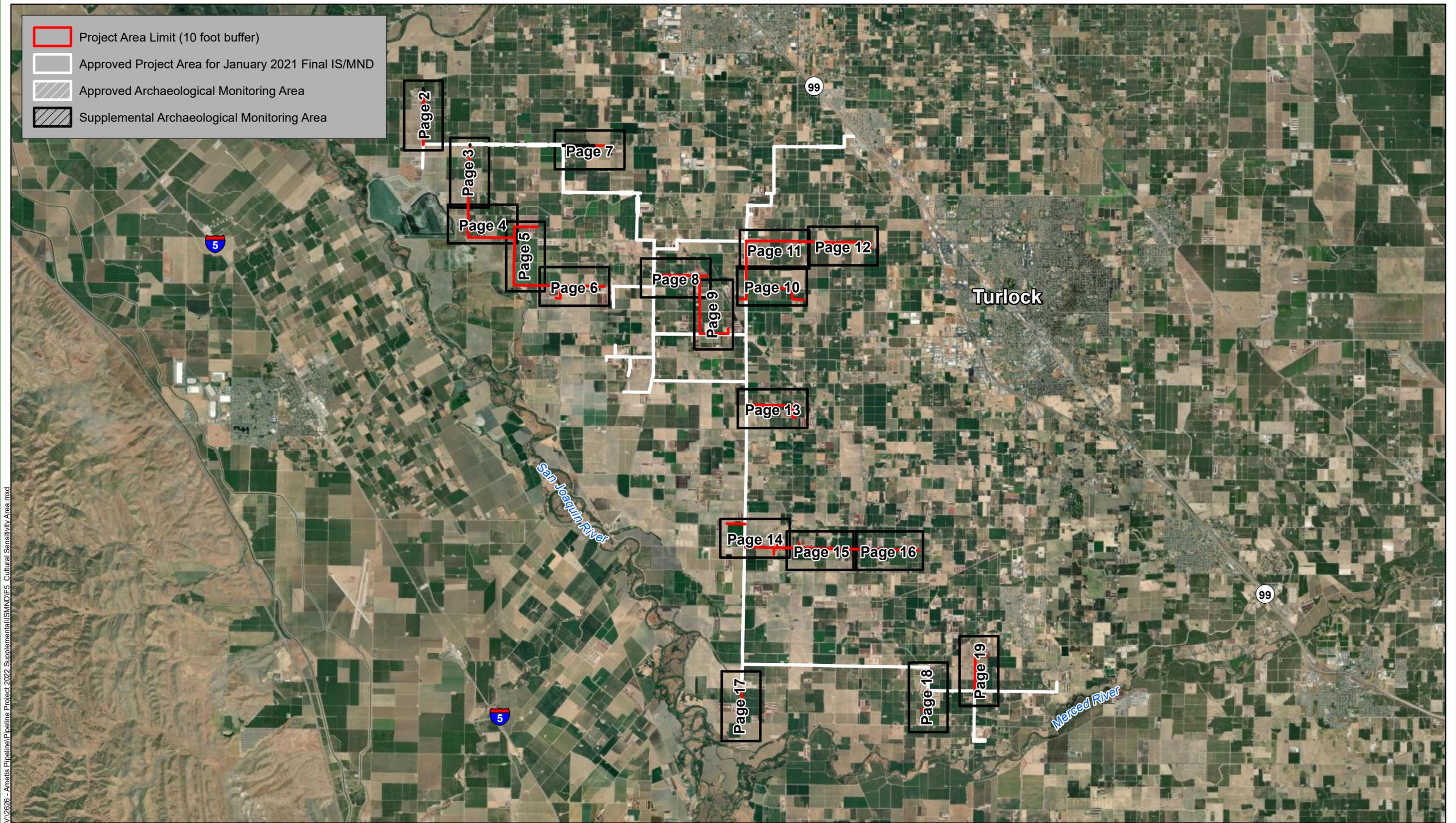
A Project Area Limits (PAL) was established as the area of direct and indirect effects which encompasses an approximately 64-acre area. The PAL extends horizontally to the edge of roadway right of way to allow for construction of the proposed additional pipeline extensions and construction access along the roadway portions of the Project. The PAL also includes segments

of approximately 20-foot wide linear connections onto private properties. The PAL is consistent with the project area which is shown in Figure 3. Vertical disturbance will be approximately 5 feet deep for pipeline construction and 20 feet deep for directional drilling of the proposed additional pipeline extensions below existing facilities. Efforts to identify potential cultural resources in the PAL included background research, a search of previously recorded archaeological site records and cultural resource identification reports on file at the California Historical Resources Information System Central California Information Center (CCIC), and a pedestrian ground surface survey.

Archaeologist Michelle Campbell conducted an archaeological field survey of the PAL on January 31 and February 1, 2023. The PAL was surveyed using transects oriented parallel with each of the roadways in the Project area. Periodic boot scrapes were used in areas of dense vegetation to expose the ground surface. All Project area conditions, and cultural resources were fully recorded in the field notes. Exposed subsurface cuts, such as ditches, roadway cuts, and bank cuts were visually examined for the presence of archaeological resources, soil color change, and/or staining that could indicate past human activity or buried deposits. The pedestrian survey did not reveal any archaeological resources within the PAL.

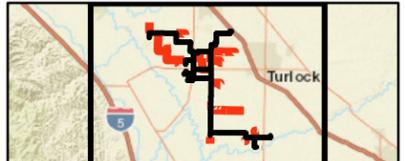
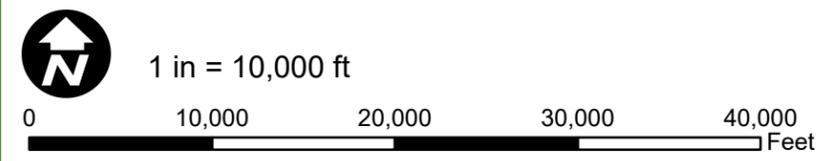
The pedestrian survey confirmed that the terrain has been subjected to intense modification, mostly through years of agricultural activities and development associated with agriculture as well as roadway maintenance. Due to the previously disturbed nature of the PAL, the potential is *low* for discovery of surface archaeological resources during construction, however, the Project proposes depths of excavation that could impact buried sites. Furthermore, portions of the Project pass through areas of high sensitivity for buried archaeological resources, as based on geomorphological studies of the Central Valley. Due to the data available for sensitivity around the Project area, portions of the Project are considered to have *high* potential for discovery of unknown subsurface archaeological resources during construction and therefore will require archaeological monitoring at these locations. Figure 5 provides the locations of high archaeological sensitivity.

-  Project Area Limit (10 foot buffer)
-  Approved Project Area for January 2021 Final IS/MND
-  Approved Archaeological Monitoring Area
-  Supplemental Archaeological Monitoring Area



V:\2626 - Ametis Pipeline\Project 2022 Supplemental\ISMND\F5\_Cultural Sensitivity\_Area.mxd

Source: ESRI Maps Online; Dokken Engineering 2/24/2023; Created By: kchen



**Figure 5**  
**Supplemental Project Area Limits**  
**Page 1 of 19**  
 Ametis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California

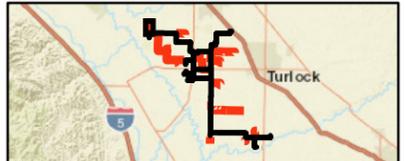
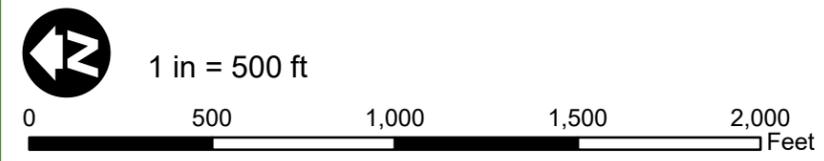


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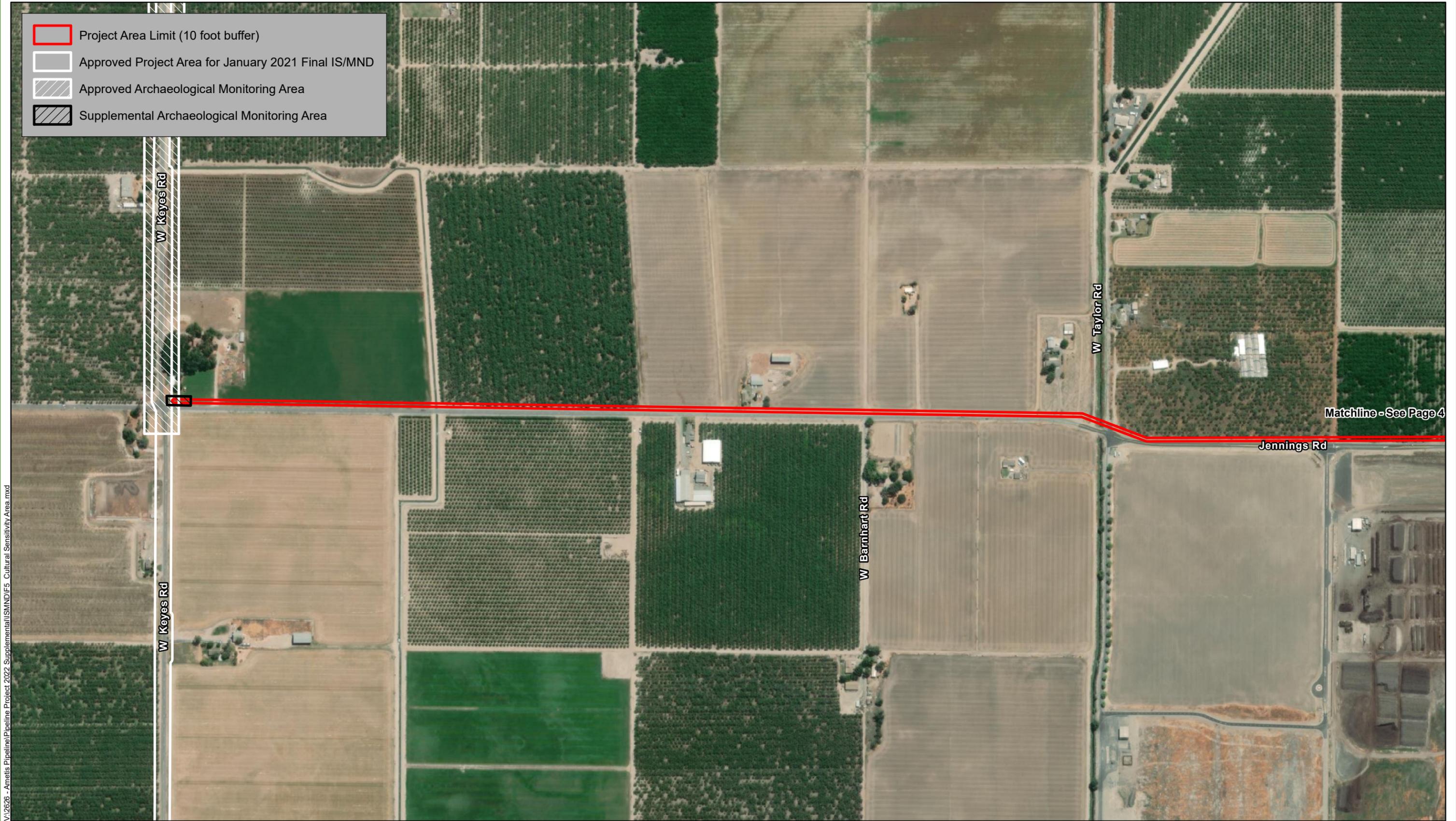
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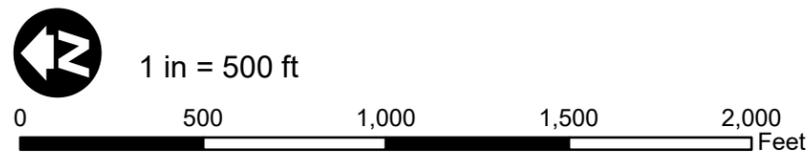


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**Figure 5**  
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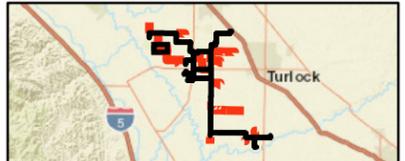
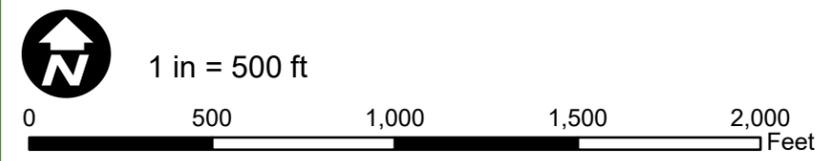
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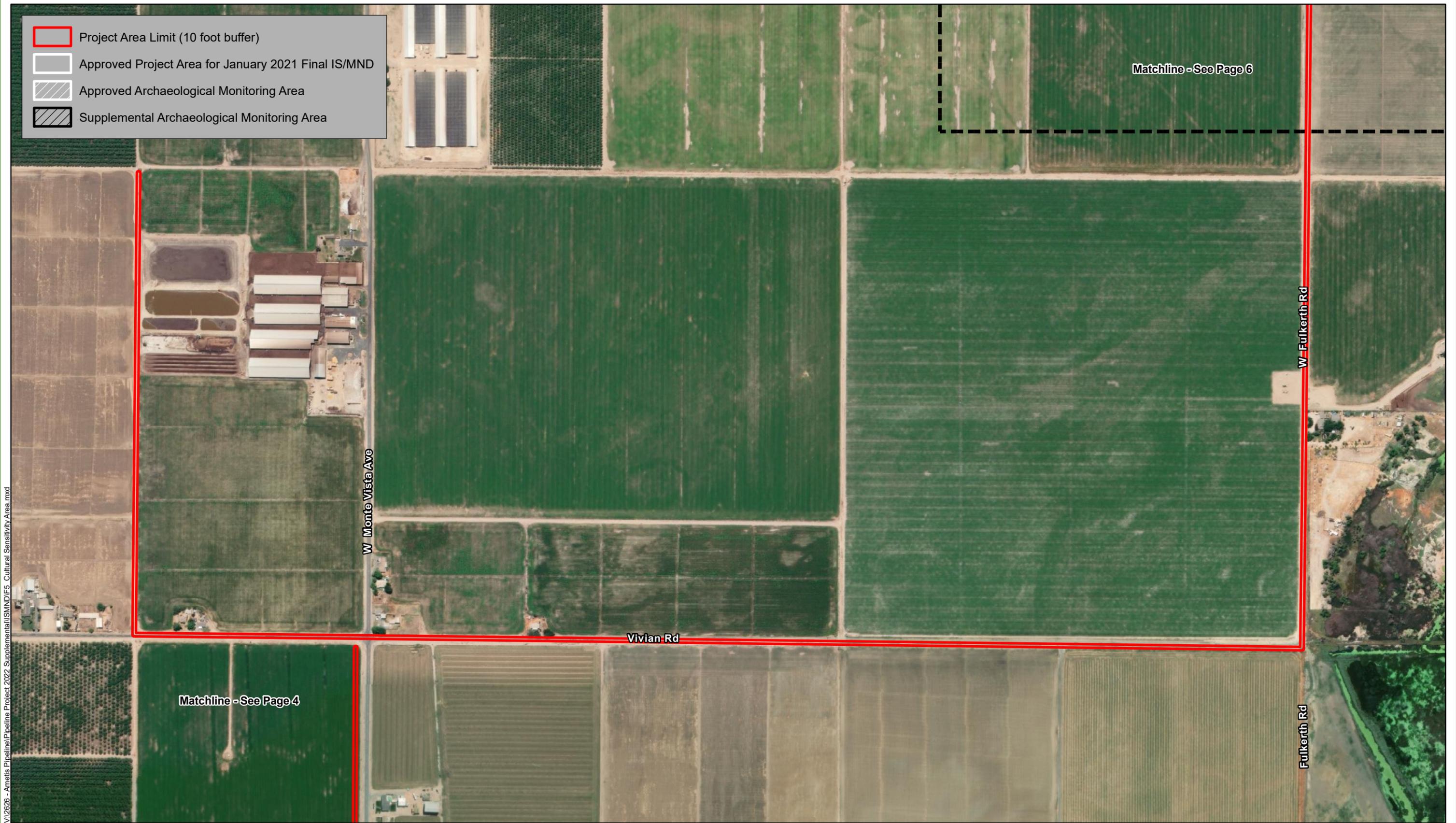
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**Figure 5**  
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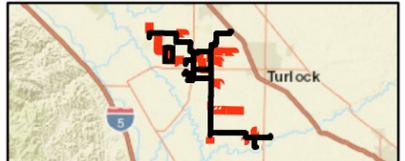
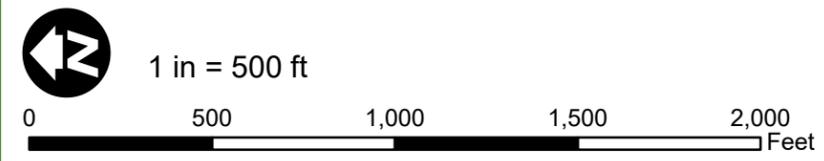


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**Figure 5**  
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Matchline - See Page 5

W Fulkerth Rd

S Carpenter Rd

Carpenter Rd

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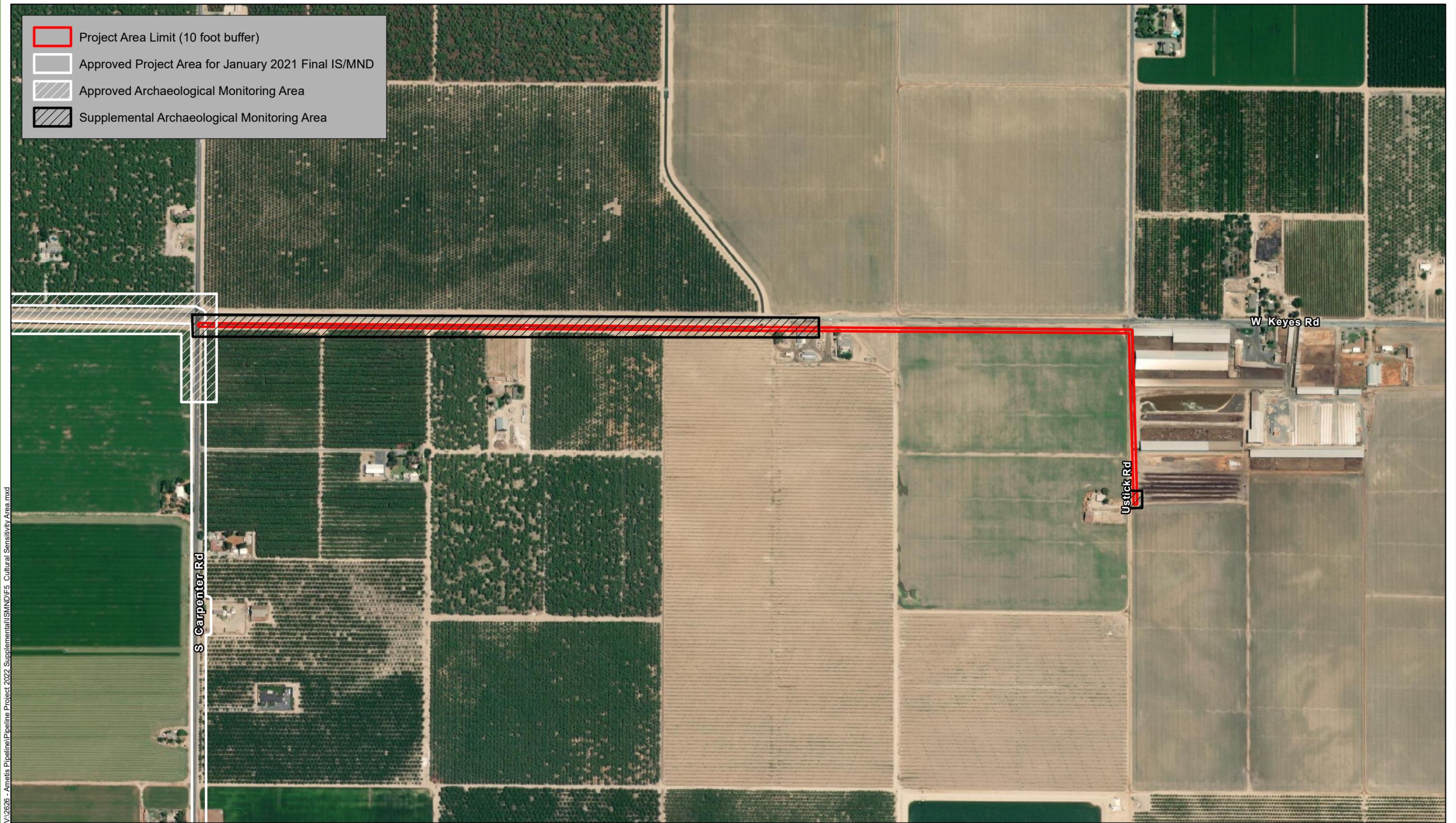
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**Figure 5**  
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**Page 6 of 19**  
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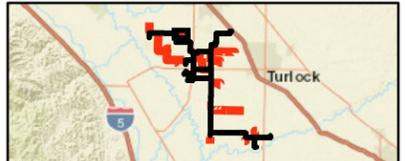
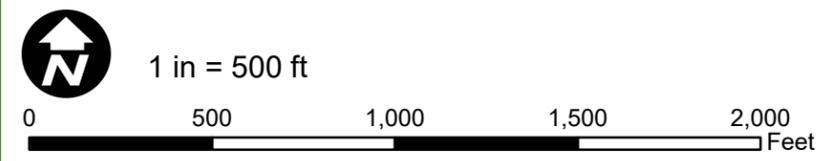


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**Figure 5**  
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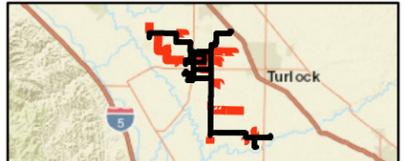
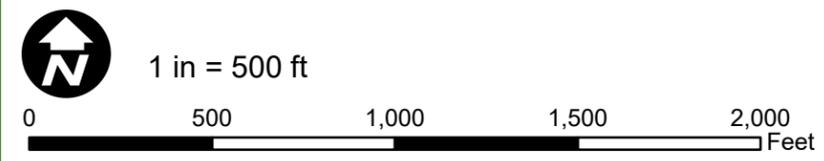


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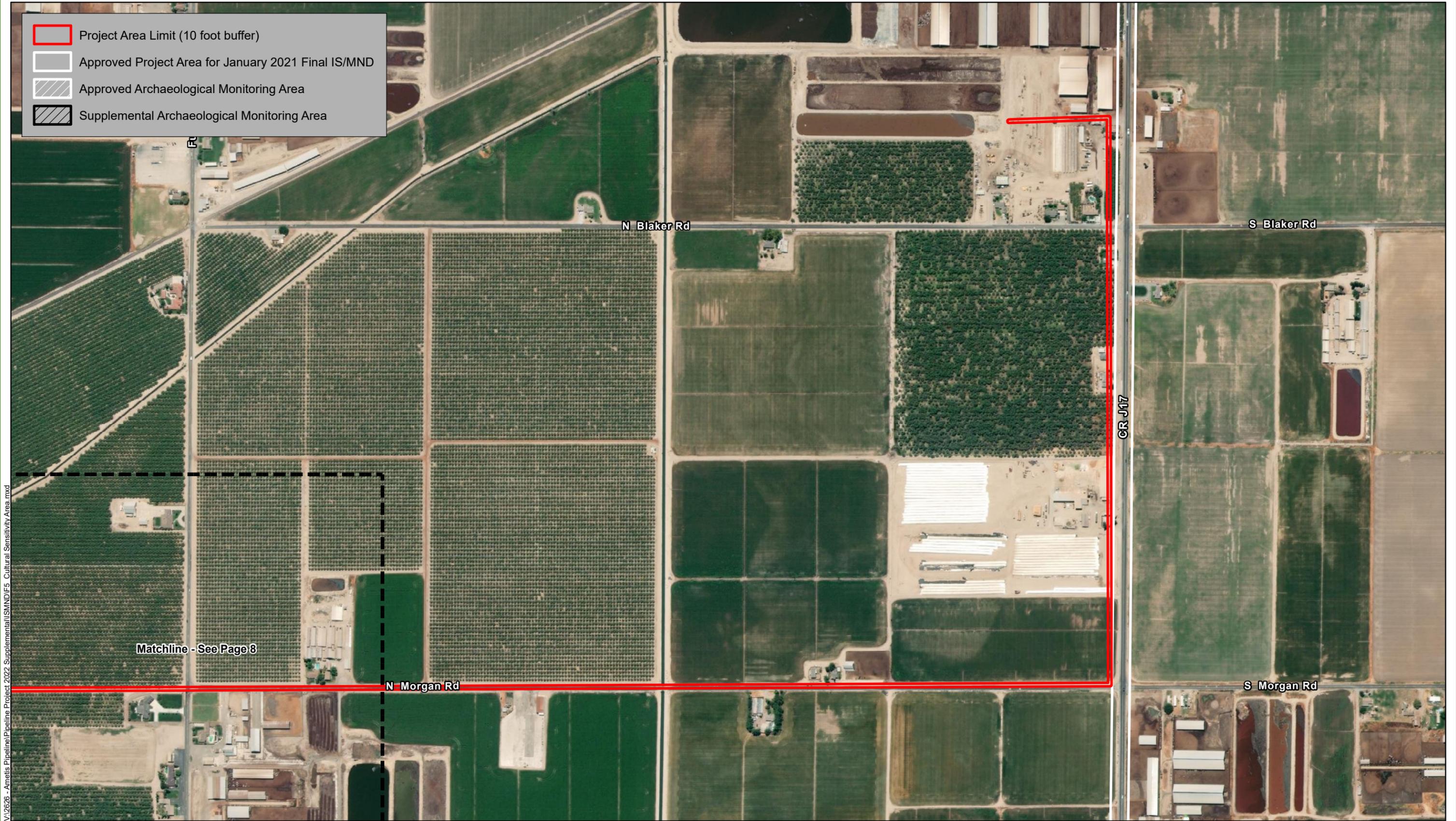
Source: ESRI Maps Online; Dokken Engineering 2/24/2023; Created By: kchen



**Figure 5**  
**Supplemental Project Area Limits**  
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 Aemetis Biogas Pipeline Project  
 Stanislaus and Merced Counties, California

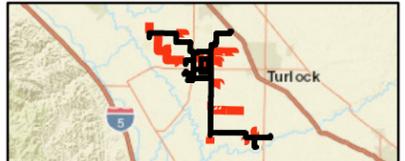


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**Figure 5**  
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Matchline - See Page 11

Central Ave

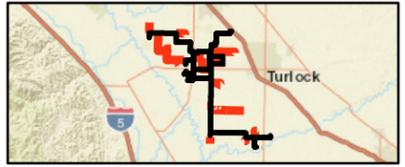
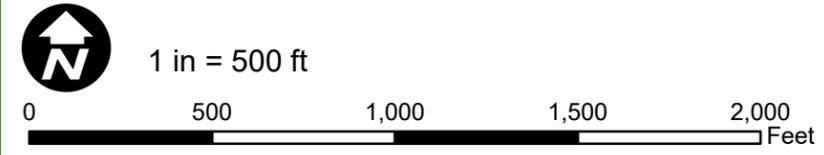
Moffett Rd

Fulkerth Rd

Mitchell Rd

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Source: ESRI Maps Online; Dokken Engineering 2/24/2023; Created By: kchen



**Figure 5**  
**Supplemental Project Area Limits**  
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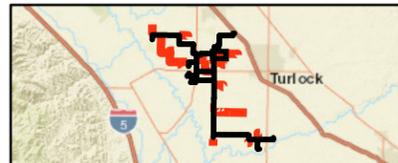
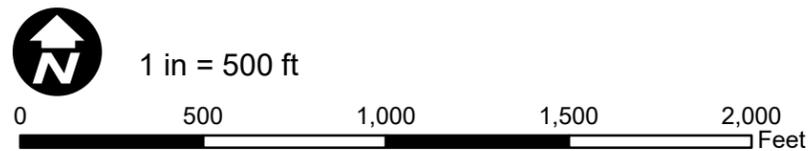


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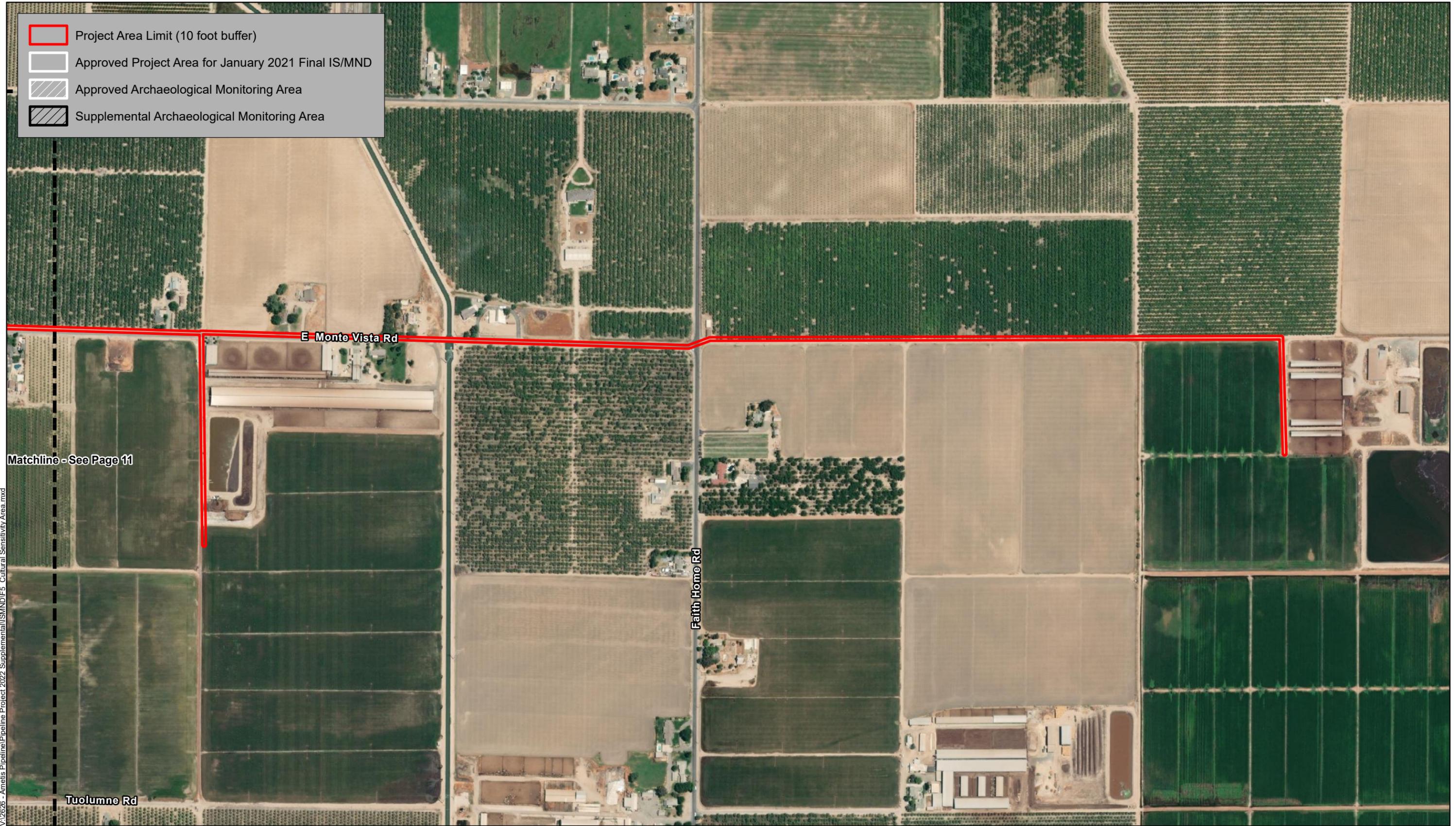
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**Figure 5**  
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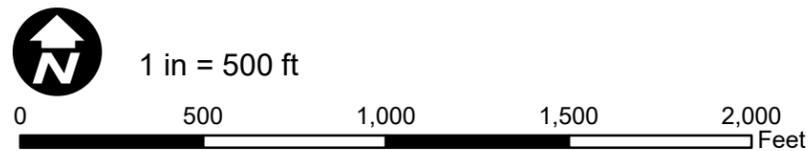


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**Figure 5**  
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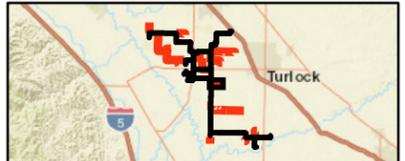
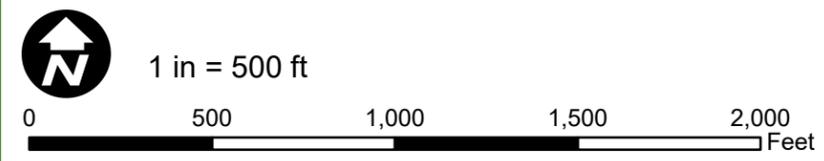


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**Figure 5**  
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 Aemetis Biogas Pipeline Project  
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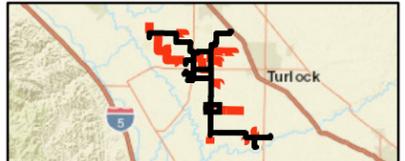
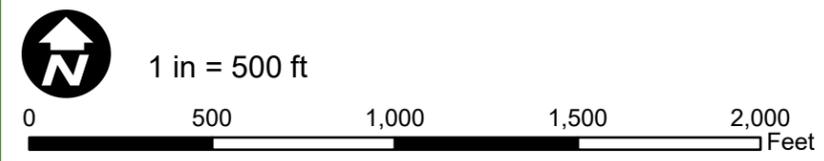
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Matchline - See Page 15

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**Figure 5**  
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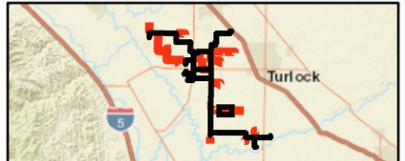
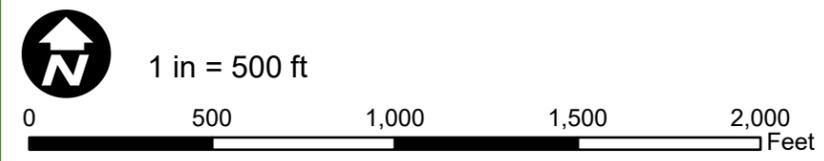


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**Figure 5**  
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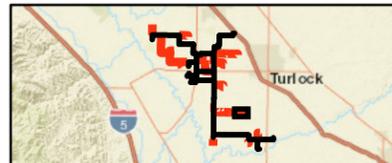
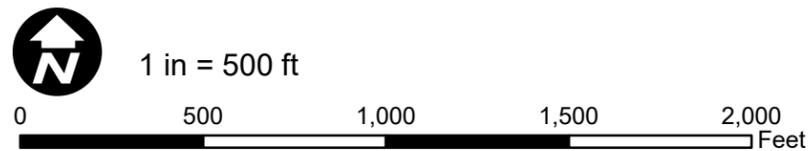


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**Figure 5**  
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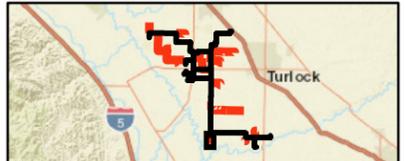
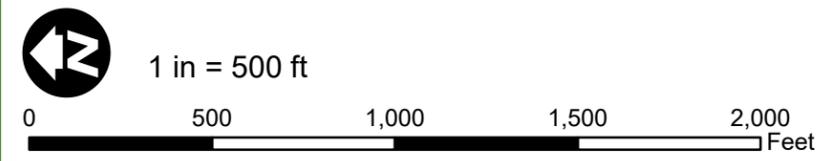


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**Figure 5**  
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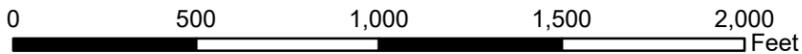


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Source: ESRI Maps Online; Dokken Engineering 2/24/2023; Created By: kchen



1 in = 500 ft



**Figure 5**  
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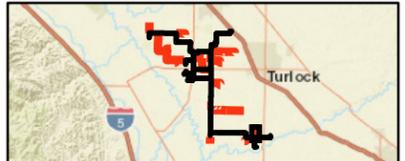
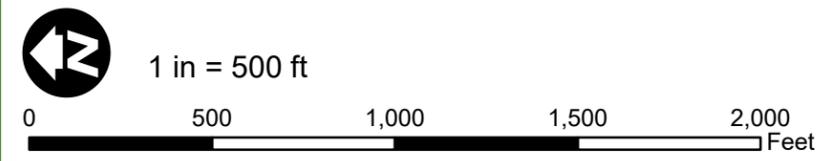


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**Figure 5**  
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**Impact Discussion:**

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

**No Impact.** Dokken Engineering obtained an updated record search (File #12358 multi and #12424N) for the revised Project area and a quarter-mile radius surrounding the Project area from the Central California Information Center (CCIC), California State University, Stanislaus, on November 3, 2022 and January 25, 2023. The search examined the Office of Historic Preservation (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and California Inventory of Historical Resources. Dokken Engineering staff reviewed historical literature and maps, Caltrans Bridge Inventory listings, General Land Office (GLO), a search of the Sacred Land File at the NAHC, and soil survey maps.

Based on the record search results obtained from the CCIC, two recorded cultural resources are located within the PAL; however, neither of these resources appear to meet the criteria for listing in the California Register of Historical Resources and National Register of Historic Places, per previous consultant evaluation. Furthermore, the project is a completely underground pipeline which does not have the potential to impact these resources. As there are no eligible cultural resources documented or encountered within the Project area, the Project would have **No Impact** on historical resources as defined in §15064.5.

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

**Less than Significant with Mitigation Incorporated.** In an effort to identify archaeological resources that might be affected by the proposed additional lateral pipeline extensions, an updated pedestrian survey, background research, and consultation with individuals and organizations were conducted. A record search conducted at the CCIC identified one cultural resource within a quarter-mile radius of the PAL and two built environment resources within the PAL. The two resources located within the PAL do not appear to meet the criteria for listing in the California Register of Historical Resources and National Register of Historic Places, per previous consultant evaluation. Furthermore, the project is a completely underground pipeline which does not have the potential to impact these resources. The pedestrian survey did not observe any cultural resources within the PAL.

At this time no further archaeological study is recommended unless Project plans change to include areas not previously included in the PAL or a greater amount of ground disturbance. With the findings of the pedestrian survey, record search, no impacts are anticipated for the Project related to archaeological resources. Monitoring is required in areas of high sensitivity for buried archaeological resources (**See Figure 5**). With any project, there is always the possibility that unknown cultural resources may be encountered during construction. With the implementation of Mitigation Measure **CR-1** and **CR-2** from the approved August 2021 Final IS/MND, potential impacts from the Project would continue to remain **Less than Significant with Mitigation Incorporated**.

- c) *Disturb any human remains, including those interred outside of dedicated cemeteries?*

**Less than Significant with Mitigation Incorporated.** With any project, there is always the possibility that unmarked burials may be unearthed during construction. This impact is considered potentially significant. Implementation of Mitigation Measure **CR-3** from the approved August 2021 Final IS/MND will ensure impacts remain **Less than Significant with Mitigation Incorporated**.

**Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **CR-1** through **CR-3** previously recommended from the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

## VI. Energy

Would the project:

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

### Impact Discussion:

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

**No Impact.** Although the project is indirectly related to energy generation associated with processing of pre-treated biogas into a useable fuel product, the proposed additional lateral pipeline extensions would simply result in a more efficient method of transmission of the biogas from private dairies to the Aemetis Keyes refinery facility. Construction of the proposed additional lateral pipeline extensions would not result in any potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Further, by constructing the additional pipeline extensions, this project would eliminate the need for truck transportation of collected biogas, substantially reducing the usage of petroleum-based vehicle fuel. As a result, No Impact associated with energy usage is anticipated for the proposed project.

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

**No Impact.** Operation of the proposed additional lateral pipeline extensions will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. There would be No Impact.

### Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

## VII. Geology and Soils

Would the project:

	Potentially Significant Impact	Less Significant Mitigation Incorporated	Than with Significant Impact	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### REGULATORY SETTING

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the CEQA.

### AFFECTED ENVIRONMENT

The project is located in the Great Valley Geomorphic Province and does not have any mapped or known faults within or near the project area.

### Impact Discussion:

- a) *Expose people or structures to 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?*

**No Impact.** The project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. The project is not located within a fault zone and the nearest fault is the San Joaquin fault, a Late Quaternary fault (movement during past 700,000 years) located approximately ten miles east of the Project.

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

**Less than Significant Impact.** The Natural Resource Conservation Service Web Soil Survey was used to identify soils within the revised project area. The area is a wide range of various sandy loam with very little to no slopes. A majority of the area consists of Dinuba sandy loam, slightly saline-alkali; Hilmar loamy sand; and Dinuba sandy loam, with 0 to 1 percent slopes. The project would involve ground disturbance in the form of trenching for installation of the additional lateral pipeline extensions along the entirety of the revised project limits, however, the total amount of disturbed soil will be limited to a small area at a time and excavated soils would be backfilled after the proposed additional pipeline extensions are constructed. These minor grading impacts are not expected to result in a substantial soil erosion or loss of topsoil and the impacts associated with excavation would be **Less than Significant**.

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

**No impact.** The project will not be located on soil that is known to be unstable or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. There has been no history of seismic activity in Stanislaus County that would lead to this type of risk affecting the Project after it has been constructed. There would be **No Impact**.

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

**No Impact.** Risk of soil instability to the presence of expansive soils would not be increased as a result of any of the additional lateral pipeline extensions. **No Impact** would occur.

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

**No Impact.** The proposed additional lateral pipeline extensions will not utilize septic tanks or any alternative waste water disposal systems. There would be **No Impact**.

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

**No Impact.** No findings of unique paleontological resources or sites or unique geological features were identified during the record search and pedestrian survey. The project would be constructed at depths between 3-15 feet below grade and would not be expected to impact paleontological resources should they be present in the project area.

**Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**VIII. Greenhouse Gas Emissions**

Would the project:

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

**REGULATORY SETTING**

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include CO<sub>2</sub>, CH<sub>4</sub>, NO<sub>x</sub>, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with greenhouse gas emissions and climate change at the state level. AB 1493 requires the CARB to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the EPA. The waiver was denied by the EPA in December 2007 and efforts to overturn the decision had been unsuccessful. See *California v. Environmental Protection Agency*, 9th Cir. Jul. 25, 2008, No. 08-70011. On January 26, 2009, it was announced that EPA would reconsider their decision regarding the denial of California’s waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. On June 30, 2009 EPA granted California the waiver. California is expected to enforce its standards for 2009 to 2011 and then look to the federal government to implement equivalent standards for 2012 to 2016. The granting of the waiver will also allow California to implement even stronger standards in the future. The state is expected to start developing new standards for the post-2016 model years later this year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California’s GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state’s Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. [EPA] et al., 549 U.S. 497 (2007)). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions. [1]

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)--in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's greenhouse gas emission standards for light-duty vehicles, which were jointly by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.

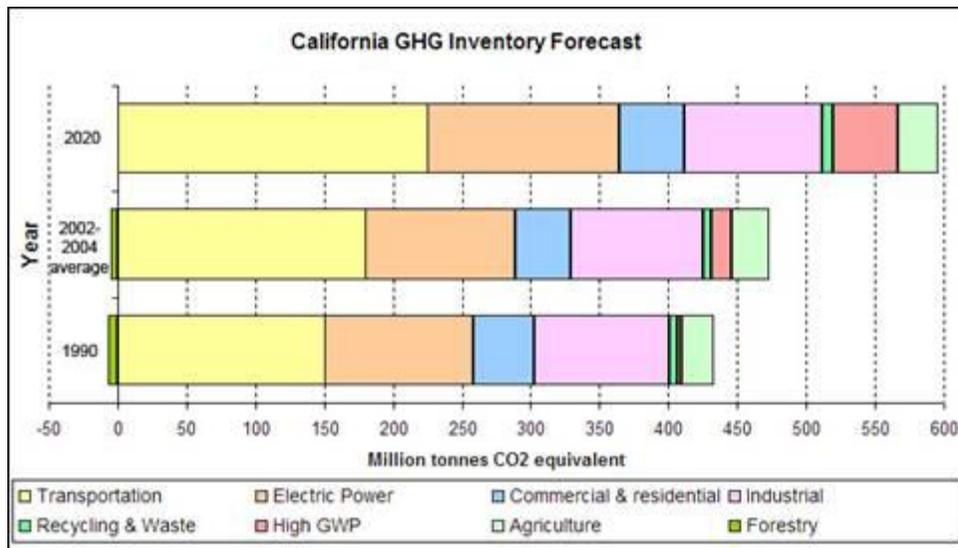


Figure 6: California Greenhouse Gas Inventory

According to Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global

[1] <http://www.epa.gov/climatechange/endangerment.html>

climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the Project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

As part of its supporting documentation for the Draft *Climate Change Scoping Plan*, CARB recently released an updated version of the GHG inventory for California (June 26, 2008). Figure 6 is a graph from that update that shows the total GHG emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.

### **Impact Discussion:**

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

**Less than Significant Impact.** Greenhouse gas (GHG) emissions can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds.

### **Long Term Emissions**

The proposed project would construct 21 additional lateral pipeline extensions to carry biogas from local dairies in Stanislaus and Merced County to the Aemetis Keyes refinery facility. Biogas would be collected at each private dairy through manure collection and processing, biogas collection using a covered anaerobic lagoon digester, and then gas pressurization for transmission in the proposed pipeline. The 21 additional pipeline extensions are accessory to existing dairy operations and are a permitted use within the General Agricultural or A-2 District (Stanislaus County Zoning Ordinance). Processing and refining biogas at the Aemetis facility does generate some long term emissions; however, this operation is not a part of the proposed project and has already been approved under separate environmental documentation and local agency permits authorized by Stanislaus County and the San Joaquin Valley Unified Air Pollution Control District. Prior CEQA and Permitting approvals relevant to the gas refining process are included in Appendix A. Furthermore, collection of biogas from dairies would substantially reduce carbon dioxide, nitrous oxide, hydrogen sulfide, and methane gasses emissions from traditional dairy operations. This collection process has been previously determined to result in a net reduction of emissions, specifically in terms of greenhouse gasses. As a result, no long term greenhouse gas emissions are expected to be generated as a result of construction of a biogas transmission pipeline as proposed in this project.

### **Construction Emissions**

All construction impacts to greenhouse gas emissions would be short-term and intermittent; therefore, impacts are anticipated to be less than significant. Temporary increase in greenhouse gasses would be generated by use of construction vehicles as well as minor increases in traffic congestion when construction requires lane closures on existing roadways.

Construction emissions were estimated using the latest Sacramento Metropolitan Air Quality Management District's Road Construction Model (<http://www.airquality.org/ceqa/>, Version 9.0.0, SMAQMD 2018). Construction-related emissions for the proposed project are anticipated to result in approximately 104 metric tons of CO<sub>2</sub> during construction. Neither of these changes are expected to result in any cumulatively considerable increases in greenhouse gas emissions.

Traffic congestion would be minimized through the use of a Traffic Management Plan outlined in Measure **TRA-1** from the 2021 IS/MND and discussed in Section XVII, Transportation.

The emission of GHGs during construction of the proposed Project would be negligible and therefore **Less Than Significant**.

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

**Less than Significant Impact.** The project involves construction of a gas pipeline. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emission. Impacts would be **Less Than Significant**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**IX. Hazards and Hazardous Materials**  
Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**REGULATORY SETTING**

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during Project construction.

**AFFECTED ENVIRONMENT**

EnviroStor indicates two cleanup sites within or near the project area. Both site types are military evaluation. The Bombing Target No. 8, Crows Landing located on Linwood Avenue in Turlock with a cleanup status of No Further Action as of 7/20/2010 and no contaminants were found. The Turlock Bomb Load Plant is east of the proposed pipeline between the project and the City of Turlock. Potential contaminants of concern include Explosive (UXO, MEC). The cleanup status was No Further Action as of 1/23/2015.

**Impact Discussion:**

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

**Less than Significant Impact with Mitigation Incorporated.** The proposed additional pipeline extensions could present a new significant hazard to the public or the environment as biogas is considered a hazardous material and its transport through the pipeline could result in exposure to the public in the event of an accident or emergency. Consistent with requirements discussed in the approved August 2021 Final IS/MND, tracer wires along with detectable metal tapes will be installed to identify the location of the buried pipeline in the ground. Pipe markers with important information pertaining to the biogas pipeline/system will also be in place at specific locations along the alignment of the Project. An emergency management plan will be created and provided to the appropriate public services and agencies.

The pipeline itself would be one of the safest parts of the facility as it would be constructed underground protecting it from accidental damage such as a vehicle collision or from deterioration due to weather and sun exposure. Potentially greater risk from the storage and processing of biogas would occur at the Aemetis Keyes refinery facility; however, development of a biogas processing facility is covered under prior CEQA and local agency approvals (see Appendix A). In addition to following all local and state requirement and best management practices for construction of this pipeline, Measures **HAZ-1** and **HAZ-2** previously identified in the approved August 2021 Final IS/MND will provide additional safety measures to minimize and mitigate potential risk associated with construction and operation of the Project. Implementation of the measures would mitigate potentially significant impacts to **Less than Significant Impact with Mitigation Incorporated.**

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

**Less than Significant Impact with Mitigation Incorporated.** The project would involve the use of heavy equipment for grading, filling, and the hauling of materials. Such equipment may require the use of common materials that have hazardous properties, e.g., petroleum-based fuels. These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. All refueling of construction vehicles and equipment would occur within designated areas and the use of hazardous materials within the project area would be temporary.

With any project that involves excavation, there is a possibility of encountering unknown hazardous contamination during construction. With the implementation measure **HAZ-3**, as previously recommended in the approved August 2021 Final IS/MND, Project impacts from upset or accident conditions will be reduced to a **Less than Significant Impact with Mitigation Incorporated.**

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

**Less than Significant Impact with Mitigation Incorporated.** None of the proposed additional pipeline extensions would occur within ¼ mile of a local school. With inclusion of measures **HAZ-1** through **HAZ-4** from the approved August 2021 Final IS/MND, the potential for impacts associated with the additional biogas pipeline extensions would remain **Less than Significant Impact with Mitigation Incorporated.**

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

**Less than Significant Impact.** None of the proposed additional pipeline extensions are on a site included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which is also known as the Cortese List. Impacts would remain **Less than Significant**.

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

**No Impact.** None of the proposed additional pipeline extensions would result in a safety hazard for people residing or working in the project area as the pipelines do not run within the vicinity of an airport land use plan or within two miles of a public airport or public use airport. There would be **No Impact**.

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

**No Impact.** Due to the location and lack of residential density in the project area, there would be **No Impact**. There would be no effect on emergency response or evacuation.

- g) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**No Impact.** None of the proposed additional pipeline extensions would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no wildlands are adjacent to or within the project area. There would be **No Impact**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **HAZ-1** through **HAZ-5** previously recommended from the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

**X. Hydrology and Water Quality**  
Would the project:

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

**REGULATORY SETTING**

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (Corps) to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the Statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB's Statewide General Construction Permit. All construction projects over 1 acre require a SWPPP to be prepared and implemented during construction. Caltrans activities less than 1 acre require a Water Pollution Control Program.

Stanislaus County has a Storm Water Management Program (Program), adopted in April of 2003, to meet the terms of the General Permit, regulating storm water discharges from small MS4s. The Program has six control measures, established by the SWRCB, to regulate the discharge of storm water. The control measures include, public education and outreach, public involvement, discharge detection and elimination program, construction site storm water runoff control, post-construction storm water management and pollution prevention/good housekeeping for municipal operations. The County is currently working on developing a Storm Water Resource Plan, in accordance with Senate Bill 985, focused on identifying and prioritizing local, multi-benefit stormwater and dry weather capture projects.

## **AFFECTED ENVIRONMENT**

### **Hydrology**

The Project site falls within Central Valley, Region 5, of the RWQCB. The San Joaquin River is the largest freshwater stream within the San Joaquin Valley, providing water to agricultural operations and habitat for many aquatic species. The Project is within the Middle San Joaquin-Lower Merced-Lower Stanislaus watershed (USGS 2019). The San Joaquin River is approximately 300-miles long and surface waters within the Project area are 303(d) listed for Alpha-BHC, Conductivity, DDE, DDT, Group A Pesticides, Mercury, Specific Conductivity, Temperature, Total Dissolved Solids, and Toxicity according to the most recent data from the EPA (EPA 2016b). Causes of impairments to the San Joaquin River, from the Merced River to the Tuolumne River, include pesticides, mercury, salinity, total dissolved solids, chlorides and sulfates.

### **Groundwater**

The Project is located within the San Joaquin Valley groundwater basin and the San Joaquin Valley Delta-Mendota sub-basin. The San Joaquin Valley groundwater basin contains 9 sub-basins and lies within the San Joaquin River and Tulare Lake Hydrologic Regions covering approximately 8.88 million acres (Central Valley RWCQB 2006). Groundwater in this region is primarily used for agricultural and urban entities and accounts for approximately 48% of the groundwater used in California.

The Delta-Mendota sub-basin covers approximately 747,000 acres and the shallowest water-bearing zone is approximately 25 feet deep, located in the lower section of the Tulare Formation. Groundwater samples collected in this sub-basin from 1994 through 2000 from water supply wells indicate the presence of pesticides at concentrations greater than the applicable maximum contaminant level determined by the EPA. Furthermore, the inorganic constituents found within the Delta-Mendota sub-basin range from approximately 210 to 1,750 mg/L. In certain areas within the sub-basin these inorganic constituents, including iron, fluoride, nitrate and boron, impair the beneficial uses of the groundwater. The proposed Project does not anticipate impacting or altering any groundwater basins.

### **Municipal Supply**

The San Joaquin River is considered a municipal and domestic water supply suitable or potentially suitable for drinking water. The Sacramento-San Joaquin Delta is one of the largest surface water delivery projects in California. The Delta provides a portion of the drinking water for 25 million Californians and provides the agricultural industry with irrigation for 4.5 million acres (Water Education Foundation 2019). The Project will not impact any water reservoirs or water recharge facilities.

### **Flooding**

The Project area is within FEMA Zone X, designated as a low-risk area with a 0.2% annual chance of flooding.

#### **Impact Discussion:**

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

**Less than Significant Impact with Mitigation Incorporated.** Construction of the proposed additional pipeline extensions will disturb greater than one acre, therefore a Construction Storm Water General Permit is required, consistent with Construction General Permit Order No. 2009-009-DWQ, issued by the SWRCB to address storm water runoff. The permit will address clearing, grading, grubbing, and disturbances to the ground, such as stockpiling, or excavation. This permit will also require that a SWPPP be prepared and implemented throughout construction with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. Mitigation Measures **BIO-1**, and **BIO-2** from the approved August 2021 Final IS/MND would continue to be required to ensure the Project grading will conform to SWRCB standards. As no new significant impacts requiring additional mitigation measures would occur, project impacts will remain **Less than Significant Impact with Mitigation Incorporated**.

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

**No Impact.** Construction of the proposed additional pipeline extensions would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. Therefore, there would be **No Impact** related to depletion of groundwater supplies or interference with groundwater recharge.

- 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?*

**No Impact.** As the Project proposes to construct new underground pipeline utility extensions it would not result in changes to the existing impermeable surfaces within the Project area. The Project will not be making any alterations to the existing drainage patterns nor will it result in erosion or siltation on or off site. As there is no change in impervious surfaces, there will be no change in the amount of surface runoff that would result in flooding or exceed capacity of stormwater system. Therefore, **No Impact** would occur.

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

**No Impact.** The proposed additional pipeline extensions would not create a potential situation for inundation by seiche, tsunami, or mudflow. The Project site is located in a dominantly flat landscape, is not located in proximity to a large body of water, and is not near the coastal waters; therefore, **No Impact** would occur.

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

**Less than Significant Impact with Mitigation Incorporated.** The Project may have short-term impacts associated with sediment and runoff during grading and construction. Material excavated during construction would be kept in piles of staged soil, and backfilled or re-graded and distributed within the Project site. As noted above, the Project is subject to NPDES regulations since these improvements will exceed one acre. Compliance with existing regulations and implementation of BMPs would reduce potentially significant impacts associated erosion or siltation on- or offsite to levels less than significant. Mitigation Measures **BIO-1**, and **BIO-2** previously recommended from the approved August 2021 Final IS/MND would continue to be required to ensure that Project impacts to water quality would be **Less than Significant Impact with Mitigation Incorporated**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **BIO-1** and **BIO-2** previously recommended in the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

**XI. Land Use and Planning**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**AFFECTED ENVIRONMENT**

The biogas pipeline would be 26.6 miles in length running through unincorporated portions of Stanislaus and Merced Counties. Agriculture is the leading industry in Stanislaus County and this project would support infrastructure that meets the goals and objectives defined in the Agricultural Element of the Stanislaus County General Plan to strengthen the agricultural sector and conserve agricultural lands for agricultural uses. The pipeline and the proposed additional pipeline extensions are accessory to existing dairy operations and is a permitted use within the General Agricultural or A-2 District (Stanislaus County Zoning Ordinance). Biogas would be collected at each private dairy through manure collection and processing using a covered anaerobic lagoon digester, and then gas pressurization for transmission in the proposed pipeline. Processing and refining of the biogas will occur at the Aemetis facility in Keyes.

**Impact Discussion:**

a) *Physically divide an established community?*

**No Impact.** The proposed additional pipeline extensions would be constructed underground and within existing road right-of-way, therefore, it would not divide an established community. There would be **No Impact**.

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

**No Impact.** The proposed additional pipeline extensions would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation for the purpose of avoiding or mitigation an environmental effect. Any expansion of herd or operation of a digester that will serve multiple dairies will be subject to land use approval through the Planning Department and other State agencies as applicable. Therefore, there would be **No Impact**.

**Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

## XII. Mineral Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **AFFECTED ENVIRONMENT**

According to the Stanislaus County General Plan (2015), which relies upon the State Division of Mines and Geology report, *Mineral Land Classification of Stanislaus County, California* (Special Report 173), mineral commodities mined in the past in Stanislaus County include construction aggregate, industrial minerals, and metallic minerals. Currently, sand and gravel deposits constitute the only commercially significant extractive mineral resource in the region. The 2030 Merced County General Plan (2013) states that the County is rich in nonfuel mineral and soil resources; however, there are very few mines in operation today and currently sand and gravel is also the primary mineral resource in the area. The Project will not affect mineral resources or the extraction of those resources in either County.

### **Impact Discussion:**

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

**No Impact.** The proposed additional pipeline extensions would not affect sand and gravel or any other known mineral resources. There would be **No Impact**.

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

**No Impact.** The proposed additional pipeline extensions would not go through lands that are listed as a locally important mineral resource recovery site in Stanislaus or Merced Counties. There would be **No Impact**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**XIII. Noise**

Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**AFFECTED ENVIRONMENT**

The Project area is within a rural area of Stanislaus County and Merced County. Background noise levels are influenced by local roads and the existing surrounding agricultural areas. Vehicle travel remains the dominant noise source at the Project site. The existing noise level ranges from 40 to 50 dB. As the Project would construct an underground pipeline, no permanent changes in noise generation are expected. The only source of noise associated with the project would be generated by construction vehicles and the discussions below only relate to construction noise.

**Impact Discussion:**

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

**Less Than Significant Impact.** The *Stanislaus County General Plan, Noise Element* (Stanislaus County, 2015) has established Goals and Policies relating to evaluating noise impacts due to projects. The overall noise goal for the County is to limit the exposure of the community to excessive noise levels. The *Noise Element* establishes noise standards for maximum allowable noise exposure due to transportation sources and performance standards for fixed noise sources. Transportation noise standards (60 dBA L<sub>dn</sub>/CNEL) are applied at the outdoor activity area of noise sensitive land use (residential) where it is not possible to reduce noise in outdoor activity areas to 60 dB L<sub>dn</sub>/CNEL or less using a practical application of the best-available noise reduction measures.

Fixed noise sources are not to exceed 55 dBA L<sub>eq</sub> and 75 dBA L<sub>max</sub> during daytime hours (7:00 A.M. to 10:00 P.M.) and 45 dBA L<sub>eq</sub> and 65 dBA L<sub>max</sub> during nighttime hours (10:00 P.M. to 7:00 A.M.) as measured at the property line of noise sensitive land uses.

During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment is expected to generate noise levels ranging from 70 to 90 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

In addition, the County's municipal code (Chapter 10.46) states exterior noise level standards and allowances. The Project is anticipated to comply with all local and regional regulations.

While construction activities may result in some nuisance related noise for local residences, construction noise would be minimized through implementation of the local County noise ordinance, Stanislaus County Noise Control Ordinance (Chapter 10.46). The County's Municipal Code specifically prohibits the operation of any construction equipment that would cause a greater sound level than 75 decibels at or beyond the property line of any property between the hours of 7:00 p.m. to 7 a.m. The Project will have **Less Than Significant Impact**, and the implementation of measure **NOI-1** from the approved August 2021 Final IS/MND would minimize potential construction noise impacts even further.

*b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

**Less Than Significant Impact.** The Project area is within a rural area of Stanislaus County with a limited number of rural residences within the Project vicinity. No significant vibration causing construction activities (such as blasting or pile driving) will be necessary for this project. As a result, the Project will have **Less Than Significant** Impacts. Additionally, the implementation of Mitigation Measure **NOI-1** from the approved August 2021 Final IS/MND would further reduce vibration and noise impacts.

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

**No Impact.** The Project is not located within or adjacent to an airport land use plan, or where such a plan has not been adopted, or within two miles of a public airport or public use airport; therefore, no impact would occur, and no mitigation is required. There would be **No Impact**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measure **NOI-1** previously recommended in the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

#### XIV. Population and Housing

Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### REGULATORY SETTING

CEQA also requires the analysis of a project’s potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents “...discuss the ways in which the Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment...”

#### Impact Discussion:

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

**No Impact.** The proposed additional pipeline extensions would have **No Impact** related to substantial population growth in rural Stanislaus or Merced Counties since the Project does not propose new homes.

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

**No Impact.** The proposed additional pipeline extensions would not displace any existing housing, nor would it necessitate the construction of replacement housing. There would be **No Impact**.

#### Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**XV. Public Services**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**AFFECTED ENVIRONMENT**

The nearest fire stations include the Mountain View Fire Department located at 9633 Crows Landing Road and the Keyes Fire Station located at 5627 7<sup>th</sup> Street. The nearest law enforcement office is the Stanislaus County Sheriff Department located at 250 Hackett Road. The nearest schools include Keyes Elementary School located at 4400 Maud Avenue, Chatom Elementary School located at 7221 Clayton Road, and Central Valley High School located at 4033 Central Avenue. There are no public parks within 2 miles of the project area.

**Impact 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 service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, and/or other public facilities?*

**No Impact.** The Project is located in rural Stanislaus County, which consists predominantly of agricultural lands. The Project would construct additional pipeline extensions on public roadway right-of-way and private property associated with the dairy facilities. There would be no increase to the usage of public services such as fire protection, police protection, schools, or parks. There would be **No Impact** to public services.

**Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**XVI. Recreation**

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

**AFFECTED ENVIRONMENT**

The parks in the vicinity are located in Turlock, Patterson, and Hilmar. The proposed additional pipeline extensions would not run through or in close proximity to existing parks or recreation areas.

**Impact 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 additional pipeline extensions would not increase the use of any neighborhood or regional parks or other recreational facilities. There would be **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 additional pipeline extensions would not result in the use of existing parks or recreational facilities, nor would it require construction or expansion of new recreational facilities. There would be **No Impact**.

**Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond what was previously recommended in the approved August 2021 Final IS/MND would be necessary.

## XVII. Transportation

Would the project:

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

### **AFFECTED ENVIRONMENT**

According to Stanislaus County General Plan (2015), when measuring levels-of-service (LOS), Stanislaus County uses the criteria established in the *Highway Capacity Manual* published and updated by the Transportation Research Board. LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, freedom to maneuver, volume, density, and capacity. Six levels are defined, from LOS A, as the best operating conditions, to LOS F, or the worst operating conditions. LOS E represents “at-capacity” operations. When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

For roadways within Stanislaus County, the Stanislaus County General Plan (2015) states the level-of-service criteria as, “The County shall maintain LOS C or better for all County roadways and intersections, except, within the sphere of influence of a city that has adopted a lower level of service standard, the City standard shall apply. The County may adopt either a higher or lower level of service standard for roadways and intersections within urban areas such as Community Plan areas, but in no case shall the adopted LOS fall below LOS D.”

### **Impact Discussion:**

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

**No Impact.** As the Project would construct additional pipeline extensions, there would be no permanent changes to the existing circulation system including transit, roadway, bicycle, and pedestrian facilities. The post project condition would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Therefore, there would be **No Impact**.

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

**No Impact.** CEQA Guidelines section 15064.3 describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, “vehicle miles traveled” refers to the amount and distance of automobile travel attributable to a project. Subdivision (b) defines the criteria for analyzing transportation impacts. However, as the Project is an underground utility,

the Project will have no change on the vehicle miles traveled. Per section 15064.3 (b)(2), projects that have no impact on vehicle miles traveled are presumed to cause a less than significant transportation impact, and as there will be no changes in the roadway, the Project would be consistent with 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)?*

**Less than Significant Impact with Mitigation Incorporated.** As the Project would construct an underground utility facility, there would be no changes to the permanent roadway conditions. The Project would not substantially increase hazards due to a permanent design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); therefore, No Impact would occur, and no mitigation is required.

Construction of the proposed additional pipeline extensions may require temporary closure of travel lanes on existing County maintained roadways. Temporary lane closures may result in additional congestion or unsafe traffic conditions if they are not effectively managed. In order to minimize traffic impacts during construction, a Traffic Management Plan will be prepared and submitted to Stanislaus County for review and approval prior to starting work. The Traffic Management Plan will outline where lane closures are required and how they will be effectively managed during construction activities. Lane closures are expected to require flaggers directing single-lane two-way traffic on local County Roads. Measure **TRA-1** from the previous August 2021 Final IS/MND outlines the need for a Traffic Management Plan and would continue to ensure that traffic impacts during construction would remain **Less than Significant Impact with Mitigation Incorporated**.

- d) *Result in inadequate emergency access?*

**Less Than Significant.** The Project would not change the existing roadway geometry and would not change emergency access in the permanent condition. During construction lane closures may result in minor increase in congestion but would not be expected to substantially limit emergency access as a single lane will remain open and most roadways in the project area have large unpaved shoulders that emergency vehicles could use to bypass the area where a lane is closed. The Traffic Management Plan required in measure **TRA-1** from the previous August 2021 Final IS/MND would further minimize the potential for impacts to emergency access during construction, but project impacts are expected to be Less than Significant.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measure **TRA-1** that was previously recommended in the approved August 2021 Final IS/MND would be necessary.

**XVIII. Tribal Cultural Resources**

Would the project:

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- |     |   |                          |                                     |                          |                          |
|-----|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| i.  | Listed or eligible for listing in the California Register of Historical Resources, or in local register of historical resources as defined in Public Resources Code section 5020.1(k), or   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. | A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**REGULATORY SETTING**

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a “project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment” (PRC § 21084.2).

To help determine whether a project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. The consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the NAHC shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the project area. If the tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe’s request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the

Public Records act. TCRs are also exempt from disclosure. The term “tribal cultural resource” refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California Public Resources Code (PRC) Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

### **AFFECTED ENVIRONMENT**

A Project Area Limits (PAL) was established as the area of direct and indirect effects which encompasses an approximately 321-acre area. The PAL extends horizontally to the edge of roadway right of way to allow for construction of the pipeline and construction access along the roadway portions of the Project. The PAL also includes segments of 20 foot wide linear connections onto private properties. The PAL is consistent with the project area which is shown in Figure 3. Vertical disturbance will be approximately 5 feet deep for pipeline construction and 20 feet deep for directional drilling of the pipeline below existing facilities. Efforts to identify potential cultural resources in the PAL included background research, a search of previously recorded archaeological site records and cultural resource identification reports on file at the California Historical Resources Information System Central California Information Center (CCIC), and a pedestrian ground surface survey.

Archaeologist Michelle Campbell conducted an archaeological field survey of the PAL on January 31, 2023. The PAL was surveyed using transects oriented parallel with each of the roadways in the Project area. Periodic boot scrapes were used in areas of dense vegetation to expose the ground surface. All Project area conditions, and cultural resources were fully recorded in the field notes. Exposed subsurface cuts, such as ditches, roadway cuts, and bank cuts were visually examined for the presence of archaeological resources, soil color change, and/or staining that could indicate past human activity or buried deposits. The pedestrian survey did not reveal any archaeological resources within the PAL.

The pedestrian survey confirmed that the terrain has been subjected to intense modification, mostly through years of agricultural activities and development associated with agriculture as well as roadway maintenance. Due to the minimal depth of ground disturbance associated with this project and the previously disturbed nature of the PAL, the potential is low for discovery of unknown subsurface archaeological resources during construction. Portions of the Project, however, pass through areas of high sensitivity for buried archaeological resources, as based on geomorphological studies of the Central Valley. Due to the data available for sensitivity around the Project area, portions of the Project are considered to have high potential for discovery of unknown subsurface archaeological resources during construction and therefore will require archaeological monitoring at these locations. Figure 5 provides the locations of high archaeological sensitivity.

Dokken Engineering obtained an updated record search (File #12358 multi and #12424N) for the revised Project area and a quarter-mile radius surrounding the Project area from the Central California Information Center (CCIC), California State University, Stanislaus, on November 3,

2022 and January 25, 2023. The search examined the Office of Historic Preservation (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and California Inventory of Historical Resources. Dokken Engineering staff reviewed historical literature and maps, Caltrans Bridge Inventory listings, General Land Office (GLO), a search of the Sacred Land File at the NAHC, and soil survey maps. No cultural resources have been documented within the PAL.

The following tribes were contacted via letter on February 9th, 2022 for AB 52 consultation:

- Valentin Lopez, Chairperson, Amah Mutsun Tribal Band
- Debra Grimes, Calaveras Band of Mi-Wuk Indians
- Gloria Grimes, Chairperson, Calaveras Band of Mi-Wuk Indians
- Silvia Burley, California Valley Miwok Tribe
- Robert Ledger, Chairperson, Dumna Wo-Wah Tribal Government
- Katherine Perez, Chairperson, North Valley Yokuts Tribe
- Timothy Perez, North Valley Yokuts Tribe
- William Leonard, Chairperson, Southern Sierra Miwuk Nation
- Neil Peyron, Chairperson, Tule River Indian Tribe
- Kerri Vera, Tule River Indian Tribe
- Joey Garfield, Tule River Indian Tribe
- Kevin Day, Chairperson, Tuolumne Band of Me-Wuk Indians
- Stanley Cox, Tuolumne Band of Me-Wuk Indians

The letters provided a summary of the Project and requested information regarding comments or concerns the Native American community might have about the Project and whether any traditional cultural properties, TCRs, or other resources of significance would be affected by implementation of the project. The letters also stated that if the tribes would like to consult under AB 52, they would have to respond within 30 days, pursuant to PRC 21080.3.1(d). To date, no Native American tribe or individuals have responded with requests to be notified by the County for AB 52 consultation. See **Appendix E** for complete Native American Consultation Log.

### **Impact Discussion:**

- 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)*

**Less than Significant Impact with Mitigation Incorporated.** The Project is not anticipated to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the California Register of Historical Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k). No cultural resources were identified during the visual survey. A record search conducted at the CCIC identified one cultural resource within a quarter-mile radius of the PAL and two cultural resources within the PAL. The two resources located within the PAL have been determined ineligible under the California Register of Historical Resources and National Register of Historic Places. No impacts are anticipated for the Project related to archaeological resource; however, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. This impact would be considered potentially significant. Implementation of Mitigation Measure **CR-1** through **CR-3** from the previous August 2021 Final IS/MND would continue to ensure impacts remain **Less than Significant Impact with Mitigation Incorporated**.

- b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public*

*Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

**Less than Significant Impact with Mitigation Incorporated.** The Project is not anticipated to cause a substantial adverse change to a TCR pursuant to criteria set forth in subdivision (c) of Public Resources Cod Section 5024.1. No cultural resources were identified during the visual survey. A record search conducted at the CCIC identified one cultural resource within a quarter-mile radius of the PAL and two cultural resources within the PAL. The two resources located within the PAL have been determined ineligible under the California Register of Historical Resources and National Register of Historic Places. No impacts are anticipated for the Project related to archaeological resource; however, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. Implementation of Mitigation Measure **CR-1** through **CR-3** from the previous August 2021 Final IS/MND would continue to ensure impacts remain **Less than Significant Impact with Mitigation Incorporated**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **CR-1** through **CR-3** that were previously recommended in the approved August 2021 Final IS/MND would be necessary.

## XIX. Utilities and Service Systems

Would the project:

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

### Impact Discussion:

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

**Less than Significant.** The Project would construct additional pipeline extensions to provide transmission of pre-treated biogas from local private dairies to the Aemetis Keyes refinery. This new utility would eliminate the need for transporting gas using trucks and would provide a long term, safe, and reliable gas transmission solution in the project area. Construction of the biogas pipeline extensions would result in impacts which are discussed throughout this Supplemental Initial Study and all impacts have been reduced to a less than significant level through inclusion of appropriate avoidance, minimization, and mitigation measures.

Throughout the project area, there are numerous other underground utility systems. The project is intended to be designed such that it would completely avoid impacts to those existing utility facilities. Avoidance can be achieved by locating it either adjacent to existing facilities (laterally) or by locating the new pipeline at a depth where existing facilities would be avoided. Pending final design of the project; there is a potential that complete avoidance of existing facilities would not be feasible and minor relocations would be necessary. If such relocations are necessary; they would be proposed and implemented in coordination with the utility owner, as well as with the local agency with jurisdiction over the road right-of-way (Stanislaus County, Merced County, or the City of Modesto). Should utility systems require relocation, they would be relocated within the project area provided in this Supplemental Initial Study and would be designed to ensure that no new environmental impacts not already discussed in this Initial Study would occur.

The Project would not include the construction of any uses that would increase demand on wastewater, stormwater facilities, electric power, natural gas, or telecommunications facilities. No

new utilities would be required other than the biogas pipeline that is proposed. Therefore, impacts would be **Less than Significant**.

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

**No Impact.** The proposed additional pipeline extensions would not result in the need for new or expanded water supplies. **No Impact** would result from development of the Project.

- 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?*

**No Impact.** The Project would construct additional pipeline extensions that would not involve the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of Project development; therefore, the Project would not result in the need for new or expanded wastewater facilities. **No Impact** would occur.

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

**Less than Significant Impact.** No solid waste is expected to be generated through use and operations of the proposed additional pipeline extensions. Solid waste may be generated during construction such as broken up asphalt; however, the amount will not substantially impact landfill capacities. This would not affect landfill capacity because the amounts would not be substantial and would occur for a short period during the construction period. Impacts would be **Less than Significant**.

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

**Less than Significant Impact.** The Project would comply with federal, state, and local statutes and regulations related to solid waste; therefore, impacts associated with compliance with federal, state, and local statutes and regulations related to solid waste would be considered Less Than Significant.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **UTIL-1** that was previously recommended in the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

**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 Incorporated Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**AFFECTED ENVIRONMENT**

Cal Fire has determined that Stanislaus and Merced Counties have no Very High Fire Hazard Severity Zones.

**Impact Discussion:**

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

**No Impact.** The project would install additional pipeline extensions connecting to numerous dairies and would not impair an adopted emergency response plan or emergency evacuation plan. An emergency management plan pertaining to the Project in the event of an incident or leak will be created and provided to the appropriate public services and agencies (as discussed in Measure **HAZ-5** in the previous August 2021 Final IS/MND).

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

**No Impact.** There is very little to no slope in the project area and will not expose occupants to pollutant concentrations from a wildfire. There would be **No Impact**.

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?*

**Less than Significant Impact with Mitigation Incorporated.** The proposed pipeline extensions would provide transmission of a potentially flammable and explosive methane and CO2 based biogas. This utility does increase risk of a fire starting in the event of an accident which compromises the pipeline integrity, or through integrity degradation over a long period of time. Implementation of measures **HAZ-1**; **HAZ-2**; and **HAZ-5** from the previous August 2021 Final

IS/MND would continue to ensure that construction and operation of this pipeline would remain **Less than Significant Impact with Mitigation Incorporated**.

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

**No Impact.** The project would not expose people or structures to downslope or downstream flooding or landslides as the proposed additional pipeline extensions would not change any of the existing slopes or grades adjacent to the project. There would be **No Impact**.

### **Avoidance, Minimization, and/or Mitigation Measures**

No avoidance, minimization, or mitigation measures beyond measures **HAZ-1**, **HAZ-2**, and **HAZ-5** that was previously recommended in the approved August 2021 Final IS/MND (See Appendix E) would be necessary.

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

**Impact 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, 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?*

**Less than Significant Impact with Mitigation Incorporated.** Implementation of the Project would have the potential to impact the quality of the existing environment. Potentially significant impacts have been identified related to Biological Resources (2.4), Cultural Resources (Section 2.5), Hazards and Hazardous Materials (Section 2.9), and Tribal Cultural Resources (Section 2.18). The project has the potential to have impacts to wildlife species including Swainson’s Hawk; however, mitigation measures previously identified in the approved August 2021 Final IS/MND would be sufficient to reduce the level of all new Project-related impacts to less than significant levels. Therefore, impacts are considered **Less than Significant Impact with Mitigation Incorporated**.

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

**Less than Significant Impact with Mitigation Incorporated.** All potential significant impacts discussed in this Initial Study can be reduced to a less than significant level with avoidance, minimization and mitigation measures identified in the previous August 2021 Final IS/MND. Past projects in the region have been cleared through the CEQA process and potentially significant impacts from those previous projects would have already been addressed through their own environmental review process. No significant cumulative effects have been identified with incorporation of the measures provided in this Initial Study. Incorporation of these measures would ensure that project level impacts to not contribute to cumulatively significant impacts on a

regional level. Therefore, impacts are considered **Less than Significant Impact with Mitigation Incorporated**.

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

**Less than Significant Impact with Mitigation Incorporated.** The Project would not cause significant adverse effects to human beings, either directly or indirectly. Potential impacts have been identified related to Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Traffic and Transportation, Tribal Cultural Resources, and Wildfire. Mitigation measures from the previous August 2021 Final IS/MND have been identified related to individual resource-specific impacts. Mitigation measures would reduce the level of all Project-related impacts to less than significant levels. As no new significant impacts requiring mitigation would occur, impacts are considered **Less than Significant Impact with Mitigation Incorporated**.

### **Avoidance, Minimization, and/or Mitigation Measures**

Please see Appendix E for related measures.

## List of Preparers

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The following is a list of persons who participated in the Initial Study or prepared technical studies for this project.

### **Aemetis Biogas LLC**

Robbie Macias, Vice President

### **Stanislaus County**

Chris Brady, Deputy Director of Public Works

Kristin Doud, Principal Planner, Planning Department

### **Dokken Engineering**

Amy Bakker, Senior Environmental Planner. B.A. in Environmental Studies; 12 years environmental planning experience. Contribution: Environmental Oversight.

Michelle Campbell, Senior Archaeologist. M.A. in Archaeology; 23 years experience. Contribution: Cultural Resources Section

Ken Chen, Associate Environmental Planner. B.S. in Community Development and Regional Development; 8 years environmental planning experience. Contribution: Environmental Document Preparation

Vincent Chevreuil, Biologist; 4 years experience. Contribution: Biological Resources Section

## References

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- California Department of Conservation. California Important Farmland Finder. Available at: <https://maps.conservation.ca.gov/dlrp/ciff/> (accessed: 2/23/2023).
- California Department of Toxic Substances Control. Envirostor. Available at <https://www.envirostor.dtsc.ca.gov/public/>. (accessed: 2/23/2023).
- CDFW 2023. California Natural Diversity Database. California Department of Fish and Wildlife. 2023. Available at: <http://www.dfg.ca.gov/biogeodata/cnddb/> (accessed: 1/19/2023).
- CNPS 2023. Inventory of Rare and Endangered Plants. California Native Plant Society. 2023. Available at: <http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi/BrowseAZ?name=quad> (accessed: 1/19/2023).
- Department of Conservation. Fault Activity Map of California. Available at: <https://maps.conservation.ca.gov/cgs/fam/>
- Department of Conservation. Mineral Land Classification of Stanislaus County, California. 1993. Special Report 173. Available at: <ftp.consrv.ca.gov> › *dmg* › *pubs* › *SR\_173* › *SR\_173\_Text*
- FESA 1973. Federal Endangered Species Act. 1973. U.S. Fish and Wildlife. Available at: <https://www.fws.gov/endangered/laws-policies/>
- NMFS 2023. NOAA Fisheries ESA Listed Species, Critical Habitat, Essential Fish Habitat, and MMPA Species Data within California, West Coast Region. National Marine Fisheries Service. 2023. (requested: 2/23/2023).
- NRCS 2023. National Cooperative Soil Survey (NCSS). Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- USFWS 2023. Official Species List: U.S. Department of the Interior – Fish and Wildlife Service: Sacramento Fish and Wildlife Office. Consultation Code 2023-0035851. United States Fish and Wildlife Service. 2023. (requested: 1/19/2023).
- NRCS 2023. National Cooperative Soil Survey (NCSS). Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Appendix A      January 2021 Final IS/MND and  
August 2021 CEQA Addendum

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# Appendix B    Construction Emissions Modelling Results

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Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> AEMETIS BIOGAS LLC DAIRY BIOGAS CLUSTER PROJECT													Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)				
Grubbing/Land Clearing	0.00	0.00	0.00	5.00	0.00	5.00	1.04	0.00	1.04	0.00	0.00	0.00	0.00	0.00				
Grading/Excavation	1.28	13.48	12.99	5.56	0.56	5.00	1.56	0.52	1.04	0.03	2,525.92	0.82	0.02	2,553.14				
Drainage/Utilities/Sub-Grade	0.94	8.37	9.82	5.40	0.40	5.00	1.41	0.37	1.04	0.02	1,771.71	0.57	0.02	1,790.79				
Paving	0.31	4.08	3.15	0.16	0.16	0.00	0.15	0.15	0.00	0.01	555.68	0.18	0.00	561.67				
Maximum (pounds/day)	1.28	13.48	12.99	5.56	0.56	5.00	1.56	0.52	1.04	0.03	2,525.92	0.82	0.02	2,553.14				
Total (tons/construction project)	0.06	0.59	0.60	0.31	0.03	0.28	0.08	0.02	0.06	0.00	113.11	0.04	0.00	114.33				

Notes: Project Start Year -> 2023  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 321  
 Maximum Area Disturbed/Day (acres) -> 1  
 Water Truck Used? -> Yes

Phase	Total Material Imported/Exported Volume (yd <sup>3</sup> /day)		Daily VMT (miles/day)			
	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	0	0
Grading/Excavation	0	20	0	0	0	0
Drainage/Utilities/Sub-Grade	0	0	0	0	0	0
Paving	0	0	0	0	0	0

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 -> AEMETIS BIOGAS LLC DAIRY BIOGAS CLUSTER PROJECT													Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	PM10 (tons/phase)	PM10 (tons/phase)	PM10 (tons/phase)	PM2.5 (tons/phase)	PM2.5 (tons/phase)	PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)				
Grubbing/Land Clearing	0.00	0.00	0.00	0.03	0.00	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00				
Grading/Excavation	0.03	0.36	0.34	0.15	0.01	0.13	0.04	0.01	0.03	0.00	66.68	0.02	0.00	61.15				
Drainage/Utilities/Sub-Grade	0.02	0.19	0.23	0.12	0.01	0.12	0.03	0.01	0.02	0.00	40.93	0.01	0.00	37.53				
Paving	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.50	0.00	0.00	5.04				
Maximum (tons/phase)	0.03	0.36	0.34	0.15	0.01	0.13	0.04	0.01	0.03	0.00	66.68	0.02	0.00	61.15				
Total (tons/construction project)	0.06	0.59	0.60	0.31	0.03	0.28	0.08	0.02	0.06	0.00	113.11	0.04	0.00	103.72				

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 Special Status Species Potential Table

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# Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Ceres (3712058) OR Denair (3712057) OR Brush Lake (3712151) OR Salida (3712161) OR Riverbank (3712068) OR Waterford (3712067) OR Turlock (3712047) OR Hatch (3712048) OR Crows Landing (3712141))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>alkali milk-vetch</b> <i>Astragalus tener</i> var. <i>tener</i>	PDFAB0F8R1	None	None	G2T1	S1	1B.2
<b>alkali-sink goldfields</b> <i>Lasthenia chrysantha</i>	PDAST5L030	None	None	G2	S2	1B.1
<b>Antioch multilid wasp</b> <i>Myrmosula pacifica</i>	IIHYM15010	None	None	GH	SH	
<b>beaked clarkia</b> <i>Clarkia rostrata</i>	PDONA050Y0	None	None	G2G3	S2S3	1B.3
<b>burrowing owl</b> <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
<b>cackling (=Aleutian Canada) goose</b> <i>Branta hutchinsii leucopareia</i>	ABNJB05035	Delisted	None	G5T3	S3	WL
<b>California alkali grass</b> <i>Puccinellia simplex</i>	PMPOA53110	None	None	G2	S2	1B.2
<b>California tiger salamander - central California DPS</b> <i>Ambystoma californiense</i> pop. 1	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
<b>Colusa grass</b> <i>Neostapfia colusana</i>	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
<b>Crotch bumble bee</b> <i>Bombus crotchii</i>	IIHYM24480	None	Candidate Endangered	G2	S2	
<b>Delta button-celery</b> <i>Eryngium racemosum</i>	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
<b>great blue heron</b> <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
<b>green sturgeon - southern DPS</b> <i>Acipenser medirostris</i> pop. 1	AFCAA01031	Threatened	None	G2T1	S1	
<b>Greene's tuctoria</b> <i>Tuctoria greenei</i>	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
<b>hardhead</b> <i>Mylopharodon conocephalus</i>	AFCJB25010	None	None	G3	S3	SSC
<b>heartscale</b> <i>Atriplex cordulata</i> var. <i>cordulata</i>	PDCHE040B0	None	None	G3T2	S2	1B.2
<b>hoary bat</b> <i>Lasiurus cinereus</i>	AMACC05032	None	None	G3G4	S4	
<b>least Bell's vireo</b> <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S2	
<b>lesser saltscale</b> <i>Atriplex minuscula</i>	PDCHE042M0	None	None	G2	S2	1B.1



**Selected Elements by Common Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>Merced kangaroo rat</b> <i>Dipodomys heermanni dixonii</i>	AMAFD03062	None	None	G4T2T3	S2	
<b>Merced monardella</b> <i>Monardella leucocephala</i>	PDLAM180C0	None	None	GX	SX	1A
<b>moestan blister beetle</b> <i>Lytta moesta</i>	IICOL4C020	None	None	G2	S2	
<b>Northern California legless lizard</b> <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S2S3	SSC
<b>obscure bumble bee</b> <i>Bombus caliginosus</i>	IIHYM24380	None	None	G2G3	S1S2	
<b>prairie wedge grass</b> <i>Sphenopholis obtusata</i>	PMPOA5T030	None	None	G5	S2	2B.2
<b>Sacramento splittail</b> <i>Pogonichthys macrolepidotus</i>	AFCJB34020	None	None	G3	S3	SSC
<b>San Joaquin Valley giant flower-loving fly</b> <i>Rhaphiomidas trochilus</i>	IIDIP05010	None	None	G1	S1	
<b>San Joaquin Valley Orcutt grass</b> <i>Orcuttia inaequalis</i>	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
<b>snowy egret</b> <i>Egretta thula</i>	ABNGA06030	None	None	G5	S4	
<b>steelhead - Central Valley DPS</b> <i>Oncorhynchus mykiss irideus pop. 11</i>	AFCHA0209K	Threatened	None	G5T2Q	S2	
<b>subtle orache</b> <i>Atriplex subtilis</i>	PDCHE042T0	None	None	G1	S1	1B.2
<b>Swainson's hawk</b> <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
<b>Townsend's big-eared bat</b> <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G4	S2	SSC
<b>tricolored blackbird</b> <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<b>valley elderberry longhorn beetle</b> <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2T3	S3	
<b>vernal pool fairy shrimp</b> <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
<b>vernal pool smallscale</b> <i>Atriplex persistens</i>	PDCHE042P0	None	None	G2	S2	1B.2
<b>vernal pool tadpole shrimp</b> <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G4	S3	
<b>western pond turtle</b> <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
<b>western ridged mussel</b> <i>Gonidea angulata</i>	IMBIV19010	None	None	G3	S1S2	

**Record Count: 40**

CNPS Rare Plant Inventory



## Search Results

17 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [3712058:3712151:3712057:3712067:3712068:3712161:3712141:3712048:3712047]

▲ COMMON NAME	SCIENTIFIC NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
alkali milk-vetch	<a href="#"><i>Astragalus tener</i> var. <i>tener</i></a>	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	Yes	1994-01-01	No Photo Available
alkali-sink goldfields	<a href="#"><i>Lasthenia chrysantha</i></a>	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes	2019-09-30	 © 2009 California State University, Stanislaus
beaked clarkia	<a href="#"><i>Clarkia rostrata</i></a>	Onagraceae	annual herb	Apr-May	None	None	G2G3	S2S3	1B.3	Yes	1974-01-01	No Photo Available
California alkali grass	<a href="#"><i>Puccinellia simplex</i></a>	Poaceae	annual herb	Mar-May	None	None	G2	S2	1B.2		2015-10-15	No Photo Available
Colusa grass	<a href="#"><i>Neostapfia colusana</i></a>	Poaceae	annual herb	May-Aug	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Delta button-celery	<a href="#"><i>Eryngium racemosum</i></a>	Apiaceae	annual/perennial herb	(May)Jun-Oct	None	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Ferris' goldfields	<a href="#"><i>Lasthenia ferrisiae</i></a>	Asteraceae	annual herb	Feb-May	None	None	G3	S3	4.2	Yes	2001-01-01	 © 2009 Zoya Akulova
Greene's tuctoria	<a href="#"><i>Tuctoria greenei</i></a>	Poaceae	annual herb	May-Jul(Sep)	FE	CR	G1	S1	1B.1	Yes	1974-01-01	 ©2008 F. Gauna
heartscale	<a href="#"><i>Atriplex cordulata</i> var. <i>cordulata</i></a>	Chenopodiaceae	annual herb	Apr-Oct	None	None	G3T2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.

lesser saltscale	<u><a href="#">Atriplex</a></u> <u><a href="#">minuscula</a></u>	Chenopodiaceae	annual herb	May-Oct	None	None	G2	S2	1B.1	Yes	1994- 01-01	 © 2000 Robert E. Preston, Ph.D.
Merced monardella	<u><a href="#">Monardella</a></u> <u><a href="#">leucocephala</a></u>	Lamiaceae	annual herb	May-Aug	None	None	GX	SX	1A	Yes	1974- 01-01	No Photo Available
Parry's rough tarplant	<u><a href="#">Centromadia</a></u> <u><a href="#">parryi</a></u> ssp. <u><a href="#">rudis</a></u>	Asteraceae	annual herb	May-Oct	None	None	G3T3	S3	4.2	Yes	2007- 05-22	No Photo Available
prairie wedge grass	<u><a href="#">Sphenopholis</a></u> <u><a href="#">obtusata</a></u>	Poaceae	perennial herb	Apr-Jul	None	None	G5	S2	2B.2		1974- 01-01	No Photo Available
San Joaquin Valley Orcutt grass	<u><a href="#">Orcuttia</a></u> <u><a href="#">inaequalis</a></u>	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974- 01-01	No Photo Available
stinkbells	<u><a href="#">Fritillaria</a></u> <u><a href="#">agrestis</a></u>	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980- 01-01	 © 2016 Aaron Schusteff
subtle orache	<u><a href="#">Atriplex</a></u> <u><a href="#">subtilis</a></u>	Chenopodiaceae	annual herb	(Apr)Jun- Sep(Oct)	None	None	G1	S1	1B.2	Yes	1994- 01-01	 © 2000 Robert E. Preston, Ph.D.
vernal pool smallscale	<u><a href="#">Atriplex</a></u> <u><a href="#">persistens</a></u>	Chenopodiaceae	annual herb	Jun-Oct	None	None	G2	S2	1B.2	Yes	2001- 01-01	No Photo Available

Showing 1 to 17 of 17 entries

**Suggested Citation:**

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 19 January 2023].



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Sacramento Fish And Wildlife Office  
Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:  
Project Code: 2023-0035851  
Project Name: Aemetis Biogas Pipeline

January 19, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

## To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

---

Attachment(s):

- Official Species List

## **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### **Sacramento Fish And Wildlife Office**

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
(916) 414-6600

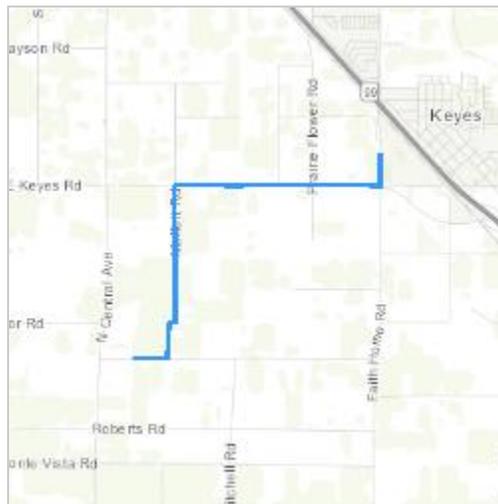
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## Project Summary

Project Code: 2023-0035851  
Project Name: Aemetis Biogas Pipeline  
Project Type: Pipeline - Offshore - Maintenance / Modification  
Project Description: Biogas Pipeline Project connecting 20 Dairies in Stanislaus and Merced Counties.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.54374705,-120.94788522124676,14z>



Counties: Stanislaus County, California

## Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [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.

### Amphibians

NAME	STATUS
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened

### Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

### Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7850">https://ecos.fws.gov/ecp/species/7850</a>	Threatened

## Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2246">https://ecos.fws.gov/ecp/species/2246</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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## **IPaC User Contact Information**

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# Appendix D Species Observed Tables

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#### Appendix D. Species Observed

Common Name	Scientific Name	Native (N)/Non-Native (X)
<b>Trees</b>		
Blue gum eucalyptus	<i>Eucalyptus globulus</i>	X
Pines	<i>Pinus sp.</i>	X
English walnuts	<i>Juglans regia</i>	N
Mexican fan palm	<i>Washingtonia robusta</i>	X
<b>Grasses/Forbs</b>		
Cheeseweed mallow	<i>Malva parviflora</i>	X
Purple Dead Nettle	<i>Lamium purpureum</i>	X
Salt grass	<i>Distichlis spicata</i>	N
Shepherd's purse	<i>Capsella bursa-pastoris</i>	X
Tarweed	<i>Madia anomala</i>	N
Wild Radish	<i>Raphanus sativus</i>	X
<b>Shrubs</b>		
Coyote brush	<i>Baccharis pilularis</i>	N
<b>Wildlife Species</b>		
American robin	<i>Turdus migratorius</i>	N
Barn swallow	<i>Hirundo rustica</i>	N
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	N
European starling	<i>Sturnus vulgaris</i>	X
House finch	<i>Haemorhous mexicanus</i>	N
Killdeer	<i>Charadrius vociferus</i>	N
Mourning Dove	<i>Zenaida macroura</i>	N
Northern Mockingbird	<i>Mimus polyglottos</i>	N
Northern harrier	<i>Circus cyaneus</i>	N
Oak titmouse	<i>Baeolophus inornatus</i>	N
Red-tailed hawk	<i>Buteo jamaicensis</i>	N
Savannah sparrow	<i>Passerculus sandwichensis</i>	N
Western bluebird	<i>Sialia mexicana</i>	N
Western meadowlark	<i>Sturnella neglecta</i>	N
Yellow-billed magpie	<i>Pica nuttalli</i>	N
Yellow-rumped Warbler	<i>Setophaga coronata</i>	N

<sup>1</sup>California Invasive Plant Council invasive rating

# Appendix E      Avoidance, Minimization, and Mitigation Measures from the January 2021 Final IS/MND

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**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE  
AEMETIS BIOGAS PIPELINE PROJECT**

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
<b>AIR QUALITY</b>				
<b>AQ-1:</b> The construction contractor shall comply with the San Joaquin Valley Air Pollution Control District Rule VIII as it pertains to fugitive dust (PM10).	During Construction	Aemetis Construction Contractor		
<b>AQ-2:</b> Wind Erosion Control best management practices will be implemented as follows: <ul style="list-style-type: none"> <li>• Water shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.</li> <li>• All distribution equipment shall be equipped with a positive means of shutoff.</li> <li>• Unless water is applied by means of pipelines, at least one mobile unit shall be available at all times to apply water or dust palliative to the Project.</li> <li>• If reclaimed water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. Non-potable water shall not be conveyed in tanks or drain pipes that will be used to convey potable water and there shall be no connection between potable and non-potable supplies. Non-potable tanks, pipes and other conveyances shall be marked "NON-POTABLE WATER – DO NOT DRINK."</li> <li>• Materials applied as temporary soil stabilizers and soil binders will also provide wind erosion control benefits.</li> </ul>	During Construction	Aemetis Construction Contractor		

<b>BIOLOGICAL RESOURCES</b>				
<p><b>BIO-1:</b> Construction specifications will include the following BMPs, where applicable, to reduce erosion during construction:</p> <ul style="list-style-type: none"> <li>• Implementation of the Project shall require approval of a site-specific SWPPP or Water Pollution Control Program (WPCP) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;</li> <li>• Existing vegetation shall be protected in place where feasible to provide an effective form of erosion and sediment control;</li> <li>• Stabilizing materials shall be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities;</li> <li>• Roughening and/or terracing shall be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed.</li> <li>• Soil exposure shall be minimized through the use of temporary BMPs, groundcover, and stabilization measures;</li> <li>• The contractor shall conduct periodic maintenance of erosion- and sediment-control measures.</li> </ul>	During Construction	Aemetis Construction Contractor		
<p><b>BIO-2:</b> To conform to water quality requirements, the Project must implement the following:</p> <ul style="list-style-type: none"> <li>• Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants shall be a minimum of 100 feet from irrigation and drainage canals within the BSA. Any necessary equipment washing shall occur where the water cannot flow into surface waters. The Project specifications shall require the contractor to operate under an approved spill prevention and clean-up plan;</li> <li>• Construction equipment shall not be operated in flowing water; if necessary, equipment buckets and arms may be used within flowing water.</li> <li>• Construction work shall be conducted according to site-specific construction plans that minimize the potential for sediment input to WoUS and WoS;</li> <li>• Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering surface waters;</li> <li>• Equipment used in and around surface waters shall be in good working order and free of dripping or leaking contaminants; and,</li> <li>• Any surplus concrete rubble, asphalt, or other debris from construction shall be taken to an approved disposal site.</li> </ul>	During Construction	Aemetis Construction Contractor		

<p><b>BIO-3:</b> Construction personnel must receive environmental awareness training. Awareness training shall be given by the Project biologist(s) who have experience in the natural history of species that may occur within the Project area. The training will cover protocol for, identification of, and natural history of the special status species that have the potential to occur within the Project area (such as Swainson’s hawk, tricolored blackbird, and western red bat).</p>	<p>During Construction</p>	<p>Aemetis</p>		
<p><b>BIO-4:</b> If vegetation removal is necessary for Project activities, removal of large diameter trees will be avoided to the greatest extent practicable. Any large diameter trees that cannot be protected within the Project impact area shall be removed outside of the Swainson’s hawk nesting season (February 1st – August 31st), one year prior to construction.</p>	<p>During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b>BIO-5:</b> If vegetation removal is necessary for Project activities and Swainson’s hawk nests are discovered within ¼ mile of the Project area, a 300-foot no-work buffer will be installed around the nest using ESA fencing and the Project biologist will monitor the nest until it is determined that the young have fledged. Additional appropriate protective measures may be developed in coordination with CDFW.</p>	<p>During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b>BIO-6:</b> If tree removal is required, prior to tree removal the Project biologist will conduct surveys to determine if the trees designated for removal are potentially suitable bat habitat. Potential “bat habitat trees” typically are mature trees with features such as open cavities, crevices, or loose bark.</p>	<p>Prior to Construction</p>	<p>Aemetis</p>		
<p><b>BIO-7:</b> If tree removal is required, removal of trees determined to be potentially suitable for bats must be removed between September 1st and March 31st, outside of the bat maternity season (April 1st –August 31st). Additional specific tree removal procedures (including potential exclusions, two step tree removal, removal of bark etc.) will be determined on a case by case basis by the Project biologist. Potential bat habitat trees not requiring removal will be protected in place with ESA fencing. If surveys for “bat habitat trees” reveal large establish maternity colonies and impacts to these colonies cannot be avoided, coordination will occur with CDFW to determine the best possible course of action.</p>	<p>During Construction</p>	<p>Aemetis</p>		
<p><b>BIO-8:</b> If removal of trees that are potentially suitable bat habitat is required, a biologist will monitor the removal of all potentially suitable bat habitat trees. Additionally, a biologist will inspect downed trees, identified as potentially suitable, for signs of bats prior to the trees being removed offsite. If a bat is discovered in downed vegetation, the bat(s) will be taken to a wildlife rehabilitation center.</p>	<p>During Construction</p>	<p>Aemetis</p>		

<p><b>BIO-9:</b> Vegetation removal or earthwork shall be minimized during the nesting season (February 1st – August 31st). If vegetation removal is required during the nesting season (February 1st – August 31st), a pre-construction nesting bird survey must be conducted within 7 days prior to vegetation removal. Within 2 weeks of the nesting bird survey, all vegetation cleared by the biologist will be removed by the contractor.</p> <p>A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in consultation with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by CDFW.</p>	During Construction	Aemetis		
<p><b>CULTURAL RESOURCES</b></p>				
<p><b>CR-1:</b> Conduct archaeological monitoring in areas of high sensitivity for buried archaeological resources following areas designated in the Figure 5 of the Initial Study. Monitoring efforts can be reduced at the discretion of the archaeologist.</p>	During Construction	Aemetis		
<p><b>CR-2:</b> If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. The final disposition of archaeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission must first be approved by the Commission. An additional archaeological survey will be needed if Project limits are extended beyond the present survey limits.</p>	During Construction	Aemetis Construction Contractor Stanislaus County		
<p><b>CR-3:</b> Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.</p>	Prior to and During Construction	Aemetis Construction Contractor Stanislaus County		

<p><b>GREENHOUSE GASES</b></p> <p><b>GGE-1:</b> The contractor must comply with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the Contract, including air pollution control rules, regulations, ordinances, and statutes provided in Govt Code § 11017 (Pub Cont Code § 10231).</p>	<p>During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b>HAZARDS AND HAZARDOUS WASTE</b></p> <p><b>HAZ-1:</b> The following best practices shall be implemented during construction of the pipeline to ensure the facility does not present a new significant risk of exposure to hazardous material in the form of biogas.</p> <ul style="list-style-type: none"> <li>• The pipeline shall be airtight and must be tested to demonstrate as such prior to operation for the transport of biogas.</li> <li>• The pipeline shall be fluid, pressure, and corrosion resistant.</li> <li>• The pipeline shall be designed to include security valves placed upstream of the installations intended for production, storage treatment and use of biogas.</li> <li>• Systems that could trigger security valves shall be installed in easy to access locations.</li> </ul>	<p>Prior to During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b>HAZ-2:</b> Prepare a Health and Safety Plan prior to the start of construction which will include plans for addressing gas leaks, fires, or other failures of the pipeline. The Plan shall identify sensitive receptors and protective measures to ensure risk it minimized to the greatest extent feasible.</p>	<p>Prior to During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b>HAZ-3:</b> The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.</p>	<p>Prior to During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b>HAZ-4:</b> As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during Project construction. The construction contractor shall prepare an Unknown Hazard Procedures Manual to provide a plan for how previously unknown hazardous waste/material encountered during construction would be handled to maintain public and worker health and safety.</p>	<p>During Construction</p>	<p>Aemetis Construction Contractor</p>		

<p><b>NOISE</b></p> <p><b>NOI-1:</b> To minimize the construction-generated noise, the following construction noise best management practices shall be followed:</p> <ul style="list-style-type: none"> <li>• Do not operate construction equipment or run the equipment engines from 7:00 p.m. to 7:00 a.m. or on Sundays, with the exception that you may operate equipment within the Project limits during these hours to: <ul style="list-style-type: none"> <li>○ Service traffic control facilities</li> <li>○ Service construction equipment</li> </ul> </li> <li>• Equip an internal combustion engine with the manufacturer recommended muffler.</li> <li>• Do not operate an internal combustion engine on the job site without the appropriate muffler.</li> </ul> <p>A variance from these requirements may be provided by request at the discretion of Stanislaus County.</p>	<p>During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b>TRANSPORTATION/TRAFFIC</b></p> <p><b>TRA-1:</b> The contractor shall prepare and implement a Construction Staging and Traffic Management Plan to minimize traffic disruption during construction activities. The plan shall be made available to the public and affected stakeholders that use the bridge for access. The following elements shall be included in the plan: parking, detours/road closures, pedestrian/commercial/residential access, and media campaign.</p>	<p>During Construction</p>	<p>Aemetis Construction Contractor</p>		
<p><b><u>UTILITIES AND SERVICE SYSTEMS</u></b></p> <p><b><u>UTIL-1:</u></b> <u>Best Management Practices will be incorporated to locate and avoid underground utilities. Potholing at the intersection of W Keyes Road and Jennings Road and other areas may be necessary to identify utility location. Local jurisdictions will be notified prior to construction if utilities are found to be in close vicinity to the biogas pipeline construction activities. The Stanislaus County Department of Environmental Resources will be contacted if any portion of the existing onsite wastewater treatment system and/or existing onsite water supply system is encountered on any parcel connecting to the proposed dairy biogas pipeline during construction.</u></p>	<p><u>During Construction</u></p>	<p><u>Aemetis Construction Contractor</u></p>		

## Appendix F Acronyms

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AB	Assembly Bill
ADL	Aerially deposited lead
ADT	Average Daily Traffic
APE	Area of Potential Effects
AUL	Activity and Use Limitation
BMPs	Best Management Practices
BSA	Biological Study Area
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulation
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CWA	Clean Water Act
dBA	Decibel A-weighted
DWR	Department of Water Resources
EDR	Environmental Data Resources Inc.
E.O.	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area

FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GHG	greenhouse gases
IPac	USFWS Information for Planning and Conservation
ISA	Initial Site Assessment
Ldn	Day-night Average Sound Level
Leq	Equivalent Continuous Sound Level
Lmax	Maximum Sound Level
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
Mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NEPA	National Environmental Protection Act
NMFS	National Marine Fisheries Service
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
NOA	Naturally Occurring Asbestos
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
O <sub>3</sub>	Ozone
OHP	Office of Historic Preservation
PCEs	primary constituent elements
PM	Particulate Matter
POAQC	Project of Localized Air Quality Concern

ppb	Parts per Billion
ppm	Parts per Million
PRC	Public Resources Code
REC	Recognized Environmental Condition
ROG	Reactive organic compounds
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SCS	Sustainable Communities Strategy
sec	second
SHPO	State Historic Preservation Office
SHTAC	Swainson's Hawk Technical Advisory Committee
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO <sub>2</sub>	Sulfur Dioxide
SPCCP	Spill Prevention, Control, and Countermeasure Program
SSC	Species of Special Concern (SSC).
StanCOG	Stanislaus Council of Governments
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VHD	vehicle hours of delay
VOC	Volatile organic compounds